

Tyson Spring Dye Traces (3 Jul 2009) - 2 Traces

Carbon (Bug) Analysis Results

Trace Inputs:

Dye Input #1: At 15:35, 271.77g of **Sulforhodamine B** was poured into Schweir Sinkhole D594 (MN23:D00594, 561,603 E / 4,845,940 N, NAD 83, Zone 15) at 15:35. The dye was preceded by about 100 gallons (380 l) of water, then followed by 400 gallons (1,510 l) of water.

Dye Input #2: At 18:25, 562.48g of **Uranine** was poured into Freimark Sinkhole 23D3318 (MN23:D03318, 561,589 E / 4,844,089 N, NAD 83, Zone 15) at 18:25. The dye was preceded by about 100 gallons (380 l) of water, then followed by 400 gallons (1,510 l) of water.

KFD Numbers	Field Site	UTMs (NAD 83, Zone 15)		24 Jun - 3 Jul 2009	3 Jul 2009 Dye Input	3 Jul - 6 Jul 2009	6 Jul - 13 Jul 2009	13 Jul - 20 Jul 2009	20 Jul - 28 Jul 2009	28 Jul - 10 Aug 2009
		Easting	Northing							
MN23:X00128	Fillmore Creek (23X128)	559,220	4,844,065	nd		nd	Uran (3245 σ) (diluted)	Uran (231 σ) (diluted)	Uran (217 σ)	Uran (526 σ) (diluted)
MN23:X00127	Frederick's Upstream (23X127)	560,407	4,845,406	lost		nd	Uran * (15 σ)	Uran * (251 σ)	Uran * (4 σ)	nd
MN23:A00111	Shady Spring East Headwater (23A111)	564,064	4,847,288	nd (in: 26 Jun)		nd	nd	nd	nd	nd
MN23:A00112	Shady Spring West A (23A112) (aka, Arndt Spring SW)	564,059	4,847,450	nd (in: 26 Jun)		nd	nd	nd	nd	nd
MN23:X00126	Turn Lathe Spring Run (23X126)	561,078	4,845,997	nd		SrB (271 σ) (diluted)	SrB (172 σ) (diluted)	SrB (255 σ)	SrB (57 σ)	SrB (174 σ)
MN23:X00119	Tyson Spring Run (23X119)	561,066	4,845,994	nd		SrB * (4 σ)	SrB * (5 σ)	nd	nd	nd

SrB indicates **Sulforhodamine B** dye was detected
SrB * indicates Sulforhodamine B from some other source (possibly wastewater plant)
Uran indicates **Uranine** dye was detected
Uran * indicates subsequent analysis in later years determined to be **Uranine** detection

nd indicates no dye was detected
lost indicates bug was lost in the field