VIA ELECTRONIC MAIL

September 14, 2020

Mr. Alexander Wardle
Virginia Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, Virginia, 22193

SUBJECT: SUPPLEMENTAL INFORMATION TO SUPPORT NFA REQUEST
Inactive Fairfax Facility # 26140
9901 Georgetown Pike
Great Falls, Fairfax County, Virginia
PC# 2010-3028

Dear Mr. Wardle:

Kleinfelder, on behalf of Fairfax Petroleum Realty, LLC (Fairfax), has prepared this correspondence in response to your email of August 11, 2020. In that email, you requested a tabulation of mass discharge for methyl tertiary butyl ether (MTBE) through each of the applicable transects (A-A', B-B', and C-C') for various points in time, a sensitivity analysis showing whether there are critical data points at which changes in concentration would have a significant effect on the calculated mass flux, and a discussion of whether overall evidence indicates that mass flux for Transect C-C' will continue to fall.

The transect locations are depicted on Figure 1. The full set of documentation of the updated mass flux models using Mass Flux Toolkit, version 2.01 is attached. These models were prepared for the three transects for five time periods and the results are summarized below:

Table 1. Summary of Calculated Mass Discharge of MTBE.

		Mass Discharge (g/day)				
ID	**Distance from Former USTs (feet)**	*Historic Average*	*Aug-14 (Last before startup)*	*Jun-18 (Last before shutdown)*	*Sep-18 (First after shutdown)*	*May-20 (Most recent)*
Transect A-A'	1	1.16E+03	4.71E+01	3.42E-01	5.99E-01	3.41E-01
Transect B-B'	100	1.16E+03	9.79E+02	1.11E+02	1.11E+02	2.00E+01
Transect C-C'	276	1.26E+03	3.47E+01	2.34E+01	2.34E+01	1.34E+01

As shown below, mass discharge of MTBE as measured in grams per day has decreased at all three transects over time, both during and after remedial system operation. Total decreases of 99.97 percent (%), 98.28%, and 98.94% were calculated for Transects A-A', B-B', and C-C', respectively.

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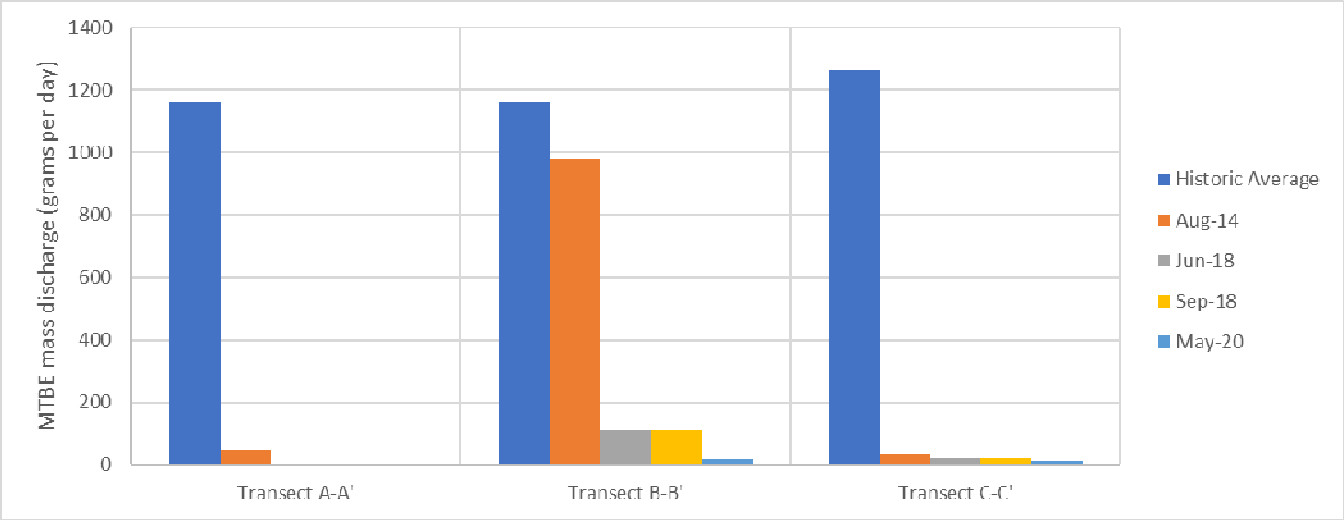

Figure 1. MTBE mass discharge changes over time for Transects A-A', B-B', and C-C'.

Mass Flux Toolkit was also utilized to perform sensitivity analysis of the calculated mass discharge models. The "Simple Uncertainty Analysis" was used and all outputs are attached. This module applies cross-validation to evaluate the uncertainty in the interpolation scheme. One observation at a time is removed, the value for the removed observation is estimated using the remaining observations, and the output calculated. The removed value is then replaced, and the next observation removed. This process is continued until all the observations have been removed one at a time.

The results of the sensitivity analysis indicated that due to the relatively 'sparse' current data set (i.e. there are fewer detected MTBE concentrations than historically), wells which do have detectable MTBE concentrations are the primary contributors to calculated flux at the various transects. A summary of the key wells and contribution their contribution to calculated MTBE mass discharge at each transect is summarized below:

Table 2. Summary of Simple Uncertainty Analyses Performed in the Mass Flux Toolkit.

ID	Well with Maximum Contribution to Total Mass Flux									
	Time Period 1		*Time Period 2*		*Time Period 3*		*Time Period 4*		*Time Period 5*	
Transect A-A'	MW-9	23%	MW-11	63%	MW-1	84%	MW-1R	85%	MW-1R	92%
Transect B-B'	W-1	45%	W-1	57%	W-1	83%	W-1	83%	W-1	82%
Transect C-C'	W-7	72%	NA	NA	NA	NA	MW-27s	1	NA	NA

NA – No individual well represented the majority of the estimated mass discharge.

As shown, as overall MTBE concentrations and mass discharges have decreased through time, individual wells with detectable concentrations of MTBE in some cases represent the majority of the estimated mass discharge, such MW-1/MW-1R in Transect A-A' (4 µg/L MTBE in May 2020), W-1 in Transect B-B' (360 µg/L in May 2020), and MW-27S in Transect C-C' (0.4 µg/L MTBE in May 2020). While individual wells may represent important components of the mass discharge estimate at these transects, the consistent decrease in mass discharge and in MTBE concentrations indicate that additional sampling is not warranted.

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At Transect C-C', it is apparent that mass removal by the remedial system coupled with attenuation mechanisms have decreased MTBE concentrations in groundwater and mass discharge rates. Previous reports (CAPA, 2014) have documented that MTBE transformation to Tertiary Butyl Alcohol (TBA) is occurring.

Kleinfelder and other consultants have documented decreases in MTBE concentrations, and statistically significant downward trends in concentrations of MTBE at Transect C-C' (and A-A' and B-B') from historical averages, through remedial system operation, and following the shutdown of the remedial system. Since the shutdown of the remedial system, estimated mass discharge at Transect C-C' has decreased approximately 43% (23.4 grams per day to 13.4 grams per day).

As MTBE-containing fuels are no longer in use at the Former Shell station (VADEQ PC# 2003-3230), and the UST system was previously removed at the subject Site, no current potential sources of MTBE to groundwater are viewed to exist.

Given the MTBE removal by the former remedial system, the reductions in mass discharge through all three transects, statistically significant reductions in MTBE concentrations in groundwater, and the reduction in mass discharge at Transect C-C' following remedial system shutdown, Kleinfelder anticipates that MTBE attenuation will continue at all three transects. Accordingly, we request closure of PC #2010-3028, consistent with DEQ's recent closure of PC #2003-3230 which includes Transect C-C'.

This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee, or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

Fairfax Petroleum and Kleinfelder appreciate the continued guidance of the DEQ in the successful completion of this project. Please contact us at 410.850.0404 should you have questions or require additional information.

Sincerely,

KLEINFELDER

Nathan Stevens, P.G. (Maine)
Principal Hydrogeologist

Mark C. Steele
Senior Program Manager

Attachments

cc: Mr. Monty Berhane – Fairfax Petroleum Realty, LLC
Ms. Sarah Nutt – Fairfax Petroleum Realty, LLC

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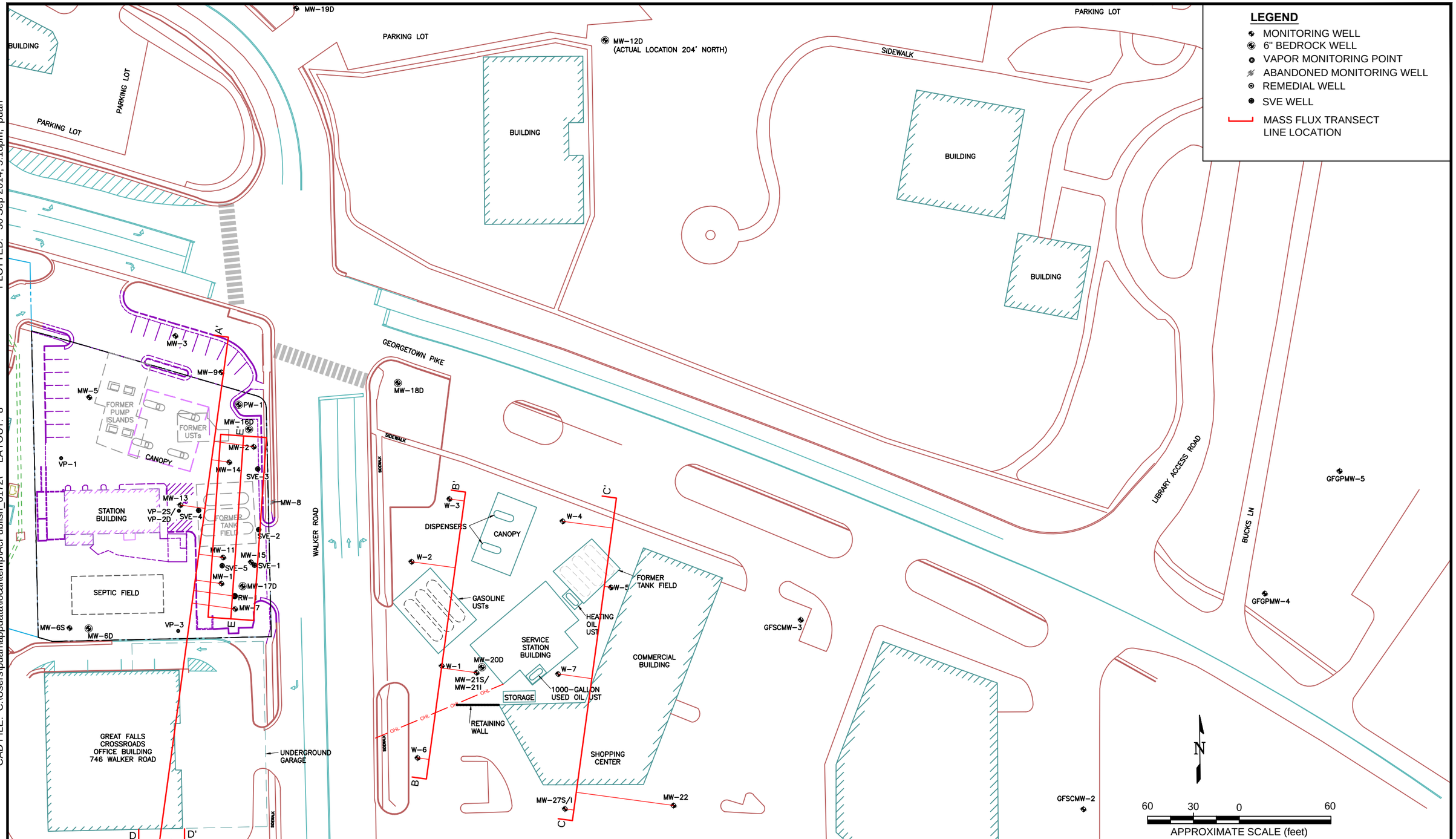

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PROJECT NO.	20143589
DRAWN:	9/19/14
DRAWN BY:	PD
CHECKED BY:	PW
FILE NAME: 26140_SP_14.dwg	

MASS FLUX TRANSECT LOCATIONS

INACTIVE FAIRFAX FACILITY #26140
9901 GEORGETOWN PIKE
GREAT FALLS, VIRGINIA

FIGURE
1

PLOTTED: 30 Sep 2014, 5:18pm, pdan
LAYOUT: 8
CAD FILE: C:\Users\pdan\appdata\local\temp\AcPublish_6172\
XRef: Eng-B_11x17_P_StyleA
XRef: X-Exst-S107520:
ATTACHED IMAGES:
ATTACHED XREFS:
ALBUQUERQUE, NM

Transect A-A' Historic Average

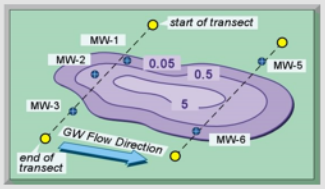
Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model
(Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

4. CHOOSE TRANSECT Transect 1

5. CHOOSE TIME PERIOD 1



6. ENTER TRANSECT DATA

6.1 Distance of Transect 1 from Source → 1 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity?: No

6.5 Uniform Hydraulic Gradient?: Yes → Hydraulic Gradient 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Hydraulic Conductivity (ft/d)	Concentration (ug/L) *Constituent A* MtBE	Concentration (ug/L) *Constituent B*
1	Start of Transect	0						0	0
2	End of Transect	360						0	0
3	MW-10	30	10	40	30	60	10.8	7	
4	MW-24	31	50	60	30	60	8.1	25	
5	MW-7	195	16	40	30	60	6.2	19182	
6	MW-1	207	20	35	30	60	6.7	136125	
7	MW-11	225	10	40	30	60	5.1	31527	
8	MW-14	288	25	45	30	60	6.8	49088	
9	MW-24	297	25	40	30	60	6.8	67330	
10	MW-9	339	25	45	30	60	0.03	59	
11	RW-1	201	21	60	30	60	4.7	31750	
12									
13									
14									
15									

7. CHOOSE GRID (OPTIONAL)

	Current Grid	Refine Grid By	Refined Grid
Number of rows	10	1	10
Number of columns	11	1	11

8. SELECT CONSTITUENT FOR CALCULATIONS
◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | **HELP**

Grid Completion: Concentration

Transect 1 Time Period 1. Vertical Interpolation: Log Horizontal Interpolation: Log

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid		Next Step: Interpolate Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (ug/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	0	7.00E+00	2.50E+01	1.92E+04	3.18E+04	1.36E+05	3.15E+04	4.91E+04	6.73E+04	5.90E+01	0
33.0	0	7.00E+00	2.50E+01	1.92E+04	3.18E+04	1.36E+05	3.15E+04	4.91E+04	6.73E+04	5.90E+01	0
36.0	0	7.00E+00	2.50E+01	1.92E+04	3.18E+04	1.36E+05	3.15E+04	4.91E+04	6.73E+04	5.90E+01	0
39.0	0	7.00E+00	2.50E+01	1.92E+04	3.18E+04	1.36E+05	3.15E+04	4.91E+04	6.73E+04	5.90E+01	0
42.0	0	7.00E+00	2.50E+01	1.92E+04	3.18E+04	1.36E+05	3.15E+04	4.91E+04	6.73E+04	5.90E+01	0
45.0	0	7.00E+00	2.50E+01	1.92E+04	3.18E+04	1.36E+05	3.15E+04	4.91E+04	6.73E+04	5.90E+01	0
48.0	0	7.00E+00	2.50E+01	1.92E+04	3.18E+04	1.36E+05	3.15E+04	4.91E+04	6.73E+04	5.90E+01	0
51.0	0	7.00E+00	2.50E+01	1.92E+04	3.18E+04	1.36E+05	3.15E+04	4.91E+04	6.73E+04	5.90E+01	0
54.0	0	7.00E+00	2.50E+01	1.92E+04	3.18E+04	1.36E+05	3.15E+04	4.91E+04	6.73E+04	5.90E+01	0
57.0	0	7.00E+00	2.50E+01	1.92E+04	3.18E+04	1.36E+05	3.15E+04	4.91E+04	6.73E+04	5.90E+01	0
60.0											

Grid Completion: Hydraulic Conductivity

Transect 1 Time Period 1. Nearest Neighbor Interpolation

Step 10: Interpolate K Horizontally | Export K Grid | Import K Grid | Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP | Next Step: View Hydraulic Gradient Grid

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	6.70E+00	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
33.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	6.70E+00	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
36.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	*6.70E+00*	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
39.0	1.08E+01	*1.08E+01*	*1.08E+01*	*6.20E+00*	4.70E+00	*5.70E+00*	*5.10E+00*	6.80E+00	*6.80E+00*	3.00E-02	3.00E-02
42.0	1.08E+01	*1.08E+01*	*1.08E+01*	*5.45E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	6.80E+00	*6.80E+00*	3.00E-02	3.00E-02
45.0	1.08E+01	*8.10E+00*	*8.10E+00*	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
48.0	1.08E+01	*8.10E+00*	*8.10E+00*	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
51.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
54.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
57.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
60.0											

Grid Completion: Hydraulic Conductivity

Transect 1 Time Period 1. Nearest Neighbor Interpolation

Step 10: Interpolate K Horizontally		Export K Grid	Import K Grid		Next Step: View Hydraulic Gradient Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	6.70E+00	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
33.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	6.70E+00	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
36.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	*6.70E+00*	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
39.0	1.08E+01	*1.08E+01*	*1.08E+01*	*6.20E+00*	4.70E+00	*5.70E+00*	*5.10E+00*	6.80E+00	*6.80E+00*	3.00E-02	3.00E-02
42.0	1.08E+01	*1.08E+01*	*1.08E+01*	*5.45E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	6.80E+00	*6.80E+00*	3.00E-02	3.00E-02
45.0	1.08E+01	*8.10E+00*	*8.10E+00*	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
48.0	1.08E+01	*8.10E+00*	*8.10E+00*	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
51.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
54.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
57.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
60.0											

Grid Completion: Hydraulic Gradient

Transect 1 Time Period 1. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally | Export i Grid | Import i Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: Calculate Mass Flux

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
42.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
45.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
48.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
51.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
54.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
57.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
60.0											

Mass Flux Result

TOTAL MASS FLUX 1.16E+03 (g/day) 4.23E+02 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 1

SELECT TIME PERIOD TO VIEW: 1

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	0	**2.79E-03**	*5.30E-02*	**2.41E+01**	**2.13E+00**	**2.60E+01**	**1.55E+01**	**2.86E+01**	**2.78E+01**	**8.85E-05**	0
33.0	0	**2.79E-03**	*5.30E-02*	**2.41E+01**	**2.13E+00**	**2.60E+01**	**1.55E+01**	**2.86E+01**	**2.78E+01**	**8.85E-05**	0
36.0	0	**2.79E-03**	*5.30E-02*	**2.41E+01**	**2.13E+00**	*2.60E+01*	**1.55E+01**	**2.86E+01**	**2.78E+01**	**8.85E-05**	0
39.0	0	*2.79E-03*	*5.30E-02*	*2.41E+01*	**2.13E+00**	*2.22E+01*	*1.55E+01*	**2.86E+01**	*2.78E+01*	**8.85E-05**	0
42.0	0	*2.79E-03*	*5.30E-02*	*2.11E+01*	**2.13E+00**	*1.83E+01*	*1.55E+01*	**2.86E+01**	*2.78E+01*	**8.85E-05**	0
45.0	0	*2.09E-03*	*3.98E-02*	*1.82E+01*	**2.13E+00**	*1.83E+01*	*1.55E+01*	*2.86E+01*	*2.78E+01*	*8.85E-05*	0
48.0	0	*2.09E-03*	*3.98E-02*	*1.82E+01*	**2.13E+00**	*1.83E+01*	*1.55E+01*	*2.86E+01*	*2.78E+01*	*8.85E-05*	0
51.0	0	*2.09E-03*	**3.98E-02**	*1.82E+01*	**2.13E+00**	*1.83E+01*	*1.55E+01*	*2.86E+01*	*2.78E+01*	*8.85E-05*	0
54.0	0	*2.09E-03*	**3.98E-02**	*1.82E+01*	**2.13E+00**	*1.83E+01*	*1.55E+01*	*2.86E+01*	*2.78E+01*	*8.85E-05*	0
57.0	0	*2.09E-03*	**3.98E-02**	*1.82E+01*	**2.13E+00**	*1.83E+01*	*1.55E+01*	*2.86E+01*	*2.78E+01*	*8.85E-05*	0
60.0											

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary | Back to Mass Flux Result | Print | Back to Data Input | HELP

SELECT TRANSECT TO VIEW: Transect 1
SELECT TIME PERIOD TO VIEW: 1

MtBE Interpolation Methods

Hydraulic Conductivity: Nearest Neighbor
Concentration: 1) Vertical: Log Transformation 2) Horizontal: Log Transformation
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points 1.16E+03 *(g/day)*

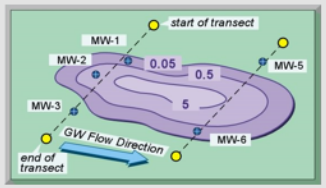
	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	RESULTS: Total Mass Flux Excluding Selected Point and Interpolating (g/day)	RESULTS: Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Conductivity	1.08E+01	ft/d	1.16E+03	0.0
2	MW-10	10.0	40.0	Conductivity	1.08E+01	ft/d	1.16E+03	0.0
3	MW-24	50.0	60.0	Conductivity	8.10E+00	ft/d	1.16E+03	0.0
4	MW-7	16.0	40.0	Conductivity	6.20E+00	ft/d	1.13E+03	2.3
5	MW-1	20.0	35.0	Conductivity	4.70E+00	ft/d	1.25E+03	-7.7
6	MW-11	10.0	40.0	Conductivity	6.70E+00	ft/d	1.13E+03	2.3
7	MW-14	25.0	45.0	Conductivity	5.10E+00	ft/d	1.19E+03	-2.6
8	MW-24	25.0	40.0	Conductivity	6.80E+00	ft/d	1.16E+03	0.0
9	MW-9	25.0	45.0	Conductivity	6.80E+00	ft/d	1.16E+03	0.0
10	RW-1	21.0	60.0	Conductivity	3.00E-02	ft/d	1.16E+03	0.0
11	End of Transect			Conductivity	3.00E-02	ft/d	1.16E+03	0.0
12	Start of Transect			Concentration	0.00E+00	ug/L	1.16E+03	0.0
13	MW-10	10.0	40.0	Concentration	7.00E+00	ug/L	1.16E+03	0.0
14	MW-24	50.0	60.0	Concentration	2.50E+01	ug/L	1.17E+03	-0.5
15	MW-7	16.0	40.0	Concentration	1.92E+04	ug/L	9.60E+02	17.2
16	*MW-1*	*20.0*	*35.0*	*Concentration*	*3.18E+04*	*ug/L*	1.17E+03	-1.1
17	*MW-11*	*10.0*	*40.0*	*Concentration*	*1.36E+05*	*ug/L*	9.98E+02	13.9
18	*MW-14*	*25.0*	*45.0*	*Concentration*	*3.15E+04*	*ug/L*	1.41E+03	-21.3
19	*MW-24*	*25.0*	*40.0*	*Concentration*	*4.91E+04*	*ug/L*	1.14E+03	1.5
20	*MW-9*	*25.0*	*45.0*	*Concentration*	*6.73E+04*	*ug/L*	8.88E+02	23.4
21	*RW-1*	*21.0*	*60.0*	*Concentration*	*5.90E+01*	*ug/L*	1.16E+03	0.0
22	*End of Transect*			*Concentration*	*0.00E+00*	*ug/L*	1.16E+03	0.0

Transect A-A', August 2014 or last previous

Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model (Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA



4. CHOOSE TRANSECT Transect 1

5. CHOOSE TIME PERIOD 2

6. ENTER TRANSECT DATA

6.1 Distance of Transect 1 from Source → 1 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity?: No

6.5 Uniform Hydraulic Gradient?: Yes → Hydraulic Gradient 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Hydraulic Conductivity (ft/d)	Concentration (ug/L) *Constituent A* MtBE	Concentration (ug/L) *Constituent B*
1	Start of Transect	0						0	0
2	End of Transect	360						0	0
3	MW-10	30	10	40	30	60	10.8	0	
4	MW-24	31	50	60	30	60	8.1	21	
5	MW-7	195	16	40	30	60	6.2	72	
6	MW-1	207	20	35	30	60	6.7	20000	
7	MW-11	225	10	40	30	60	5.1	27	
8	MW-14	288	25	45	30	60	6.8	62	
9	MW-24	297	25	40	30	60	6.8	450	
10	MW-9	339	25	45	30	60	0.03	12	
11	RW-1	201	21	60	30	60	4.7	19000	
12									
13									
14									
15									

7. CHOOSE GRID (OPTIONAL)

	Current Grid	Refine Grid By	Refined Grid
Number of rows	10	1	10
Number of columns	11	1	11

8. SELECT CONSTITUENT FOR CALCULATIONS
◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | **HELP**

Grid Completion: Concentration

Transect 1 Time Period 2. Vertical Interpolation: Log Horizontal Interpolation: Log

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid		Next Step: Interpolate Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (ug/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	End of Transect 339.0	
30.0	0	0.00E+00	2.10E+01	7.20E+01	1.90E+04	2.00E+04	2.70E+01	6.20E+01	4.50E+02	1.20E+01	0
33.0	0	0.00E+00	2.10E+01	7.20E+01	1.90E+04	2.00E+04	2.70E+01	6.20E+01	4.50E+02	1.20E+01	0
36.0	0	0.00E+00	2.10E+01	7.20E+01	1.90E+04	2.00E+04	2.70E+01	6.20E+01	4.50E+02	1.20E+01	0
39.0	0	0.00E+00	2.10E+01	7.20E+01	1.90E+04	2.00E+04	2.70E+01	6.20E+01	4.50E+02	1.20E+01	0
42.0	0	0.00E+00	2.10E+01	7.20E+01	1.90E+04	2.00E+04	2.70E+01	6.20E+01	4.50E+02	1.20E+01	0
45.0	0	0.00E+00	2.10E+01	7.20E+01	1.90E+04	2.00E+04	2.70E+01	6.20E+01	4.50E+02	1.20E+01	0
48.0	0	0.00E+00	2.10E+01	7.20E+01	1.90E+04	2.00E+04	2.70E+01	6.20E+01	4.50E+02	1.20E+01	0
51.0	0	0.00E+00	2.10E+01	7.20E+01	1.90E+04	2.00E+04	2.70E+01	6.20E+01	4.50E+02	1.20E+01	0
54.0	0	0.00E+00	2.10E+01	7.20E+01	1.90E+04	2.00E+04	2.70E+01	6.20E+01	4.50E+02	1.20E+01	0
57.0	0	0.00E+00	2.10E+01	7.20E+01	1.90E+04	2.00E+04	2.70E+01	6.20E+01	4.50E+02	1.20E+01	0
60.0											

Grid Completion: Hydraulic Conductivity

Transect 1 Time Period 2. Nearest Neighbor Interpolation

Step 10: Interpolate K Horizontally | Export K Grid | Import K Grid | Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP | Next Step: View Hydraulic Gradient Grid

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	6.70E+00	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
33.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	6.70E+00	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
36.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	*6.70E+00*	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
39.0	1.08E+01	*1.08E+01*	*1.08E+01*	*6.20E+00*	4.70E+00	*5.70E+00*	*5.10E+00*	6.80E+00	*6.80E+00*	3.00E-02	3.00E-02
42.0	1.08E+01	*1.08E+01*	*1.08E+01*	*5.45E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	6.80E+00	*6.80E+00*	3.00E-02	3.00E-02
45.0	1.08E+01	*8.10E+00*	*8.10E+00*	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
48.0	1.08E+01	*8.10E+00*	*8.10E+00*	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
51.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
54.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
57.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
60.0											

Grid Completion: Hydraulic Gradient

Transect 1 Time Period 2. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally | Export i Grid | Import i Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: Calculate Mass Flux

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
42.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
45.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
48.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
51.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
54.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
57.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
60.0											

Mass Flux Result

TOTAL MASS FLUX 4.71E+01 (g/day) 1.72E+01 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 1

SELECT TIME PERIOD TO VIEW: 2

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	0	**0.00E+00**	*4.45E-02*	**9.03E-02**	**1.28E+00**	**3.83E+00**	**1.33E-02**	**3.61E-02**	**1.86E-01**	**1.80E-05**	0
33.0	0	**0.00E+00**	*4.45E-02*	**9.03E-02**	**1.28E+00**	**3.83E+00**	**1.33E-02**	**3.61E-02**	**1.86E-01**	**1.80E-05**	0
36.0	0	**0.00E+00**	*4.45E-02*	**9.03E-02**	**1.28E+00**	*3.83E+00*	**1.33E-02**	**3.61E-02**	**1.86E-01**	**1.80E-05**	0
39.0	0	*0.00E+00*	*4.45E-02*	*9.03E-02*	**1.28E+00**	*3.26E+00*	*1.33E-02*	**3.61E-02**	*1.86E-01*	**1.80E-05**	0
42.0	0	*0.00E+00*	*4.45E-02*	*7.94E-02*	**1.28E+00**	*2.68E+00*	*1.33E-02*	**3.61E-02**	*1.86E-01*	**1.80E-05**	0
45.0	0	*0.00E+00*	*3.34E-02*	*6.84E-02*	**1.28E+00**	*2.68E+00*	*1.33E-02*	*3.61E-02*	*1.86E-01*	*1.80E-05*	0
48.0	0	*0.00E+00*	*3.34E-02*	*6.84E-02*	**1.28E+00**	*2.68E+00*	*1.33E-02*	*3.61E-02*	*1.86E-01*	*1.80E-05*	0
51.0	0	*0.00E+00*	**3.34E-02**	*6.84E-02*	**1.28E+00**	*2.68E+00*	*1.33E-02*	*3.61E-02*	*1.86E-01*	*1.80E-05*	0
54.0	0	*0.00E+00*	**3.34E-02**	*6.84E-02*	**1.28E+00**	*2.68E+00*	*1.33E-02*	*3.61E-02*	*1.86E-01*	*1.80E-05*	0
57.0	0	*0.00E+00*	**3.34E-02**	*6.84E-02*	**1.28E+00**	*2.68E+00*	*1.33E-02*	*3.61E-02*	*1.86E-01*	*1.80E-05*	0
60.0											

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary | Back to Mass Flux Result | Print | Back to Data Input | HELP

SELECT TRANSECT TO VIEW: Transect 1
SELECT TIME PERIOD TO VIEW: 2

MtBE Interpolation Methods

Hydraulic Conductivity: Nearest Neighbor
Concentration: 1) Vertical: Log Transformation 2) Horizontal: Log Transformation
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points **4.71E+01** *(g/day)*

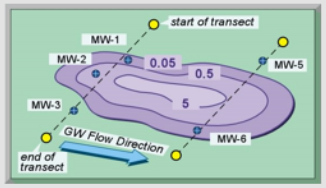
	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	RESULTS: Total Mass Flux Excluding Selected Point and Interpolating (g/day)	RESULTS: Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Conductivity	1.08E+01	ft/d	4.71E+01	0.0
2	MW-10	10.0	40.0	Conductivity	1.08E+01	ft/d	4.71E+01	0.1
3	MW-24	50.0	60.0	Conductivity	8.10E+00	ft/d	4.72E+01	-0.1
4	MW-7	16.0	40.0	Conductivity	6.20E+00	ft/d	4.70E+01	0.2
5	MW-1	20.0	35.0	Conductivity	4.70E+00	ft/d	5.89E+01	-24.9
6	MW-11	10.0	40.0	Conductivity	6.70E+00	ft/d	4.31E+01	8.5
7	MW-14	25.0	45.0	Conductivity	5.10E+00	ft/d	4.71E+01	-0.1
8	MW-24	25.0	40.0	Conductivity	6.80E+00	ft/d	4.71E+01	0.0
9	MW-9	25.0	45.0	Conductivity	6.80E+00	ft/d	4.71E+01	0.0
10	RW-1	21.0	60.0	Conductivity	3.00E-02	ft/d	4.72E+01	-0.1
11	End of Transect			Conductivity	3.00E-02	ft/d	4.71E+01	0.0
12	Start of Transect			Concentration	0.00E+00	ug/L	4.71E+01	0.0
13	MW-10	10.0	40.0	Concentration	0.00E+00	ug/L	4.71E+01	0.0
14	MW-24	50.0	60.0	Concentration	2.10E+01	ug/L	4.67E+01	0.8
15	MW-7	16.0	40.0	Concentration	7.20E+01	ug/L	5.32E+01	-12.9
16	*MW-1*	*20.0*	*35.0*	*Concentration*	*1.90E+04*	*ug/L*	3.52E+01	25.4
17	*MW-11*	*10.0*	*40.0*	*Concentration*	*2.00E+04*	*ug/L*	1.74E+01	63.1
18	*MW-14*	*25.0*	*45.0*	*Concentration*	*2.70E+01*	*ug/L*	5.25E+01	-11.3
19	*MW-24*	*25.0*	*40.0*	*Concentration*	*6.20E+01*	*ug/L*	4.74E+01	-0.6
20	*MW-9*	*25.0*	*45.0*	*Concentration*	*4.50E+02*	*ug/L*	4.54E+01	3.7
21	*RW-1*	*21.0*	*60.0*	*Concentration*	*1.20E+01*	*ug/L*	4.71E+01	0.0
22	*End of Transect*			*Concentration*	*0.00E+00*	*ug/L*	4.71E+01	0.0

Transect A-A', June 2018 or last previous

Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model (Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA



4. CHOOSE TRANSECT Transect 1

5. CHOOSE TIME PERIOD 3

6. ENTER TRANSECT DATA

6.1 Distance of Transect 1 from Source → 1 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity?: No

6.5 Uniform Hydraulic Gradient?: Yes → Hydraulic Gradient 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Hydraulic Conductivity (ft/d)	Concentration (ug/L) *Constituent A* MtBE	Concentration (ug/L) *Constituent B*
1	Start of Transect	0						0	0
2	End of Transect	360						0	0
3	MW-10	30	10	40	30	60	10.8	1	
4	MW-24	31	50	60	30	60	8.1	2	
5	MW-7	195	16	40	30	60	6.2	0	
6	MW-1	207	20	35	30	60	6.7	3	
7	MW-11	225	10	40	30	60	5.1	0	
8	MW-14	288	25	45	30	60	6.8	0	
9	MW-24	297	25	40	30	60	6.8	2	
10	MW-9	339	25	45	30	60	0.03	5	
11	RW-1	201	21	60	30	60	4.7	430	
12									
13									
14									
15									

7. CHOOSE GRID (OPTIONAL)

	Current Grid		Refine Grid By	Refined Grid
Number of rows	10	→	1	10
Number of columns	11		1	11

8. SELECT CONSTITUENT FOR CALCULATIONS
◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | **HELP**

Grid Completion: Concentration

Transect 1 Time Period 3. Vertical Interpolation: Log Horizontal Interpolation: Log

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid		Next Step: Interpolate Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (ug/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	0	1.00E+00	2.00E+00	0.00E+00	4.30E+02	3.00E+00	0.00E+00	0.00E+00	2.00E+00	5.00E+00	0
33.0	0	1.00E+00	2.00E+00	0.00E+00	4.30E+02	3.00E+00	0.00E+00	0.00E+00	2.00E+00	5.00E+00	0
36.0	0	1.00E+00	2.00E+00	0.00E+00	4.30E+02	3.00E+00	0.00E+00	0.00E+00	2.00E+00	5.00E+00	0
39.0	0	1.00E+00	2.00E+00	0.00E+00	4.30E+02	3.00E+00	0.00E+00	0.00E+00	2.00E+00	5.00E+00	0
42.0	0	1.00E+00	2.00E+00	0.00E+00	4.30E+02	3.00E+00	0.00E+00	0.00E+00	2.00E+00	5.00E+00	0
45.0	0	1.00E+00	2.00E+00	0.00E+00	4.30E+02	3.00E+00	0.00E+00	0.00E+00	2.00E+00	5.00E+00	0
48.0	0	1.00E+00	2.00E+00	0.00E+00	4.30E+02	3.00E+00	0.00E+00	0.00E+00	2.00E+00	5.00E+00	0
51.0	0	1.00E+00	2.00E+00	0.00E+00	4.30E+02	3.00E+00	0.00E+00	0.00E+00	2.00E+00	5.00E+00	0
54.0	0	1.00E+00	2.00E+00	0.00E+00	4.30E+02	3.00E+00	0.00E+00	0.00E+00	2.00E+00	5.00E+00	0
57.0	0	1.00E+00	2.00E+00	0.00E+00	4.30E+02	3.00E+00	0.00E+00	0.00E+00	2.00E+00	5.00E+00	0
60.0											

Grid Completion: Hydraulic Conductivity

Transect 1 Time Period 3. Nearest Neighbor Interpolation

Step 10: Interpolate K Horizontally | Export K Grid | Import K Grid | Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP | Next Step: View Hydraulic Gradient Grid

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	6.70E+00	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
33.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	6.70E+00	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
36.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	*6.70E+00*	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
39.0	1.08E+01	*1.08E+01*	*1.08E+01*	*6.20E+00*	4.70E+00	*5.70E+00*	*5.10E+00*	6.80E+00	*6.80E+00*	3.00E-02	3.00E-02
42.0	1.08E+01	*1.08E+01*	*1.08E+01*	*5.45E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	6.80E+00	*6.80E+00*	3.00E-02	3.00E-02
45.0	1.08E+01	*8.10E+00*	*8.10E+00*	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
48.0	1.08E+01	*8.10E+00*	*8.10E+00*	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
51.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
54.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
57.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
60.0											

Grid Completion: Hydraulic Gradient

Transect 1 Time Period 3. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally | Export i Grid | Import i Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: Calculate Mass Flux

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
42.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
45.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
48.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
51.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
54.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
57.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
60.0											

Mass Flux Result

TOTAL MASS FLUX 3.42E-01 (g/day) 1.25E-01 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 1

SELECT TIME PERIOD TO VIEW: 3

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	0	3.98E-04	*4.24E-03*	0.00E+00	2.89E-02	5.74E-04	0.00E+00	0.00E+00	8.25E-04	7.50E-06	0
33.0	0	3.98E-04	*4.24E-03*	0.00E+00	2.89E-02	5.74E-04	0.00E+00	0.00E+00	8.25E-04	7.50E-06	0
36.0	0	3.98E-04	*4.24E-03*	0.00E+00	2.89E-02	*5.74E-04*	0.00E+00	0.00E+00	8.25E-04	7.50E-06	0
39.0	0	*3.98E-04*	*4.24E-03*	*0.00E+00*	2.89E-02	*4.88E-04*	*0.00E+00*	0.00E+00	*8.25E-04*	7.50E-06	0
42.0	0	*3.98E-04*	*4.24E-03*	*0.00E+00*	2.89E-02	*4.03E-04*	*0.00E+00*	0.00E+00	*8.25E-04*	7.50E-06	0
45.0	0	*2.99E-04*	*3.18E-03*	*0.00E+00*	2.89E-02	*4.03E-04*	*0.00E+00*	*0.00E+00*	*8.25E-04*	*7.50E-06*	0
48.0	0	*2.99E-04*	*3.18E-03*	*0.00E+00*	2.89E-02	*4.03E-04*	*0.00E+00*	*0.00E+00*	*8.25E-04*	*7.50E-06*	0
51.0	0	*2.99E-04*	3.18E-03	*0.00E+00*	2.89E-02	*4.03E-04*	*0.00E+00*	*0.00E+00*	*8.25E-04*	*7.50E-06*	0
54.0	0	*2.99E-04*	3.18E-03	*0.00E+00*	2.89E-02	*4.03E-04*	*0.00E+00*	*0.00E+00*	*8.25E-04*	*7.50E-06*	0
57.0	0	*2.99E-04*	3.18E-03	*0.00E+00*	2.89E-02	*4.03E-04*	*0.00E+00*	*0.00E+00*	*8.25E-04*	*7.50E-06*	0
60.0											

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary | Back to Mass Flux Result | Print | Back to Data Input | HELP

SELECT TRANSECT TO VIEW: Transect 1
SELECT TIME PERIOD TO VIEW: 3

MtBE Interpolation Methods

Hydraulic Conductivity: Nearest Neighbor
Concentration: 1) Vertical: Log Transformation 2) Horizontal: Log Transformation
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points 3.42E-01 *(g/day)*

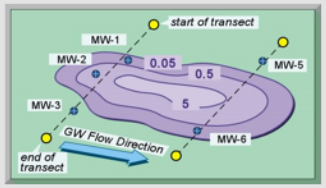
	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	RESULTS: Total Mass Flux Excluding Selected Point and Interpolating (g/day)	RESULTS: Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Conductivity	1.08E+01	ft/d	3.42E-01	0.0
2	MW-10	10.0	40.0	Conductivity	1.08E+01	ft/d	3.36E-01	1.7
3	MW-24	50.0	60.0	Conductivity	8.10E+00	ft/d	3.48E-01	-1.7
4	MW-7	16.0	40.0	Conductivity	6.20E+00	ft/d	3.42E-01	0.0
5	MW-1	20.0	35.0	Conductivity	4.70E+00	ft/d	4.38E-01	-28.1
6	MW-11	10.0	40.0	Conductivity	6.70E+00	ft/d	3.42E-01	0.2
7	MW-14	25.0	45.0	Conductivity	5.10E+00	ft/d	3.42E-01	0.0
8	MW-24	25.0	40.0	Conductivity	6.80E+00	ft/d	3.42E-01	0.0
9	MW-9	25.0	45.0	Conductivity	6.80E+00	ft/d	3.42E-01	0.0
10	RW-1	21.0	60.0	Conductivity	3.00E-02	ft/d	3.59E-01	-4.9
11	End of Transect			Conductivity	3.00E-02	ft/d	3.42E-01	0.0
12	Start of Transect			Concentration	0.00E+00	ug/L	3.46E-01	-1.1
13	MW-10	10.0	40.0	Concentration	1.00E+00	ug/L	3.39E-01	1.0
14	MW-24	50.0	60.0	Concentration	2.00E+00	ug/L	3.05E-01	10.8
15	MW-7	16.0	40.0	Concentration	0.00E+00	ug/L	6.61E-01	-93.2
16	*MW-1*	*20.0*	*35.0*	*Concentration*	*4.30E+02*	*ug/L*	5.35E-02	84.3
17	*MW-11*	*10.0*	*40.0*	*Concentration*	*3.00E+00*	*ug/L*	3.38E-01	1.3
18	*MW-14*	*25.0*	*45.0*	*Concentration*	*0.00E+00*	*ug/L*	3.42E-01	0.0
19	*MW-24*	*25.0*	*40.0*	*Concentration*	*0.00E+00*	*ug/L*	3.42E-01	0.0
20	*MW-9*	*25.0*	*45.0*	*Concentration*	*2.00E+00*	*ug/L*	3.34E-01	2.4
21	*RW-1*	*21.0*	*60.0*	*Concentration*	*5.00E+00*	*ug/L*	3.42E-01	0.0
22	*End of Transect*			*Concentration*	*0.00E+00*	*ug/L*	3.42E-01	0.0

Transect A-A', August/September 2018

Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model (Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA



4. CHOOSE TRANSECT Transect 1

5. CHOOSE TIME PERIOD 4

6. ENTER TRANSECT DATA

6.1 Distance of Transect 1 from Source → 1 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity?: No

6.5 Uniform Hydraulic Gradient?: Yes → Hydraulic Gradient 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Hydraulic Conductivity (ft/d)	Concentration (ug/L) *Constituent A* MtBE	Concentration (ug/L) *Constituent B*
1	Start of Transect	0						0	0
2	End of Transect	360						0	0
3	MW-10	30	10	40	30	60	10.8	0	
4	MW-24	31	50	60	30	60	8.1	2	
5	MW-7	195	16	40	30	60	6.2	0	
6	MW-1R	207	20	35	30	60	6.7	25	
7	MW-11	225	10	40	30	60	5.1	1	
8	MW-14	288	25	45	30	60	6.8	0	
9	MW-24	297	25	40	30	60	6.8	2	
10	MW-9	339	25	45	30	60	0.03	1	
11	RW-1	201	21	60	30	60	4.7	760	
12									
13									
14									
15									

7. CHOOSE GRID (OPTIONAL)

	Current Grid	Refine Grid By	Refined Grid
Number of rows	10	1	10
Number of columns	11	1	11

8. SELECT CONSTITUENT FOR CALCULATIONS
◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | **HELP**

Grid Completion: Concentration

Transect 1 Time Period 4. Vertical Interpolation: Log Horizontal Interpolation: Log

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid	Next Step: Interpolate Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (ug/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1R 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	End of Transect 339.0	
30.0	0	0.00E+00	2.00E+00	0.00E+00	7.60E+02	2.50E+01	1.00E+00	0.00E+00	2.00E+00	1.00E+00	0
33.0	0	0.00E+00	2.00E+00	0.00E+00	7.60E+02	2.50E+01	1.00E+00	0.00E+00	2.00E+00	1.00E+00	0
36.0	0	0.00E+00	2.00E+00	0.00E+00	7.60E+02	2.50E+01	1.00E+00	0.00E+00	2.00E+00	1.00E+00	0
39.0	0	0.00E+00	2.00E+00	0.00E+00	7.60E+02	2.50E+01	1.00E+00	0.00E+00	2.00E+00	1.00E+00	0
42.0	0	0.00E+00	2.00E+00	0.00E+00	7.60E+02	2.50E+01	1.00E+00	0.00E+00	2.00E+00	1.00E+00	0
45.0	0	0.00E+00	2.00E+00	0.00E+00	7.60E+02	2.50E+01	1.00E+00	0.00E+00	2.00E+00	1.00E+00	0
48.0	0	0.00E+00	2.00E+00	0.00E+00	7.60E+02	2.50E+01	1.00E+00	0.00E+00	2.00E+00	1.00E+00	0
51.0	0	0.00E+00	2.00E+00	0.00E+00	7.60E+02	2.50E+01	1.00E+00	0.00E+00	2.00E+00	1.00E+00	0
54.0	0	0.00E+00	2.00E+00	0.00E+00	7.60E+02	2.50E+01	1.00E+00	0.00E+00	2.00E+00	1.00E+00	0
57.0	0	0.00E+00	2.00E+00	0.00E+00	7.60E+02	2.50E+01	1.00E+00	0.00E+00	2.00E+00	1.00E+00	0
60.0											

Grid Completion: Hydraulic Conductivity

Transect 1 Time Period 4. Nearest Neighbor Interpolation

Step 10: Interpolate K Horizontally | Export K Grid | Import K Grid | Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP | Next Step: View Hydraulic Gradient Grid

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1R 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	6.70E+00	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
33.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	6.70E+00	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
36.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	*6.70E+00*	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
39.0	1.08E+01	*1.08E+01*	*1.08E+01*	*6.20E+00*	4.70E+00	*5.70E+00*	*5.10E+00*	6.80E+00	*6.80E+00*	3.00E-02	3.00E-02
42.0	1.08E+01	*1.08E+01*	*1.08E+01*	*5.45E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	6.80E+00	*6.80E+00*	3.00E-02	3.00E-02
45.0	1.08E+01	*8.10E+00*	*8.10E+00*	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
48.0	1.08E+01	*8.10E+00*	*8.10E+00*	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
51.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
54.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
57.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
60.0											

Grid Completion: Hydraulic Gradient

Transect 1 Time Period 4. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally | Export i Grid | Import i Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: Calculate Mass Flux

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1R 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
42.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
45.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
48.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
51.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
54.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
57.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
60.0											

Mass Flux Result

TOTAL MASS FLUX 5.99E-01 (g/day) 2.19E-01 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 1

SELECT TIME PERIOD TO VIEW: 4

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1R 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	0	0.00E+00	4.24E-03	0.00E+00	5.10E-02	4.78E-03	4.92E-04	0.00E+00	8.25E-04	1.50E-06	0
33.0	0	0.00E+00	4.24E-03	0.00E+00	5.10E-02	4.78E-03	4.92E-04	0.00E+00	8.25E-04	1.50E-06	0
36.0	0	0.00E+00	4.24E-03	0.00E+00	5.10E-02	4.78E-03	4.92E-04	0.00E+00	8.25E-04	1.50E-06	0
39.0	0	0.00E+00	4.24E-03	0.00E+00	5.10E-02	4.07E-03	4.92E-04	0.00E+00	8.25E-04	1.50E-06	0
42.0	0	0.00E+00	4.24E-03	0.00E+00	5.10E-02	3.36E-03	4.92E-04	0.00E+00	8.25E-04	1.50E-06	0
45.0	0	0.00E+00	3.18E-03	0.00E+00	5.10E-02	3.36E-03	4.92E-04	0.00E+00	8.25E-04	1.50E-06	0
48.0	0	0.00E+00	3.18E-03	0.00E+00	5.10E-02	3.36E-03	4.92E-04	0.00E+00	8.25E-04	1.50E-06	0
51.0	0	0.00E+00	3.18E-03	0.00E+00	5.10E-02	3.36E-03	4.92E-04	0.00E+00	8.25E-04	1.50E-06	0
54.0	0	0.00E+00	3.18E-03	0.00E+00	5.10E-02	3.36E-03	4.92E-04	0.00E+00	8.25E-04	1.50E-06	0
57.0	0	0.00E+00	3.18E-03	0.00E+00	5.10E-02	3.36E-03	4.92E-04	0.00E+00	8.25E-04	1.50E-06	0
60.0											

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary | Back to Mass Flux Result | Print | Back to Data Input | HELP

SELECT TRANSECT TO VIEW: Transect 1
SELECT TIME PERIOD TO VIEW: 4

MtBE Interpolation Methods

Hydraulic Conductivity: Nearest Neighbor
Concentration: 1) Vertical: Log Transformation 2) Horizontal: Log Transformation
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points **5.99E-01** *(g/day)*

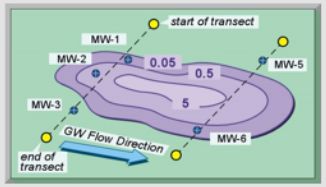
							RESULTS	
	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	Total Mass Flux Excluding Selected Point and Interpolating (g/day)	Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Conductivity	1.08E+01	ft/d	5.99E-01	0.0
2	MW-10	10.0	40.0	Conductivity	1.08E+01	ft/d	5.94E-01	0.9
3	MW-24	50.0	60.0	Conductivity	8.10E+00	ft/d	6.04E-01	-0.9
4	MW-7	16.0	40.0	Conductivity	6.20E+00	ft/d	5.99E-01	0.0
5	MW-1R	20.0	35.0	Conductivity	4.70E+00	ft/d	7.76E-01	-29.6
6	MW-11	10.0	40.0	Conductivity	6.70E+00	ft/d	5.94E-01	0.8
7	MW-14	25.0	45.0	Conductivity	5.10E+00	ft/d	6.00E-01	-0.2
8	MW-24	25.0	40.0	Conductivity	6.80E+00	ft/d	5.99E-01	0.0
9	MW-9	25.0	45.0	Conductivity	6.80E+00	ft/d	5.99E-01	0.0
10	RW-1	21.0	60.0	Conductivity	3.00E-02	ft/d	6.02E-01	-0.6
11	End of Transect			Conductivity	3.00E-02	ft/d	5.99E-01	0.0
12	Start of Transect			Concentration	0.00E+00	ug/L	5.99E-01	0.0
13	MW-10	10.0	40.0	Concentration	0.00E+00	ug/L	5.99E-01	0.0
14	MW-24	50.0	60.0	Concentration	2.00E+00	ug/L	5.62E-01	6.2
15	MW-7	16.0	40.0	Concentration	0.00E+00	ug/L	1.02E+00	-70.8
16	MW-1R	20.0	35.0	Concentration	7.60E+02	ug/L	8.88E-02	85.2
17	MW-11	10.0	40.0	Concentration	2.50E+01	ug/L	6.03E-01	-0.7
18	MW-14	25.0	45.0	Concentration	1.00E+00	ug/L	5.94E-01	0.8
19	MW-24	25.0	40.0	Concentration	0.00E+00	ug/L	6.07E-01	-1.4
20	MW-9	25.0	45.0	Concentration	2.00E+00	ug/L	5.91E-01	1.4
21	RW-1	21.0	60.0	Concentration	1.00E+00	ug/L	5.99E-01	0.0
22	End of Transect			Concentration	0.00E+00	ug/L	5.99E-01	0.0

Transect A-A', 2Q 2020

Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model
(Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA



4. CHOOSE TRANSECT Transect 1

5. CHOOSE TIME PERIOD 5

6. ENTER TRANSECT DATA

6.1 Distance of Transect 1 from Source → 1 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity?: No

6.5 Uniform Hydraulic Gradient?: Yes → Hydraulic Gradient 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Hydraulic Conductivity (ft/d)	Concentration (ug/L) *Constituent A* MtBE	Concentration (ug/L) *Constituent B*
1	Start of Transect	0						0	0
2	End of Transect	360						0	0
3	MW-10	30	10	40	30	60	10.8	0	
4	MW-24	31	50	60	30	60	8.1	0	
5	MW-7	195	16	40	30	60	6.2	0	
6	MW-1R	207	20	35	30	60	6.7	4	
7	MW-11	225	10	40	30	60	5.1	4	
8	MW-14	288	25	45	30	60	6.8	0	
9	MW-24	297	25	40	30	60	6.8	0	
10	MW-9	339	25	45	30	60	0.03	1	
11	RW-1	201	21	60	30	60	4.7	470	
12									
13									
14									
15									

7. CHOOSE GRID (OPTIONAL)

	Current Grid		Refine Grid By	Refined Grid
Number of rows	10	→	1	10
Number of columns	11		1	11

8. SELECT CONSTITUENT FOR CALCULATIONS
◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | **HELP**

Grid Completion: Concentration

Transect 1 Time Period 5. Vertical Interpolation: Log Horizontal Interpolation: Log

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid		Next Step: Interpolate Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (ug/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1R 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	End of Transect 339.0	
30.0	0	0.00E+00	0.00E+00	0.00E+00	4.70E+02	4.00E+00	4.00E+00	0.00E+00	0.00E+00	1.00E+00	0
33.0	0	0.00E+00	0.00E+00	0.00E+00	4.70E+02	4.00E+00	4.00E+00	0.00E+00	0.00E+00	1.00E+00	0
36.0	0	0.00E+00	0.00E+00	0.00E+00	4.70E+02	4.00E+00	4.00E+00	0.00E+00	0.00E+00	1.00E+00	0
39.0	0	0.00E+00	0.00E+00	0.00E+00	4.70E+02	4.00E+00	4.00E+00	0.00E+00	0.00E+00	1.00E+00	0
42.0	0	0.00E+00	0.00E+00	0.00E+00	4.70E+02	4.00E+00	4.00E+00	0.00E+00	0.00E+00	1.00E+00	0
45.0	0	0.00E+00	0.00E+00	0.00E+00	4.70E+02	4.00E+00	4.00E+00	0.00E+00	0.00E+00	1.00E+00	0
48.0	0	0.00E+00	0.00E+00	0.00E+00	4.70E+02	4.00E+00	4.00E+00	0.00E+00	0.00E+00	1.00E+00	0
51.0	0	0.00E+00	0.00E+00	0.00E+00	4.70E+02	4.00E+00	4.00E+00	0.00E+00	0.00E+00	1.00E+00	0
54.0	0	0.00E+00	0.00E+00	0.00E+00	4.70E+02	4.00E+00	4.00E+00	0.00E+00	0.00E+00	1.00E+00	0
57.0	0	0.00E+00	0.00E+00	0.00E+00	4.70E+02	4.00E+00	4.00E+00	0.00E+00	0.00E+00	1.00E+00	0
60.0											

Grid Completion: Hydraulic Conductivity

Transect 1 Time Period 5. Nearest Neighbor Interpolation

Step 10: Interpolate K Horizontally | Export K Grid | Import K Grid | Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP | Next Step: View Hydraulic Gradient Grid

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1R 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	6.70E+00	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
33.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	6.70E+00	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
36.0	1.08E+01	1.08E+01	*1.08E+01*	6.20E+00	4.70E+00	*6.70E+00*	5.10E+00	6.80E+00	6.80E+00	3.00E-02	3.00E-02
39.0	1.08E+01	*1.08E+01*	*1.08E+01*	*6.20E+00*	4.70E+00	*5.70E+00*	*5.10E+00*	6.80E+00	*6.80E+00*	3.00E-02	3.00E-02
42.0	1.08E+01	*1.08E+01*	*1.08E+01*	*5.45E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	6.80E+00	*6.80E+00*	3.00E-02	3.00E-02
45.0	1.08E+01	*8.10E+00*	*8.10E+00*	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
48.0	1.08E+01	*8.10E+00*	*8.10E+00*	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
51.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
54.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
57.0	1.08E+01	*8.10E+00*	8.10E+00	*4.70E+00*	4.70E+00	*4.70E+00*	*5.10E+00*	*6.80E+00*	*6.80E+00*	*3.00E-02*	3.00E-02
60.0											

Grid Completion: Hydraulic Gradient

Transect 1 Time Period 5. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally		Export i Grid	Import i Grid		Next Step: Calculate Mass Flux
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1R 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
42.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
45.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
48.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
51.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
54.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
57.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
60.0											

Mass Flux Result

TOTAL MASS FLUX 3.41E-01 (g/day) 1.25E-01 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 1

SELECT TIME PERIOD TO VIEW: 5

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-10 30.0	MW-24 31.0	MW-7 195.0	RW-1 201.0	MW-1R 207.0	MW-11 225.0	MW-14 288.0	MW-9 297.0	339.0	End of Transect
30.0	0	0.00E+00	0.00E+00	0.00E+00	3.15E-02	7.65E-04	1.97E-03	0.00E+00	0.00E+00	1.50E-06	0
33.0	0	0.00E+00	0.00E+00	0.00E+00	3.15E-02	7.65E-04	1.97E-03	0.00E+00	0.00E+00	1.50E-06	0
36.0	0	0.00E+00	0.00E+00	0.00E+00	3.15E-02	7.65E-04	1.97E-03	0.00E+00	0.00E+00	1.50E-06	0
39.0	0	0.00E+00	0.00E+00	0.00E+00	3.15E-02	6.51E-04	1.97E-03	0.00E+00	0.00E+00	1.50E-06	0
42.0	0	0.00E+00	0.00E+00	0.00E+00	3.15E-02	5.37E-04	1.97E-03	0.00E+00	0.00E+00	1.50E-06	0
45.0	0	0.00E+00	0.00E+00	0.00E+00	3.15E-02	5.37E-04	1.97E-03	0.00E+00	0.00E+00	1.50E-06	0
48.0	0	0.00E+00	0.00E+00	0.00E+00	3.15E-02	5.37E-04	1.97E-03	0.00E+00	0.00E+00	1.50E-06	0
51.0	0	0.00E+00	0.00E+00	0.00E+00	3.15E-02	5.37E-04	1.97E-03	0.00E+00	0.00E+00	1.50E-06	0
54.0	0	0.00E+00	0.00E+00	0.00E+00	3.15E-02	5.37E-04	1.97E-03	0.00E+00	0.00E+00	1.50E-06	0
57.0	0	0.00E+00	0.00E+00	0.00E+00	3.15E-02	5.37E-04	1.97E-03	0.00E+00	0.00E+00	1.50E-06	0
60.0											

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary | Back to Mass Flux Result | Print | Back to Data Input | HELP

SELECT TRANSECT TO VIEW: Transect 1
SELECT TIME PERIOD TO VIEW: 5

MtBE Interpolation Methods

Hydraulic Conductivity: Nearest Neighbor
Concentration: 1) Vertical: Log Transformation 2) Horizontal: Log Transformation
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points **3.41E-01** *(g/day)*

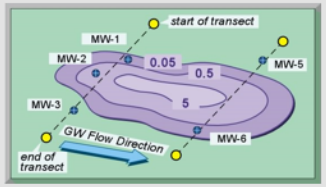
	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	RESULTS: Total Mass Flux Excluding Selected Point and Interpolating (g/day)	RESULTS: Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Conductivity	1.08E+01	ft/d	3.41E-01	0.0
2	MW-10	10.0	40.0	Conductivity	1.08E+01	ft/d	3.41E-01	0.0
3	MW-24	50.0	60.0	Conductivity	8.10E+00	ft/d	3.41E-01	0.0
4	MW-7	16.0	40.0	Conductivity	6.20E+00	ft/d	3.41E-01	0.0
5	MW-1R	20.0	35.0	Conductivity	4.70E+00	ft/d	4.47E-01	-30.9
6	MW-11	10.0	40.0	Conductivity	6.70E+00	ft/d	3.40E-01	0.2
7	MW-14	25.0	45.0	Conductivity	5.10E+00	ft/d	3.45E-01	-1.1
8	MW-24	25.0	40.0	Conductivity	6.80E+00	ft/d	3.41E-01	0.0
9	MW-9	25.0	45.0	Conductivity	6.80E+00	ft/d	3.41E-01	0.0
10	RW-1	21.0	60.0	Conductivity	3.00E-02	ft/d	3.45E-01	-1.0
11	End of Transect			Conductivity	3.00E-02	ft/d	3.41E-01	0.0
12	Start of Transect			Concentration	0.00E+00	ug/L	3.41E-01	0.0
13	MW-10	10.0	40.0	Concentration	0.00E+00	ug/L	3.41E-01	0.0
14	MW-24	50.0	60.0	Concentration	0.00E+00	ug/L	3.41E-01	0.0
15	MW-7	16.0	40.0	Concentration	0.00E+00	ug/L	3.41E-01	-0.1
16	MW-1R	20.0	35.0	Concentration	4.70E+02	ug/L	2.58E-02	92.4
17	MW-11	10.0	40.0	Concentration	4.00E+00	ug/L	4.02E-01	-17.8
18	MW-14	25.0	45.0	Concentration	4.00E+00	ug/L	3.22E-01	5.8
19	MW-24	25.0	40.0	Concentration	0.00E+00	ug/L	3.41E-01	0.0
20	MW-9	25.0	45.0	Concentration	0.00E+00	ug/L	3.41E-01	0.0
21	RW-1	21.0	60.0	Concentration	1.00E+00	ug/L	3.41E-01	0.0
22	End of Transect			Concentration	0.00E+00	ug/L	3.41E-01	0.0

Transect B-B’ Historic Average

Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model (Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA



4. CHOOSE TRANSECT Transect 2

5. CHOOSE TIME PERIOD 1

6. ENTER TRANSECT DATA

6.1 Distance of Transect 2 from Source → 100 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity?: No

6.5 Uniform Hydraulic Gradient?: Yes → Hydraulic Gradient 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Hydraulic Conductivity (ft/d)	Concentration (ug/L) *Constituent A* MtBE	Concentration (ug/L) *Constituent B*
1	Start of Transect	0						0	0
2	End of Transect	195						0	0
3	W-6	15	20	40	30	60	44.6	13	
4	MW-21S	75	26	46	30	60	44.6	3777	
5	MW-21I	76	56	66	30	60	86.3	2100	
6	W-1	78	20	40	30	60	52.6	14700	
7	W-2	141	20	40	30	60	44.6	5687	
8	W-3	183	20	40	30	60	52.6	12	
9									
10									
11									
12									
13									
14									
15									

7. CHOOSE GRID (OPTIONAL)

	Current Grid		Refine Grid By	Refined Grid
Number of rows	10	→	1	10
Number of columns	11		1	11

8. SELECT CONSTITUENT FOR CALCULATIONS
◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | **HELP**

Grid Completion: Concentration

Transect 2 Time Period 1. Vertical Interpolation: Log Horizontal Interpolation: Log

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid		Next Step: Interpolate Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (ug/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	0	1.30E+01	3.78E+03	*2.10E+03*	1.47E+04	5.69E+03	1.20E+01	0
33.0	0	1.30E+01	3.78E+03	*2.10E+03*	1.47E+04	5.69E+03	1.20E+01	0
36.0	0	1.30E+01	3.78E+03	*2.10E+03*	1.47E+04	5.69E+03	1.20E+01	0
39.0	0	*1.30E+01*	3.78E+03	*2.10E+03*	*1.47E+04*	*5.69E+03*	*1.20E+01*	0
42.0	0	*1.30E+01*	3.78E+03	*2.10E+03*	*1.47E+04*	*5.69E+03*	*1.20E+01*	0
45.0	0	*1.30E+01*	*3.78E+03*	*2.10E+03*	*1.47E+04*	*5.69E+03*	*1.20E+01*	0
48.0	0	*1.30E+01*	*3.78E+03*	*2.10E+03*	*1.47E+04*	*5.69E+03*	*1.20E+01*	0
51.0	0	*1.30E+01*	*3.78E+03*	*2.10E+03*	*1.47E+04*	*5.69E+03*	*1.20E+01*	0
54.0	0	*1.30E+01*	*3.78E+03*	*2.10E+03*	*1.47E+04*	*5.69E+03*	*1.20E+01*	0
57.0	0	*1.30E+01*	*3.78E+03*	2.10E+03	*1.47E+04*	*5.69E+03*	*1.20E+01*	0
60.0								

Grid Completion: Hydraulic Conductivity

Transect 2 Time Period 1. Nearest Neighbor Interpolation

Step 10: Interpolate K Horizontally | Export K Grid | Import K Grid | Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP | Next Step: View Hydraulic Gradient Grid

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
33.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
36.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
39.0	4.46E+01	*4.46E+01*	4.46E+01	*4.46E+01*	*4.86E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
42.0	4.46E+01	*4.46E+01*	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
45.0	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
48.0	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
51.0	4.46E+01	*4.46E+01*	*8.63E+01*	*8.63E+01*	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
54.0	4.46E+01	*4.46E+01*	*8.63E+01*	*8.63E+01*	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
57.0	4.46E+01	*4.46E+01*	*8.63E+01*	8.63E+01	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
60.0								

Grid Completion: Hydraulic Gradient

Transect 2 Time Period 1. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally | Export i Grid | Import i Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: Calculate Mass Flux

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
42.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
45.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
48.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
51.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
54.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
57.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
60.0								

Mass Flux Result

TOTAL MASS FLUX 1.16E+03 (g/day) 4.23E+02 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 2

SELECT TIME PERIOD TO VIEW: 1

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	0	**5.17E-02**	**1.22E+01**	*3.34E-01*	**5.98E+01**	**3.17E+01**	**4.06E-02**	0
33.0	0	**5.17E-02**	**1.22E+01**	*3.34E-01*	**5.98E+01**	**3.17E+01**	**4.06E-02**	0
36.0	0	**5.17E-02**	**1.22E+01**	*3.34E-01*	**5.98E+01**	**3.17E+01**	**4.06E-02**	0
39.0	0	*5.17E-02*	**1.22E+01**	*3.34E-01*	*5.53E+01*	*3.17E+01*	*4.06E-02*	0
42.0	0	*5.17E-02*	**1.22E+01**	*3.34E-01*	*5.07E+01*	*3.17E+01*	*4.06E-02*	0
45.0	0	*5.17E-02*	*1.22E+01*	*3.34E-01*	*5.07E+01*	*3.17E+01*	*4.06E-02*	0
48.0	0	*5.17E-02*	*1.22E+01*	*3.34E-01*	*5.07E+01*	*3.17E+01*	*4.06E-02*	0
51.0	0	*5.17E-02*	*2.37E+01*	*6.47E-01*	*9.81E+01*	*3.17E+01*	*4.06E-02*	0
54.0	0	*5.17E-02*	*2.37E+01*	*6.47E-01*	*9.81E+01*	*3.17E+01*	*4.06E-02*	0
57.0	0	*5.17E-02*	*2.37E+01*	**6.47E-01**	*9.81E+01*	*3.17E+01*	*4.06E-02*	0
60.0								

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary | Back to Mass Flux Result | Print | Back to Data Input | HELP

SELECT TRANSECT TO VIEW: Transect 2
SELECT TIME PERIOD TO VIEW: 1

MtBE Interpolation Methods

Hydraulic Conductivity: Nearest Neighbor
Concentration: 1) Vertical: Log Transformation 2) Horizontal: Log Transformation
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points 1.16E+03 *(g/day)*

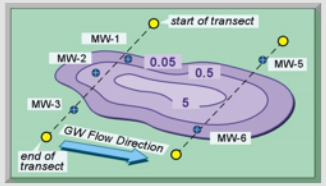
	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	RESULTS: Total Mass Flux Excluding Selected Point and Interpolating (g/day)	RESULTS: Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Conductivity	4.46E+01	ft/d	1.16E+03	0.0
2	W-6	20.0	40.0	Conductivity	4.46E+01	ft/d	1.16E+03	0.0
3	MW-21S	26.0	46.0	Conductivity	4.46E+01	ft/d	1.26E+03	-8.2
4	MW-21I	56.0	66.0	Conductivity	8.63E+01	ft/d	9.82E+02	15.3
5	W-1	20.0	40.0	Conductivity	5.26E+01	ft/d	1.13E+03	2.7
6	W-2	20.0	40.0	Conductivity	4.46E+01	ft/d	1.22E+03	-4.9
7	W-3	20.0	40.0	Conductivity	5.26E+01	ft/d	1.16E+03	0.0
8	End of Transect			Conductivity	5.26E+01	ft/d	1.16E+03	0.0
9	Start of Transect			Concentration	0.00E+00	ug/L	1.16E+03	0.0
10	W-6	20.0	40.0	Concentration	1.30E+01	ug/L	1.16E+03	0.0
11	MW-21S	26.0	46.0	Concentration	3.78E+03	ug/L	1.01E+03	12.9
12	MW-21I	56.0	66.0	Concentration	2.10E+03	ug/L	1.17E+03	-0.9
13	W-1	20.0	40.0	Concentration	1.47E+04	ug/L	6.39E+02	44.9
14	W-2	20.0	40.0	Concentration	5.69E+03	ug/L	8.66E+02	25.3
15	W-3	20.0	40.0	Concentration	1.20E+01	ug/L	1.16E+03	0.0
16	*End of Transect*			*Concentration*	*0.00E+00*	*ug/L*	1.16E+03	0.0

Transect B-B’, August 2014 or last previous

Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model (Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA



4. CHOOSE TRANSECT Transect 2

5. CHOOSE TIME PERIOD 2

6. ENTER TRANSECT DATA

6.1 Distance of Transect 2 from Source → 100 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity?: No

6.5 Uniform Hydraulic Gradient?: Yes →

Hydraulic Gradient: 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Hydraulic Conductivity (ft/d)	Concentration (ug/L) Constituent A MtBE	Concentration (ug/L) Constituent B
1	Start of Transect	0						0	0
2	End of Transect	195						0	0
3	W-6	15	20	40	30	60	44.6	0	
4	MW-21S	75	26	46	30	60	44.6	53	
5	MW-21I	76	56	66	30	60	86.3	1700	
6	W-1	78	20	40	30	60	52.6	15000	
7	W-2	141	20	40	30	60	44.6	5000	
8	W-3	183	20	40	30	60	52.6	0	
9									
10									
11									
12									
13									
14									
15									

7. CHOOSE GRID (OPTIONAL)

	Current Grid		Refine Grid By	Refined Grid
Number of rows	10	→	1	10
Number of columns	8		1	8

8. SELECT CONSTITUENT FOR CALCULATIONS

◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | **HELP**

Grid Completion: Concentration

Transect 2 Time Period 2. Vertical Interpolation: Log Horizontal Interpolation: Log

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid		Next Step: Interpolate Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (ug/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	0	0.00E+00	5.30E+01	*1.70E+03*	1.50E+04	5.00E+03	0.00E+00	0
33.0	0	0.00E+00	5.30E+01	*1.70E+03*	1.50E+04	5.00E+03	0.00E+00	0
36.0	0	0.00E+00	5.30E+01	*1.70E+03*	1.50E+04	5.00E+03	0.00E+00	0
39.0	0	*0.00E+00*	5.30E+01	*1.70E+03*	*1.50E+04*	*5.00E+03*	*0.00E+00*	0
42.0	0	*0.00E+00*	5.30E+01	*1.70E+03*	*1.50E+04*	*5.00E+03*	*0.00E+00*	0
45.0	0	*0.00E+00*	*5.30E+01*	*1.70E+03*	*1.50E+04*	*5.00E+03*	*0.00E+00*	0
48.0	0	*0.00E+00*	*5.30E+01*	*1.70E+03*	*1.50E+04*	*5.00E+03*	*0.00E+00*	0
51.0	0	*0.00E+00*	*5.30E+01*	*1.70E+03*	*1.50E+04*	*5.00E+03*	*0.00E+00*	0
54.0	0	*0.00E+00*	*5.30E+01*	*1.70E+03*	*1.50E+04*	*5.00E+03*	*0.00E+00*	0
57.0	0	*0.00E+00*	*5.30E+01*	1.70E+03	*1.50E+04*	*5.00E+03*	*0.00E+00*	0
60.0								

Grid Completion: Hydraulic Conductivity

Transect 2 Time Period 2. Nearest Neighbor Interpolation

Step 10: Interpolate K Horizontally | Export K Grid | Import K Grid | Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP | Next Step: View Hydraulic Gradient Grid

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
33.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
36.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
39.0	4.46E+01	*4.46E+01*	4.46E+01	*4.46E+01*	*4.86E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
42.0	4.46E+01	*4.46E+01*	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
45.0	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
48.0	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
51.0	4.46E+01	*4.46E+01*	*8.63E+01*	*8.63E+01*	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
54.0	4.46E+01	*4.46E+01*	*8.63E+01*	*8.63E+01*	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
57.0	4.46E+01	*4.46E+01*	*8.63E+01*	8.63E+01	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
60.0								

Grid Completion: Hydraulic Gradient

Transect 2 Time Period 2. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally		Export i Grid	Import i Grid		Next Step: Calculate Mass Flux
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
42.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
45.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
48.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
51.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
54.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
57.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
60.0								

Mass Flux Result

TOTAL MASS FLUX 9.79E+02 (g/day) 3.57E+02 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 2

SELECT TIME PERIOD TO VIEW: 2

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	0	**0.00E+00**	**1.72E-01**	*2.71E-01*	**6.10E+01**	**2.79E+01**	**0.00E+00**	0
33.0	0	**0.00E+00**	**1.72E-01**	*2.71E-01*	**6.10E+01**	**2.79E+01**	**0.00E+00**	0
36.0	0	**0.00E+00**	**1.72E-01**	*2.71E-01*	**6.10E+01**	**2.79E+01**	**0.00E+00**	0
39.0	0	*0.00E+00*	**1.72E-01**	*2.71E-01*	*5.64E+01*	*2.79E+01*	*0.00E+00*	0
42.0	0	*0.00E+00*	**1.72E-01**	*2.71E-01*	*5.17E+01*	*2.79E+01*	*0.00E+00*	0
45.0	0	*0.00E+00*	*1.72E-01*	*2.71E-01*	*5.17E+01*	*2.79E+01*	*0.00E+00*	0
48.0	0	*0.00E+00*	*1.72E-01*	*2.71E-01*	*5.17E+01*	*2.79E+01*	*0.00E+00*	0
51.0	0	*0.00E+00*	*3.32E-01*	*5.24E-01*	*1.00E+02*	*2.79E+01*	*0.00E+00*	0
54.0	0	*0.00E+00*	*3.32E-01*	*5.24E-01*	*1.00E+02*	*2.79E+01*	*0.00E+00*	0
57.0	0	*0.00E+00*	*3.32E-01*	**5.24E-01**	*1.00E+02*	*2.79E+01*	*0.00E+00*	0
60.0								

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary | Back to Mass Flux Result | Print | Back to Data Input | HELP

SELECT TRANSECT TO VIEW: Transect 2
SELECT TIME PERIOD TO VIEW: 2

MtBE Interpolation Methods

Hydraulic Conductivity: Nearest Neighbor
Concentration: 1) Vertical: Log Transformation 2) Horizontal: Log Transformation
Hydraulic Gradient: Uniform

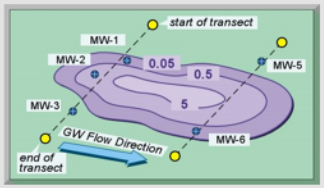
Total Mass Flux Including All Points 9.79E+02 *(g/day)*

							RESULTS	
	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	Total Mass Flux Excluding Selected Point and Interpolating (g/day)	Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Conductivity	4.46E+01	ft/d	9.79E+02	0.0
2	W-6	20.0	40.0	Conductivity	4.46E+01	ft/d	9.79E+02	0.0
3	MW-21S	26.0	46.0	Conductivity	4.46E+01	ft/d	1.05E+03	-7.4
4	MW-21I	56.0	66.0	Conductivity	8.63E+01	ft/d	8.33E+02	14.9
5	W-1	20.0	40.0	Conductivity	5.26E+01	ft/d	9.47E+02	3.3
6	W-2	20.0	40.0	Conductivity	4.46E+01	ft/d	1.03E+03	-5.1
7	W-3	20.0	40.0	Conductivity	5.26E+01	ft/d	9.79E+02	0.0
8	End of Transect			Conductivity	5.26E+01	ft/d	9.79E+02	0.0
9	Start of Transect			Concentration	0.00E+00	ug/L	9.79E+02	0.0
10	W-6	20.0	40.0	Concentration	0.00E+00	ug/L	9.79E+02	0.0
11	MW-21S	26.0	46.0	Concentration	5.30E+01	ug/L	9.77E+02	0.2
12	MW-21I	56.0	66.0	Concentration	1.70E+03	ug/L	9.78E+02	0.2
13	W-1	20.0	40.0	Concentration	1.50E+04	ug/L	4.19E+02	57.2
14	W-2	20.0	40.0	Concentration	5.00E+03	ug/L	7.01E+02	28.4
15	W-3	20.0	40.0	Concentration	0.00E+00	ug/L	9.79E+02	0.0
16	*End of Transect*			*Concentration*	*0.00E+00*	*ug/L*	9.79E+02	0.0

Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model (Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA



4. CHOOSE TRANSECT Transect 2

5. CHOOSE TIME PERIOD 3

6. ENTER TRANSECT DATA

6.1 Distance of Transect 2 from Source → 100 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity?: No

6.5 Uniform Hydraulic Gradient?: Yes →

Hydraulic Gradient: 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs)		Plume Top (ft bgs)	Plume Bottom (ft bgs)	Hydraulic Conductivity (ft/d)	Concentration (ug/L)	
			Top	Bottom				*Constituent A* MtBE	*Constituent B*
1	Start of Transect	0						0	0
2	End of Transect	195						0	0
3	W-6	15	20	40	30	60	44.6	0	
4	MW-21S	75	26	46	30	60	44.6	220	
5	MW-21I	76	56	66	30	60	86.3	1	
6	W-1	78	20	40	30	60	52.6	2000	
7	W-2	141	20	40	30	60	44.6	160	
8	W-3	183	20	40	30	60	52.6	0	
9									
10									
11									
12									
13									
14									
15									

7. CHOOSE GRID (OPTIONAL)

	Current Grid		Refine Grid By	Refined Grid
Number of rows	10	→	1	10
Number of columns	8		1	8

8. SELECT CONSTITUENT FOR CALCULATIONS

◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | ***HELP***

Grid Completion: Concentration

Transect 2 Time Period 3. Vertical Interpolation: Log Horizontal Interpolation: Log

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid		Next Step: Interpolate Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (ug/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	0	0.00E+00	2.20E+02	*1.00E+00*	2.00E+03	1.60E+02	0.00E+00	0
33.0	0	0.00E+00	2.20E+02	*1.00E+00*	2.00E+03	1.60E+02	0.00E+00	0
36.0	0	0.00E+00	2.20E+02	*1.00E+00*	2.00E+03	1.60E+02	0.00E+00	0
39.0	0	*0.00E+00*	2.20E+02	*1.00E+00*	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
42.0	0	*0.00E+00*	2.20E+02	*1.00E+00*	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
45.0	0	*0.00E+00*	*2.20E+02*	*1.00E+00*	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
48.0	0	*0.00E+00*	*2.20E+02*	*1.00E+00*	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
51.0	0	*0.00E+00*	*2.20E+02*	*1.00E+00*	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
54.0	0	*0.00E+00*	*2.20E+02*	*1.00E+00*	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
57.0	0	*0.00E+00*	*2.20E+02*	1.00E+00	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
60.0								

Grid Completion: Hydraulic Conductivity

Transect 2 Time Period 3. Nearest Neighbor Interpolation

Step 10: Interpolate K Horizontally | Export K Grid | Import K Grid | Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP | Next Step: View Hydraulic Gradient Grid

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
33.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
36.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
39.0	4.46E+01	*4.46E+01*	4.46E+01	*4.46E+01*	*4.86E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
42.0	4.46E+01	*4.46E+01*	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
45.0	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
48.0	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
51.0	4.46E+01	*4.46E+01*	*8.63E+01*	*8.63E+01*	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
54.0	4.46E+01	*4.46E+01*	*8.63E+01*	*8.63E+01*	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
57.0	4.46E+01	*4.46E+01*	*8.63E+01*	8.63E+01	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
60.0								

Grid Completion: Hydraulic Gradient

Transect 2 Time Period 3. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally | Export i Grid | Import i Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: Calculate Mass Flux

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
42.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
45.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
48.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
51.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
54.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
57.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
60.0								

Mass Flux Result

TOTAL MASS FLUX 1.11E+02 (g/day) 4.04E+01 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 2

SELECT TIME PERIOD TO VIEW: 3

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	0	0.00E+00	7.12E-01	*1.59E-04*	8.14E+00	8.92E-01	0.00E+00	0
33.0	0	0.00E+00	7.12E-01	*1.59E-04*	8.14E+00	8.92E-01	0.00E+00	0
36.0	0	0.00E+00	7.12E-01	*1.59E-04*	8.14E+00	8.92E-01	0.00E+00	0
39.0	0	*0.00E+00*	7.12E-01	*1.59E-04*	*7.52E+00*	*8.92E-01*	*0.00E+00*	0
42.0	0	*0.00E+00*	7.12E-01	*1.59E-04*	*6.90E+00*	*8.92E-01*	*0.00E+00*	0
45.0	0	*0.00E+00*	*7.12E-01*	*1.59E-04*	*6.90E+00*	*8.92E-01*	*0.00E+00*	0
48.0	0	*0.00E+00*	*7.12E-01*	*1.59E-04*	*6.90E+00*	*8.92E-01*	*0.00E+00*	0
51.0	0	*0.00E+00*	*1.38E+00*	*3.08E-04*	*1.33E+01*	*8.92E-01*	*0.00E+00*	0
54.0	0	*0.00E+00*	*1.38E+00*	*3.08E-04*	*1.33E+01*	*8.92E-01*	*0.00E+00*	0
57.0	0	*0.00E+00*	*1.38E+00*	3.08E-04	*1.33E+01*	*8.92E-01*	*0.00E+00*	0
60.0								

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary	Back to Mass Flux Result	Print
	Back to Data Input	HELP

SELECT TRANSECT TO VIEW: Transect 2
SELECT TIME PERIOD TO VIEW: 3

MtBE Interpolation Methods

Hydraulic Conductivity: Nearest Neighbor
Concentration: 1) Vertical: Log Transformation 2) Horizontal: Log Transformation
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points 1.11E+02 *(g/day)*

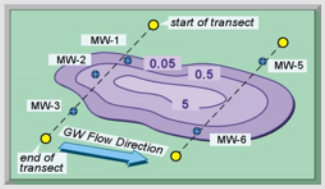
	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	RESULTS: Total Mass Flux Excluding Selected Point and Interpolating (g/day)	RESULTS: Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Conductivity	4.46E+01	ft/d	1.11E+02	0.0
2	W-6	20.0	40.0	Conductivity	4.46E+01	ft/d	1.11E+02	0.0
3	MW-21S	26.0	46.0	Conductivity	4.46E+01	ft/d	1.22E+02	-9.9
4	MW-21I	56.0	66.0	Conductivity	8.63E+01	ft/d	8.94E+01	19.3
5	W-1	20.0	40.0	Conductivity	5.26E+01	ft/d	1.06E+02	3.9
6	W-2	20.0	40.0	Conductivity	4.46E+01	ft/d	1.12E+02	-1.4
7	W-3	20.0	40.0	Conductivity	5.26E+01	ft/d	1.11E+02	0.0
8	End of Transect			Conductivity	5.26E+01	ft/d	1.11E+02	0.0
9	Start of Transect			Concentration	0.00E+00	ug/L	1.11E+02	0.0
10	W-6	20.0	40.0	Concentration	0.00E+00	ug/L	1.11E+02	0.0
11	MW-21S	26.0	46.0	Concentration	2.20E+02	ug/L	1.02E+02	8.2
12	MW-21I	56.0	66.0	Concentration	1.00E+00	ug/L	1.12E+02	-1.2
13	W-1	20.0	40.0	Concentration	2.00E+03	ug/L	1.86E+01	83.2
14	W-2	20.0	40.0	Concentration	1.60E+02	ug/L	1.02E+02	8.1
15	W-3	20.0	40.0	Concentration	0.00E+00	ug/L	1.11E+02	0.0
16	*End of Transect*			*Concentration*	*0.00E+00*	*ug/L*	1.11E+02	0.0

Transect B-B’, June 2018 or last previous

Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model
(Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA



4. CHOOSE TRANSECT Transect 2

5. CHOOSE TIME PERIOD 4

6. ENTER TRANSECT DATA

6.1 Distance of Transect 2 from Source → 100 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity?: No

6.5 Uniform Hydraulic Gradient?: Yes → Hydraulic Gradient 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Hydraulic Conductivity (ft/d)	Concentration (ug/L) *Constituent A* MtBE	Concentration (ug/L) *Constituent B*
1	Start of Transect	0						0	0
2	End of Transect	195						0	0
3	W-6	15	20	40	30	60	44.6	0	
4	MW-21S	75	26	46	30	60	44.6	220	
5	MW-21I	76	56	66	30	60	86.3	1	
6	W-1	78	20	40	30	60	52.6	2000	
7	W-2	141	20	40	30	60	44.6	160	
8	W-3	183	20	40	30	60	52.6	0	
9									
10									
11									
12									
13									
14									
15									

7. CHOOSE GRID (OPTIONAL)

	Current Grid		Refine Grid By	Refined Grid
Number of rows	10	→	1	10
Number of columns	8		1	8

8. SELECT CONSTITUENT FOR CALCULATIONS
◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | **HELP**

Grid Completion: Concentration

Transect 2 Time Period 4. Vertical Interpolation: Log Horizontal Interpolation: Log

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid		Next Step: Interpolate Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (ug/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	0	0.00E+00	2.20E+02	*1.00E+00*	2.00E+03	1.60E+02	0.00E+00	0
33.0	0	0.00E+00	2.20E+02	*1.00E+00*	2.00E+03	1.60E+02	0.00E+00	0
36.0	0	0.00E+00	2.20E+02	*1.00E+00*	2.00E+03	1.60E+02	0.00E+00	0
39.0	0	*0.00E+00*	2.20E+02	*1.00E+00*	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
42.0	0	*0.00E+00*	2.20E+02	*1.00E+00*	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
45.0	0	*0.00E+00*	*2.20E+02*	*1.00E+00*	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
48.0	0	*0.00E+00*	*2.20E+02*	*1.00E+00*	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
51.0	0	*0.00E+00*	*2.20E+02*	*1.00E+00*	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
54.0	0	*0.00E+00*	*2.20E+02*	*1.00E+00*	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
57.0	0	*0.00E+00*	*2.20E+02*	1.00E+00	*2.00E+03*	*1.60E+02*	*0.00E+00*	0
60.0								

Grid Completion: Hydraulic Conductivity

Transect 2 Time Period 4. Nearest Neighbor Interpolation

Step 10: Interpolate K Horizontally		Export K Grid	Import K Grid		Next Step: View Hydraulic Gradient Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
33.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
36.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
39.0	4.46E+01	*4.46E+01*	4.46E+01	*4.46E+01*	*4.86E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
42.0	4.46E+01	*4.46E+01*	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
45.0	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
48.0	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
51.0	4.46E+01	*4.46E+01*	*8.63E+01*	*8.63E+01*	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
54.0	4.46E+01	*4.46E+01*	*8.63E+01*	*8.63E+01*	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
57.0	4.46E+01	*4.46E+01*	*8.63E+01*	8.63E+01	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
60.0								

Grid Completion: Hydraulic Gradient

Transect 2 Time Period 4. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally | Export i Grid | Import i Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: Calculate Mass Flux

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
42.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
45.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
48.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
51.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
54.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
57.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
60.0								

Mass Flux Result

TOTAL MASS FLUX 1.11E+02 (g/day) 4.04E+01 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 2

SELECT TIME PERIOD TO VIEW: 4

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	0	**0.00E+00**	**7.12E-01**	*1.59E-04*	**8.14E+00**	**8.92E-01**	**0.00E+00**	0
33.0	0	**0.00E+00**	**7.12E-01**	*1.59E-04*	**8.14E+00**	**8.92E-01**	**0.00E+00**	0
36.0	0	**0.00E+00**	**7.12E-01**	*1.59E-04*	**8.14E+00**	**8.92E-01**	**0.00E+00**	0
39.0	0	*0.00E+00*	**7.12E-01**	*1.59E-04*	*7.52E+00*	*8.92E-01*	*0.00E+00*	0
42.0	0	*0.00E+00*	**7.12E-01**	*1.59E-04*	*6.90E+00*	*8.92E-01*	*0.00E+00*	0
45.0	0	*0.00E+00*	*7.12E-01*	*1.59E-04*	*6.90E+00*	*8.92E-01*	*0.00E+00*	0
48.0	0	*0.00E+00*	*7.12E-01*	*1.59E-04*	*6.90E+00*	*8.92E-01*	*0.00E+00*	0
51.0	0	*0.00E+00*	*1.38E+00*	*3.08E-04*	*1.33E+01*	*8.92E-01*	*0.00E+00*	0
54.0	0	*0.00E+00*	*1.38E+00*	*3.08E-04*	*1.33E+01*	*8.92E-01*	*0.00E+00*	0
57.0	0	*0.00E+00*	*1.38E+00*	**3.08E-04**	*1.33E+01*	*8.92E-01*	*0.00E+00*	0
60.0								

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary | Back to Mass Flux Result | Print | Back to Data Input | HELP

SELECT TRANSECT TO VIEW: Transect 2
SELECT TIME PERIOD TO VIEW: 4

MtBE Interpolation Methods

Hydraulic Conductivity: Nearest Neighbor
Concentration: 1) Vertical: Log Transformation 2) Horizontal: Log Transformation
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points 1.11E+02 *(g/day)*

							RESULTS	
	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	Total Mass Flux Excluding Selected Point and Interpolating (g/day)	Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Conductivity	4.46E+01	ft/d	1.11E+02	0.0
2	W-6	20.0	40.0	Conductivity	4.46E+01	ft/d	1.11E+02	0.0
3	MW-21S	26.0	46.0	Conductivity	4.46E+01	ft/d	1.22E+02	-9.9
4	MW-21I	56.0	66.0	Conductivity	8.63E+01	ft/d	8.94E+01	19.3
5	W-1	20.0	40.0	Conductivity	5.26E+01	ft/d	1.06E+02	3.9
6	W-2	20.0	40.0	Conductivity	4.46E+01	ft/d	1.12E+02	-1.4
7	W-3	20.0	40.0	Conductivity	5.26E+01	ft/d	1.11E+02	0.0
8	End of Transect			Conductivity	5.26E+01	ft/d	1.11E+02	0.0
9	Start of Transect			Concentration	0.00E+00	ug/L	1.11E+02	0.0
10	W-6	20.0	40.0	Concentration	0.00E+00	ug/L	1.11E+02	0.0
11	MW-21S	26.0	46.0	Concentration	2.20E+02	ug/L	1.02E+02	8.2
12	MW-21I	56.0	66.0	Concentration	1.00E+00	ug/L	1.12E+02	-1.2
13	W-1	20.0	40.0	Concentration	2.00E+03	ug/L	1.86E+01	83.2
14	W-2	20.0	40.0	Concentration	1.60E+02	ug/L	1.02E+02	8.1
15	W-3	20.0	40.0	Concentration	0.00E+00	ug/L	1.11E+02	0.0
16	*End of Transect*			*Concentration*	*0.00E+00*	*ug/L*	1.11E+02	0.0

Transect B-B', 2Q 2020

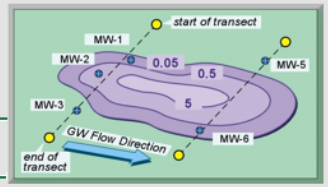
Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model (Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

4. CHOOSE TRANSECT Transect 2

5. CHOOSE TIME PERIOD 5



6. ENTER TRANSECT DATA

6.1 Distance of Transect 2 from Source → 100 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity?: No

6.5 Uniform Hydraulic Gradient?: Yes →

Hydraulic Gradient 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Hydraulic Conductivity (ft/d)	Concentration (ug/L) *Constituent A* MtBE	Concentration (ug/L) *Constituent B*
1	Start of Transect	0						0	0
2	End of Transect	195						0	0
3	W-6	15	20	40	30	60	44.6	0	
4	MW-21S	75	26	46	30	60	44.6	0.6	
5	MW-21I	76	56	66	30	60	86.3	0.5	
6	W-1	78	20	40	30	60	52.6	360	
7	W-2	141	20	40	30	60	44.6	59	
8	W-3	183	20	40	30	60	52.6	0	
9									
10									
11									
12									
13									
14									
15									

7. CHOOSE GRID (OPTIONAL)

	Current Grid		Refine Grid By	Refined Grid
Number of rows	10	→	1	10
Number of columns	8		1	8

8. SELECT CONSTITUENT FOR CALCULATIONS

◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | ***HELP***

Grid Completion: Concentration

Transect 2 Time Period 5. Vertical Interpolation: Log Horizontal Interpolation: Log

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid		Next Step: Interpolate Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (ug/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	0	0.00E+00	6.00E-01	*5.00E-01*	3.60E+02	5.90E+01	0.00E+00	0
33.0	0	0.00E+00	6.00E-01	*5.00E-01*	3.60E+02	5.90E+01	0.00E+00	0
36.0	0	0.00E+00	6.00E-01	*5.00E-01*	3.60E+02	5.90E+01	0.00E+00	0
39.0	0	*0.00E+00*	6.00E-01	*5.00E-01*	*3.60E+02*	*5.90E+01*	*0.00E+00*	0
42.0	0	*0.00E+00*	6.00E-01	*5.00E-01*	*3.60E+02*	*5.90E+01*	*0.00E+00*	0
45.0	0	*0.00E+00*	*6.00E-01*	*5.00E-01*	*3.60E+02*	*5.90E+01*	*0.00E+00*	0
48.0	0	*0.00E+00*	*6.00E-01*	*5.00E-01*	*3.60E+02*	*5.90E+01*	*0.00E+00*	0
51.0	0	*0.00E+00*	*6.00E-01*	*5.00E-01*	*3.60E+02*	*5.90E+01*	*0.00E+00*	0
54.0	0	*0.00E+00*	*6.00E-01*	*5.00E-01*	*3.60E+02*	*5.90E+01*	*0.00E+00*	0
57.0	0	*0.00E+00*	*6.00E-01*	5.00E-01	*3.60E+02*	*5.90E+01*	*0.00E+00*	0
60.0								

Grid Completion: Hydraulic Conductivity

Transect 2 Time Period 5. Nearest Neighbor Interpolation

Step 10: Interpolate K Horizontally		Export K Grid	Import K Grid		Next Step: View Hydraulic Gradient Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
33.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
36.0	4.46E+01	4.46E+01	4.46E+01	*4.46E+01*	5.26E+01	4.46E+01	5.26E+01	5.26E+01
39.0	4.46E+01	*4.46E+01*	4.46E+01	*4.46E+01*	*4.86E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
42.0	4.46E+01	*4.46E+01*	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
45.0	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
48.0	4.46E+01	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
51.0	4.46E+01	*4.46E+01*	*8.63E+01*	*8.63E+01*	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
54.0	4.46E+01	*4.46E+01*	*8.63E+01*	*8.63E+01*	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
57.0	4.46E+01	*4.46E+01*	*8.63E+01*	8.63E+01	*8.63E+01*	*4.46E+01*	*5.26E+01*	5.26E+01
60.0								

Grid Completion: Hydraulic Gradient

Transect 2 Time Period 5. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally | Export i Grid | Import i Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: Calculate Mass Flux

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
42.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
45.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
48.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
51.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
54.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
57.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
60.0								

Mass Flux Result

TOTAL MASS FLUX 2.00E+01 (g/day) 7.30E+00 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 2

SELECT TIME PERIOD TO VIEW: 5

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	W-6 15.0	MW-21S 75.0	MW-21I 76.0	W-1 78.0	W-2 141.0	W-3 183.0	End of Transect 195.0
30.0	0	**0.00E+00**	**1.94E-03**	*7.96E-05*	**1.46E+00**	**3.29E-01**	**0.00E+00**	0
33.0	0	**0.00E+00**	**1.94E-03**	*7.96E-05*	**1.46E+00**	**3.29E-01**	**0.00E+00**	0
36.0	0	**0.00E+00**	**1.94E-03**	*7.96E-05*	**1.46E+00**	**3.29E-01**	**0.00E+00**	0
39.0	0	*0.00E+00*	**1.94E-03**	*7.96E-05*	*1.35E+00*	*3.29E-01*	*0.00E+00*	0
42.0	0	*0.00E+00*	**1.94E-03**	*7.96E-05*	*1.24E+00*	*3.29E-01*	*0.00E+00*	0
45.0	0	*0.00E+00*	*1.94E-03*	*7.96E-05*	*1.24E+00*	*3.29E-01*	*0.00E+00*	0
48.0	0	*0.00E+00*	*1.94E-03*	*7.96E-05*	*1.24E+00*	*3.29E-01*	*0.00E+00*	0
51.0	0	*0.00E+00*	*3.76E-03*	*1.54E-04*	*2.40E+00*	*3.29E-01*	*0.00E+00*	0
54.0	0	*0.00E+00*	*3.76E-03*	*1.54E-04*	*2.40E+00*	*3.29E-01*	*0.00E+00*	0
57.0	0	*0.00E+00*	*3.76E-03*	**1.54E-04**	*2.40E+00*	*3.29E-01*	*0.00E+00*	0
60.0								

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary	Back to Mass Flux Result	Print
	Back to Data Input	HELP

SELECT TRANSECT TO VIEW: Transect 2
SELECT TIME PERIOD TO VIEW: 5

MtBE Interpolation Methods

Hydraulic Conductivity: Nearest Neighbor
Concentration: 1) Vertical: Log Transformation 2) Horizontal: Log Transformation
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points 2.00E+01 *(g/day)*

	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	RESULTS: Total Mass Flux Excluding Selected Point and Interpolating (g/day)	RESULTS: Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Conductivity	4.46E+01	ft/d	2.00E+01	0.0
2	W-6	20.0	40.0	Conductivity	4.46E+01	ft/d	2.00E+01	0.0
3	MW-21S	26.0	46.0	Conductivity	4.46E+01	ft/d	2.17E+01	-8.6
4	MW-21I	56.0	66.0	Conductivity	8.63E+01	ft/d	1.65E+01	17.4
5	W-1	20.0	40.0	Conductivity	5.26E+01	ft/d	1.92E+01	3.9
6	W-2	20.0	40.0	Conductivity	4.46E+01	ft/d	2.06E+01	-2.9
7	W-3	20.0	40.0	Conductivity	5.26E+01	ft/d	2.00E+01	0.0
8	End of Transect			Conductivity	5.26E+01	ft/d	2.00E+01	0.0
9	Start of Transect			Concentration	0.00E+00	ug/L	2.00E+01	0.0
10	W-6	20.0	40.0	Concentration	0.00E+00	ug/L	2.00E+01	0.0
11	MW-21S	26.0	46.0	Concentration	6.00E-01	ug/L	2.00E+01	0.1
12	MW-21I	56.0	66.0	Concentration	5.00E-01	ug/L	2.00E+01	-0.1
13	W-1	20.0	40.0	Concentration	3.60E+02	ug/L	3.57E+00	82.2
14	W-2	20.0	40.0	Concentration	5.90E+01	ug/L	1.67E+01	16.4
15	W-3	20.0	40.0	Concentration	0.00E+00	ug/L	2.00E+01	0.0
16	*End of Transect*			*Concentration*	*0.00E+00*	*ug/L*	2.00E+01	0.0

Transect C-C' Historic Average

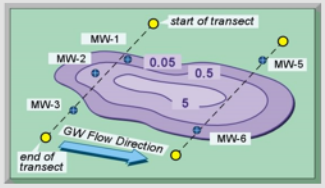
Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model
(Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

4. CHOOSE TRANSECT Transect 3

5. CHOOSE TIME PERIOD 1



6. ENTER TRANSECT DATA

6.1 Distance of Transect 3 from Source → 276 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity? Yes → Hydraulic Conductivity 1.04E+02 *(ft/d)*

6.5 Uniform Hydraulic Gradient? Yes → Hydraulic Gradient 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Concentration (mg/L) *Constituent A* MtBE	Concentration (mg/L) *Constituent B*
1	Start of Transect	0					0	0
2	End of Transect	213					0	0
3	MW-22	27	20	40	30	40	0	
4	MW-27S	30	20	40	30	40	0	
5	W-7	108	20	40	30	40	16	
6	W-5	168	20	40	30	40	0	
7	W-4	210	20	40	30	40	19	
8								
9								
10								
11								
12								
13								
14								
15								

7. CHOOSE GRID (OPTIONAL)

	Current Grid		Refine Grid By	Refined Grid
Number of rows	10	→	1	10
Number of columns	8		1	8

8. SELECT CONSTITUENT FOR CALCULATIONS
◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | **HELP**

Grid Completion: Concentration

Transect 3 Time Period 1. No Interpolation Required (No Space Available in Grid for Interpolation).

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid		Next Step: View Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (mg/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	0	0.00E+00	0.00E+00	1.60E+01	0.00E+00	1.90E+01	0
31.0	0	0.00E+00	0.00E+00	1.60E+01	0.00E+00	1.90E+01	0
32.0	0	0.00E+00	0.00E+00	1.60E+01	0.00E+00	1.90E+01	0
33.0	0	0.00E+00	0.00E+00	1.60E+01	0.00E+00	1.90E+01	0
34.0	0	0.00E+00	0.00E+00	1.60E+01	0.00E+00	1.90E+01	0
35.0	0	0.00E+00	0.00E+00	1.60E+01	0.00E+00	1.90E+01	0
36.0	0	0.00E+00	0.00E+00	1.60E+01	0.00E+00	1.90E+01	0
37.0	0	0.00E+00	0.00E+00	1.60E+01	0.00E+00	1.90E+01	0
38.0	0	0.00E+00	0.00E+00	1.60E+01	0.00E+00	1.90E+01	0
39.0	0	0.00E+00	0.00E+00	1.60E+01	0.00E+00	1.90E+01	0

Grid Completion: Hydraulic Conductivity

Transect 3 Time Period 1. Constant Conductivity: No Interpolation Required

Step 10: Interpolate K Horizontally		Export K Grid	Import K Grid	Next Step: View Hydraulic Gradient Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
31.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
32.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
33.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
34.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
35.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
36.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
37.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
38.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
39.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
40.0							

Grid Completion: Hydraulic Gradient

Transect 3 Time Period 1. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally		Export i Grid	Import i Grid		Next Step: Calculate Mass Flux
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
31.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
32.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
34.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
35.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
37.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
38.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
40.0							

Mass Flux Result

TOTAL MASS FLUX 1.26E+03 (g/day) 4.61E+02 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 3

SELECT TIME PERIOD TO VIEW: 1

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	0	0.00E+00	0.00E+00	9.11E+01	0.00E+00	3.53E+01	0
31.0	0	0.00E+00	0.00E+00	9.11E+01	0.00E+00	3.53E+01	0
32.0	0	0.00E+00	0.00E+00	9.11E+01	0.00E+00	3.53E+01	0
33.0	0	0.00E+00	0.00E+00	9.11E+01	0.00E+00	3.53E+01	0
34.0	0	0.00E+00	0.00E+00	9.11E+01	0.00E+00	3.53E+01	0
35.0	0	0.00E+00	0.00E+00	9.11E+01	0.00E+00	3.53E+01	0
36.0	0	0.00E+00	0.00E+00	9.11E+01	0.00E+00	3.53E+01	0
37.0	0	0.00E+00	0.00E+00	9.11E+01	0.00E+00	3.53E+01	0
38.0	0	0.00E+00	0.00E+00	9.11E+01	0.00E+00	3.53E+01	0
39.0	0	0.00E+00	0.00E+00	9.11E+01	0.00E+00	3.53E+01	0
40.0							

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary	Back to Mass Flux Result	Print
	Back to Data Input	HELP

SELECT TRANSECT TO VIEW: Transect 3
SELECT TIME PERIOD TO VIEW: 1

MtBE Interpolation Methods

Hydraulic Conductivity: Uniform
Concentration: Nearest Neighbor
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points 1.26E+03 *(g/day)*

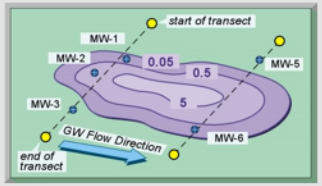
	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	RESULTS: Total Mass Flux Excluding Selected Point and Interpolating (g/day)	RESULTS: Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Concentration	0.00E+00	mg/L	1.26E+03	0.0
2	MW-22	20.0	40.0	Concentration	0.00E+00	mg/L	1.26E+03	0.0
3	MW-27S	20.0	40.0	Concentration	0.00E+00	mg/L	1.26E+03	0.0
4	W-7	20.0	40.0	Concentration	1.60E+01	mg/L	3.53E+02	72.1
5	W-5	20.0	40.0	Concentration	0.00E+00	mg/L	2.06E+03	-63.3
6	W-4	20.0	40.0	Concentration	1.90E+01	mg/L	9.11E+02	27.9
7	End of Transect			Concentration	0.00E+00	mg/L	1.29E+03	-1.9

Transect C-C' August 2014 or last previous

Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model
(Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA



4. CHOOSE TRANSECT Transect 3

5. CHOOSE TIME PERIOD 2

6. ENTER TRANSECT DATA

6.1 Distance of Transect 3 from Source → 276 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity? Yes → Hydraulic Conductivity 1.04E+02 *(ft/d)*

6.5 Uniform Hydraulic Gradient? Yes → Hydraulic Gradient 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Concentration (mg/L) *Constituent A* MtBE	Concentration (mg/L) *Constituent B*
1	Start of Transect	0					0	0
2	End of Transect	213					0	0
3	MW-22	27	20	40	30	40	0	
4	MW-27S	30	20	40	30	40	1	
5	W-7	108	20	40	30	40	0	
6	W-5	168	20	40	30	40	0	
7	W-4	210	20	40	30	40	0	
8								
9								
10								
11								
12								
13								
14								
15								

7. CHOOSE GRID (OPTIONAL)

	Current Grid		Refine Grid By	Refined Grid
Number of rows	10	→	1	10
Number of columns	7		1	7

8. SELECT CONSTITUENT FOR CALCULATIONS
◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | ***HELP***

Grid Completion: Concentration

Transect 3 Time Period 2. No Interpolation Required (No Space Available in Grid for Interpolation).

Step 10: Interpolate Conc Horizontally | Export Conc Grid | Import Conc Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: View Hydraulic Conductivity Grid

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (mg/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	0	0.00E+00	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0
31.0	0	0.00E+00	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0
32.0	0	0.00E+00	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0
33.0	0	0.00E+00	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0
34.0	0	0.00E+00	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0
35.0	0	0.00E+00	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0
36.0	0	0.00E+00	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0
37.0	0	0.00E+00	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0
38.0	0	0.00E+00	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0
39.0	0	0.00E+00	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0

Grid Completion: Hydraulic Conductivity

Transect 3 Time Period 2. Constant Conductivity: No Interpolation Required

Step 10: Interpolate K Horizontally | Export K Grid | Import K Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: View Hydraulic Gradient Grid

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
31.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
32.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
33.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
34.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
35.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
36.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
37.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
38.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
39.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
40.0							

Grid Completion: Hydraulic Gradient

Transect 3 Time Period 2. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally | Export i Grid | Import i Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: Calculate Mass Flux

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
31.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
32.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
34.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
35.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
37.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
38.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
40.0							

Mass Flux Result

TOTAL MASS FLUX 3.34E+01 (g/day) 1.22E+01 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 3

SELECT TIME PERIOD TO VIEW: 2

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	0	0.00E+00	3.34E+00	0.00E+00	0.00E+00	0.00E+00	0
31.0	0	0.00E+00	3.34E+00	0.00E+00	0.00E+00	0.00E+00	0
32.0	0	0.00E+00	3.34E+00	0.00E+00	0.00E+00	0.00E+00	0
33.0	0	0.00E+00	3.34E+00	0.00E+00	0.00E+00	0.00E+00	0
34.0	0	0.00E+00	3.34E+00	0.00E+00	0.00E+00	0.00E+00	0
35.0	0	0.00E+00	3.34E+00	0.00E+00	0.00E+00	0.00E+00	0
36.0	0	0.00E+00	3.34E+00	0.00E+00	0.00E+00	0.00E+00	0
37.0	0	0.00E+00	3.34E+00	0.00E+00	0.00E+00	0.00E+00	0
38.0	0	0.00E+00	3.34E+00	0.00E+00	0.00E+00	0.00E+00	0
39.0	0	0.00E+00	3.34E+00	0.00E+00	0.00E+00	0.00E+00	0
40.0							

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary | Back to Mass Flux Result | Print | Back to Data Input | HELP

SELECT TRANSECT TO VIEW: Transect 3
SELECT TIME PERIOD TO VIEW: 2

MtBE Interpolation Methods

Hydraulic Conductivity: Uniform
Concentration: Nearest Neighbor
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points 3.34E+01 *(g/day)*

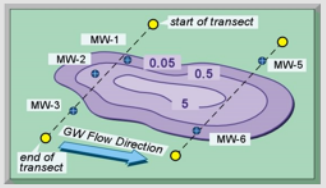
	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	RESULTS: Total Mass Flux Excluding Selected Point and Interpolating (g/day)	RESULTS: Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Concentration	0.00E+00	mg/L	4.89E+00	85.4
2	MW-22	20.0	40.0	Concentration	2.80E-02	mg/L	4.57E+00	86.3
3	MW-27S	20.0	40.0	Concentration	2.80E-02	mg/L	4.57E+00	86.3
4	W-7	20.0	40.0	Concentration	2.80E-02	mg/L	4.57E+00	86.3
5	W-5	20.0	40.0	Concentration	2.80E-02	mg/L	4.57E+00	86.3
6	W-4	20.0	40.0	Concentration	2.80E-02	mg/L	4.06E+00	87.9
7	End of Transect			Concentration	0.00E+00	mg/L	4.61E+00	86.2

Transect C-C', June 2018 or last previous

Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model
(Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA



4. CHOOSE TRANSECT Transect 3

5. CHOOSE TIME PERIOD 3

6. ENTER TRANSECT DATA

6.1 Distance of Transect 3 from Source → 276 (ft)

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity? Yes → Hydraulic Conductivity 1.04E+02 (ft/d)

6.5 Uniform Hydraulic Gradient? Yes → Hydraulic Gradient 2.80E-02 (ft/ft)

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Concentration (mg/L) Constituent A MtBE	Concentration (mg/L) Constituent B
1	Start of Transect	0					0	0
2	End of Transect	213					0	0
3	MW-22	27	20	40	30	40	0	
4	MW-27S	30	20	40	30	40	0.7	
5	W-7	108	20	40	30	40	0	
6	W-5	168	20	40	30	40	0	
7	W-4	210	20	40	30	40	0	
8								
9								
10								
11								
12								
13								
14								
15								

7. CHOOSE GRID (OPTIONAL)

	Current Grid		Refine Grid By	Refined Grid
Number of rows	10	→	1	10
Number of columns	7		1	7

8. SELECT CONSTITUENT FOR CALCULATIONS
◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | Import MW Data | Export MW Data | See Conc/Flux Grids

Clear Screen | Paste Example | Restore Table Formatting | Print | HELP

Grid Completion: Concentration

Transect 3 Time Period 3. No Interpolation Required (No Space Available in Grid for Interpolation).

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid		Next Step: View Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (mg/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
31.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
32.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
33.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
34.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
35.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
36.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
37.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
38.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
39.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0

Grid Completion: Hydraulic Conductivity

Transect 3 Time Period 3. Constant Conductivity: No Interpolation Required

Step 10: Interpolate K Horizontally | Export K Grid | Import K Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: View Hydraulic Gradient Grid

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
31.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
32.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
33.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
34.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
35.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
36.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
37.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
38.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
39.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
40.0							

Grid Completion: Hydraulic Gradient

Transect 3 Time Period 3. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally | Export i Grid | Import i Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: Calculate Mass Flux

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
31.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
32.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
34.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
35.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
37.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
38.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
40.0							

Mass Flux Result

TOTAL MASS FLUX 2.34E+01 (g/day) 8.54E+00 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 3

SELECT TIME PERIOD TO VIEW: 3

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
31.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
32.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
33.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
34.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
35.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
36.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
37.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
38.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
39.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
40.0							

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary	Back to Mass Flux Result	Print
	Back to Data Input	HELP

SELECT TRANSECT TO VIEW: Transect 3
SELECT TIME PERIOD TO VIEW: 3

MtBE Interpolation Methods

Hydraulic Conductivity: Uniform
Concentration: Nearest Neighbor
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points 2.34E+01 *(g/day)*

	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	RESULTS: Total Mass Flux Excluding Selected Point and Interpolating (g/day)	RESULTS: Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Concentration	0.00E+00	mg/L	2.34E+01	0.0
2	MW-22	20.0	40.0	Concentration	0.00E+00	mg/L	3.20E+01	-37.0
3	MW-27S	20.0	40.0	Concentration	7.00E-01	mg/L	0.00E+00	100.0
4	W-7	20.0	40.0	Concentration	0.00E+00	mg/L	2.34E+01	0.0
5	W-5	20.0	40.0	Concentration	0.00E+00	mg/L	2.34E+01	0.0
6	W-4	20.0	40.0	Concentration	0.00E+00	mg/L	2.34E+01	0.0
7	End of Transect			Concentration	0.00E+00	mg/L	2.34E+01	0.0

Transect C-C', August/September 2018

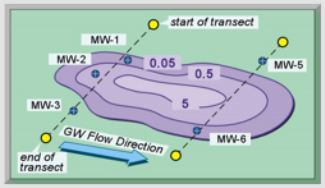
Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model (Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

4. CHOOSE TRANSECT Transect 3

5. CHOOSE TIME PERIOD 4



6. ENTER TRANSECT DATA

6.1 Distance of Transect 3 from Source → 276 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity? Yes → Hydraulic Conductivity 1.04E+02 *(ft/d)*

6.5 Uniform Hydraulic Gradient? Yes → Hydraulic Gradient 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Concentration (mg/L) Constituent A MtBE	Concentration (mg/L) Constituent B
1	Start of Transect	0					0	0
2	End of Transect	213					0	0
3	MW-22	27	20	40	30	40	0	
4	MW-27S	30	20	40	30	40	0.7	
5	W-7	108	20	40	30	40	0	
6	W-5	168	20	40	30	40	0	
7	W-4	210	20	40	30	40	0	
8								
9								
10								
11								
12								
13								
14								
15								

7. CHOOSE GRID (OPTIONAL)

	Current Grid	Refine Grid By	Refined Grid
Number of rows	10	1	10
Number of columns	7	1	7

8. SELECT CONSTITUENT FOR CALCULATIONS
◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | Import MW Data | Export MW Data | See Conc/Flux Grids

Clear Screen | Paste Example | Restore Table Formatting | Print | HELP

Grid Completion: Concentration

Transect 3 Time Period 4. No Interpolation Required (No Space Available in Grid for Interpolation).

Step 10: Interpolate Conc Horizontally		Export Conc Grid	Import Conc Grid		Next Step: View Hydraulic Conductivity Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (mg/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
31.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
32.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
33.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
34.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
35.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
36.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
37.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
38.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0
39.0	0	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0

Grid Completion: Hydraulic Conductivity

Transect 3 Time Period 4. Constant Conductivity: No Interpolation Required

Step 10: Interpolate K Horizontally		Export K Grid	Import K Grid	Next Step: View Hydraulic Gradient Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
31.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
32.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
33.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
34.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
35.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
36.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
37.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
38.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
39.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
40.0							

Grid Completion: Hydraulic Gradient

Transect 3 Time Period 4. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally | Export i Grid | Import i Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: Calculate Mass Flux

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
31.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
32.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
34.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
35.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
37.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
38.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
40.0							

Mass Flux Result

TOTAL MASS FLUX 2.34E+01 (g/day) 8.54E+00 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 3

SELECT TIME PERIOD TO VIEW: 4

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
31.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
32.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
33.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
34.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
35.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
36.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
37.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
38.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
39.0	0	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0
40.0							

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary	Back to Mass Flux Result	Print
	Back to Data Input	HELP

SELECT TRANSECT TO VIEW: Transect 3
SELECT TIME PERIOD TO VIEW: 4

MtBE Interpolation Methods

Hydraulic Conductivity: Uniform
Concentration: Nearest Neighbor
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points 2.34E+01 *(g/day)*

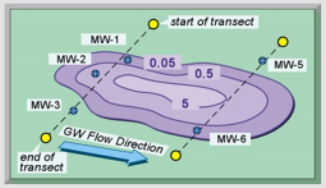
	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	RESULTS: Total Mass Flux Excluding Selected Point and Interpolating (g/day)	RESULTS: Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Concentration	0.00E+00	mg/L	2.34E+01	0.0
2	MW-22	20.0	40.0	Concentration	0.00E+00	mg/L	3.20E+01	-37.0
3	MW-27S	20.0	40.0	Concentration	7.00E-01	mg/L	0.00E+00	100.0
4	W-7	20.0	40.0	Concentration	0.00E+00	mg/L	2.34E+01	0.0
5	W-5	20.0	40.0	Concentration	0.00E+00	mg/L	2.34E+01	0.0
6	W-4	20.0	40.0	Concentration	0.00E+00	mg/L	2.34E+01	0.0
7	End of Transect			Concentration	0.00E+00	mg/L	2.34E+01	0.0

Transect C-C', 2Q 2020

Input Data and Grid

Data Input Instructions
Enter value directly.
Value calculated by model
(Don't enter any data)

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA



4. CHOOSE TRANSECT Transect 3

5. CHOOSE TIME PERIOD 5

6. ENTER TRANSECT DATA

6.1 Distance of Transect 3 from Source → 276 *(ft)*

6.2 ○ Darcy Velocity ◉ Hydraulic Conductivity

6.6 ◉ Sampling Interval ○ Mid Point of Sampling Interval

6.3 Hydraulic Conductivity Units: ft/d

6.4 Uniform Hydraulic Conductivity?: Yes → Hydraulic Conductivity 1.04E+02 *(ft/d)*

6.5 Uniform Hydraulic Gradient?: Yes → Hydraulic Gradient 2.80E-02 *(ft/ft)*

	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Concentration (mg/L) *Constituent A* MtBE	Concentration (mg/L) *Constituent B*
1	Start of Transect	0					0	0
2	End of Transect	213					0	0
3	MW-22	27	20	40	30	40	0	
4	MW-27S	30	20	40	30	40	0.4	
5	W-7	108	20	40	30	40	0	
6	W-5	168	20	40	30	40	0	
7	W-4	210	20	40	30	40	0	
8								
9								
10								
11								
12								
13								
14								
15								

7. CHOOSE GRID (OPTIONAL)

	Current Grid		Refine Grid By	Refined Grid
Number of rows	10	→	1	10
Number of columns	7		1	7

8. SELECT CONSTITUENT FOR CALCULATIONS
◉ MtBE ○ Constituent B

Next Step: Continue Data Input

Back to Transect Calculator Screen | *Import MW Data* | *Export MW Data* | *See Conc/Flux Grids*

Clear Screen | *Paste Example* | *Restore Table Formatting* | Print | **HELP**

Grid Completion: Concentration

Transect 3 Time Period 5. No Interpolation Required (No Space Available in Grid for Interpolation).

Step 10: Interpolate Conc Horizontally | Export Conc Grid | Import Conc Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | *HELP*

Next Step: View Hydraulic Conductivity Grid

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

MtBE Concentrations (mg/L)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	0	0.00E+00	4.00E-01	0.00E+00	0.00E+00	0.00E+00	0
31.0	0	0.00E+00	4.00E-01	0.00E+00	0.00E+00	0.00E+00	0
32.0	0	0.00E+00	4.00E-01	0.00E+00	0.00E+00	0.00E+00	0
33.0	0	0.00E+00	4.00E-01	0.00E+00	0.00E+00	0.00E+00	0
34.0	0	0.00E+00	4.00E-01	0.00E+00	0.00E+00	0.00E+00	0
35.0	0	0.00E+00	4.00E-01	0.00E+00	0.00E+00	0.00E+00	0
36.0	0	0.00E+00	4.00E-01	0.00E+00	0.00E+00	0.00E+00	0
37.0	0	0.00E+00	4.00E-01	0.00E+00	0.00E+00	0.00E+00	0
38.0	0	0.00E+00	4.00E-01	0.00E+00	0.00E+00	0.00E+00	0
39.0	0	0.00E+00	4.00E-01	0.00E+00	0.00E+00	0.00E+00	0

Grid Completion: Hydraulic Conductivity

Transect 3 Time Period 5. Constant Conductivity: No Interpolation Required

Step 10: Interpolate K Horizontally		Export K Grid	Import K Grid		Next Step: View Hydraulic Gradient Grid
Back to Data Input	Back to Conc Grid	Back to K Grid	Print	HELP	

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

→ Top/Bottom of plume. (Don't enter any data).

Hydraulic Conductivity (ft/d)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
31.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
32.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
33.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
34.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
35.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
36.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
37.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
38.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
39.0	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02	1.04E+02
40.0							

Grid Completion: Hydraulic Gradient

Transect 3 Time Period 5. Constant Gradient: No Interpolation Required

Step 10: Interpolate i Horizontally | Export i Grid | Import i Grid

Back to Data Input | Back to Conc Grid | Back to K Grid | Print | HELP

Next Step: Calculate Mass Flux

Data Input Instructions

10.80 → Enter value directly. (Values in italics represent interpolated values.)

[redacted] → Top/Bottom of plume. (Don't enter any data).

Hydraulic Gradient (ft/ft)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
31.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
32.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
33.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
34.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
35.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
36.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
37.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
38.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
39.0	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02	2.80E-02
40.0							

Mass Flux Result

TOTAL MASS FLUX 1.34E+01 (g/day) 4.88E+00 (kg/yr)

Data Representation

1. Bold values represent calculations based on given values.
2. Values in italics represent calculations based on interpolation.
3. Black shaded cells represent the top and bottom of the plume.

Next Step: Mass Flux Summary | Run/View Uncertainty Analysis (Optional) | View Final Concentration Grid | Back to Data Grid | Print | HELP

SELECT TRANSECT TO VIEW: Transect 3

SELECT TIME PERIOD TO VIEW: 5

MtBE Mass Flux (g/day)

Distance from Edge of Transect (ft)

Depth in ft-bgs	Start of Transect 0.0	MW-22 27.0	MW-27S 30.0	W-7 108.0	W-5 168.0	W-4 210.0	End of Transect 213.0
30.0	0	0.00E+00	1.34E+00	0.00E+00	0.00E+00	0.00E+00	0
31.0	0	0.00E+00	1.34E+00	0.00E+00	0.00E+00	0.00E+00	0
32.0	0	0.00E+00	1.34E+00	0.00E+00	0.00E+00	0.00E+00	0
33.0	0	0.00E+00	1.34E+00	0.00E+00	0.00E+00	0.00E+00	0
34.0	0	0.00E+00	1.34E+00	0.00E+00	0.00E+00	0.00E+00	0
35.0	0	0.00E+00	1.34E+00	0.00E+00	0.00E+00	0.00E+00	0
36.0	0	0.00E+00	1.34E+00	0.00E+00	0.00E+00	0.00E+00	0
37.0	0	0.00E+00	1.34E+00	0.00E+00	0.00E+00	0.00E+00	0
38.0	0	0.00E+00	1.34E+00	0.00E+00	0.00E+00	0.00E+00	0
39.0	0	0.00E+00	1.34E+00	0.00E+00	0.00E+00	0.00E+00	0
40.0							

Interpolation Error Results

INSTRUCTIONS
1. The table below shows all concentration and, if applicable, non-uniform conductivity/Darcy velocity and gradient input data.
2. During the uncertainty analysis, each of the points in the table are removed one at a time and the mass flux calculated without that point using the interpolation scheme specified in the Data Input section (note that

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Next Step: Mass Flux Summary | Back to Mass Flux Result | Print | Back to Data Input | HELP

SELECT TRANSECT TO VIEW: Transect 3
SELECT TIME PERIOD TO VIEW: 5

MtBE Interpolation Methods

Hydraulic Conductivity: Uniform
Concentration: Nearest Neighbor
Hydraulic Gradient: Uniform

Total Mass Flux Including All Points 1.34E+01 *(g/day)*

	End of Transect	Top of Sampling Interval	Bottom of Sampling Interval	Parameter Examined	Parameter Value Removed For Analysis	Parameter Units	RESULTS: Total Mass Flux Excluding Selected Point and Interpolating (g/day)	RESULTS: Contribution of Selected Point to Total Mass Flux (%)
1	Start of Transect			Concentration	0.00E+00	mg/L	1.34E+01	0.0
2	MW-22	20.0	40.0	Concentration	0.00E+00	mg/L	1.83E+01	-37.0
3	MW-27S	20.0	40.0	Concentration	4.00E-01	mg/L	0.00E+00	100.0
4	W-7	20.0	40.0	Concentration	0.00E+00	mg/L	1.34E+01	0.0
5	W-5	20.0	40.0	Concentration	0.00E+00	mg/L	1.34E+01	0.0
6	W-4	20.0	40.0	Concentration	0.00E+00	mg/L	1.34E+01	0.0
7	End of Transect			Concentration	0.00E+00	mg/L	1.34E+01	0.0

Transect Calculator: Mass Flux Summary

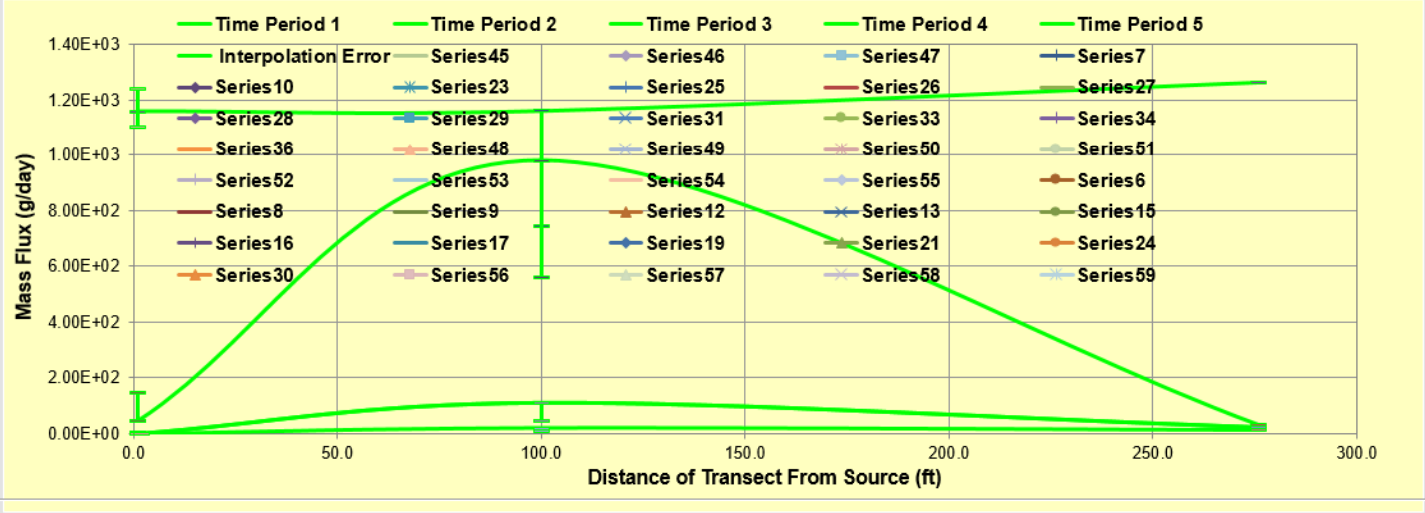
Version 2.01

Site Location and I.D.: 26140
Description: 9901 Georgetown Pike, Great Falls, VA

Mass Flux Summary for MtBE

	Distance from Source (ft)	Mass Flux (g/day)				
		Time Period 1	Time Period 2	Time Period 3	Time Period 4	Time Period 5
Transect 1	1	1.16E+03	4.71E+01	3.42E-01	5.99E-01	3.41E-01
Transect 2	100	1.16E+03	9.79E+02	1.11E+02	1.11E+02	2.00E+01
Transect 3	276	1.26E+03	3.34E+01	2.34E+01	2.34E+01	1.34E+01
Transect 4						
Transect 5						

85th percentile from Advanced Uncertainty Analysis
Maximum of the three Toolkit interpolation schemes
Value using selected interpolation schemes
Minimum of the three Toolkit interpolation schemes
15th percentile from Advanced Uncertainty Analysis



Next Step: Save File

View Flux Result | View Conc Grid | Print | HELP

Return To Toolkit Main Screen | Return To Transect Main Screen