DATA EVALUATION RECORD

STUDY 8

CHEM 128847 Difenoconazole §162-3, §162-4
CAS No. 119446-68-3
FORMULATION--00--ACTIVE INGREDIENT

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Spare, W. 1989. Aerobic and anaerobic aquatic metabolism of CGA-169374. Agrisearch Project No: 1240. Unpublished study performed by Agrisearch Inc., Fredrick, MD; and submitted by Agricultural Division, CIBA-GEIGY Corp., Greensboro, NC.

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CONCLUSIONS

Metabolism - Anaerobic Aquatic and Aerobic Aquatic

1. This study is of questionable scientifical validity, but may provide useful information on the anaerobic aquatic metabolism of difenoconazole. However, the data are of questionable validity because both material balances and parent data were variable over time. Additionally, anaerobicity of the test systems could not be confirmed. Because the test compound was relatively stable, an additional study may not provide new information.

   This study is scientifically valid and provides useful information on the aerobic aquatic metabolism of difenoconazole. However, the data are of questionable validity because both material balances and parent data were variable over time. Because the test compound was relatively stable, an additional study may not provide new information.

   It is noted that this study was not conducted in accordance with Good Laboratory Practices (GLP) as specified in 40 CFR 160. The study was conducted in accordance with the EPA GLP Standards in place at the time of the study.

2. This study does not meet Subdivision N Guidelines for the fulfillment of EPA data requirements on anaerobic aquatic metabolism for the following reasons:

   (i) the sediment may not have been flooded for 30 days prior to treatment with the test compound; and

   (ii) the test systems were not monitored for redox potential, dissolved oxygen, and pH during the incubation period.

   This study does not meet Subdivision N Guidelines for the fulfillment of EPA data requirements on aerobic aquatic metabolism for the following reason:

   (i) the test systems were not monitored for redox potential, dissolved oxygen, and pH during the incubation period.

3. Under anaerobic conditions, triazole ring-labeled [3,5-^{14}C]difenoconazole, at a nominal concentration of 10.0 µg/mL (reviewer-calculated), was relatively stable (registrant-calculated half-life was 1245 days; $r^2 = 0.62$) in flooded loam sediment that was incubated in darkness at 25 ± 1 °C for up to 365 days; however, data were variable between sampling intervals. The parent compound was present at 78.0% of the applied radioactivity at 365 days posttreatment. All reported data are the means of two replicates which were both analyzed by two separate TLC systems, unless otherwise reported. In the total sediment/water system, the parent compound was initially 95.6% (single replicates) of the applied radioactivity, decreased with variability to 83.3% by 7 days

posttreatment, was 96.4% at 91 days, and decreased with variability to 78.0% by 365 days. In the water phase, the parent compound was initially 95.6% (single replicate; prior to flooding of the sediment) of the applied radioactivity and was 8.7% at 1 day posttreatment (reviewer-calculated), the last sampling interval for which water phase [^{14}C]residues were characterized. In the sediment phase, the parent compound was 82.4% of the applied radioactivity at 1 day posttreatment, was 95.4% at 3 days, was 83.3% at 7 days, was 96.4% at 91 days, and decreased with variability to 78.0% by 365 days. Nonextractable [^{14}C]residues were ≤8.1% (reviewer-calculated) of the applied radioactivity throughout the incubation period. [^{14}C]Volatiles were not detected during the incubation period; tabular data were not presented. The distribution ratio (reviewer-calculated) of [^{14}C]residues between the sediment and water phases was 9.4:1 at 1 day posttreatment, 26.5:1 at 3 days, and 52.9:1 (single replicate) at 365 days.

Under aerobic conditions, triazole ring-labeled [3,5-^{14}C]difenoconazole, at a nominal concentration of 10.0 µg/mL (reviewer-calculated), was relatively stable (registrant-calculated half-life was 860 days; $r^2 = 0.03$) in flooded loam sediment that was incubated in darkness at 25 ± 1°C for up to 30 days; however, data were variable between sampling intervals. The parent compound was present at 86.8% of the applied radioactivity at 30 days posttreatment. All reported data are the means of two replicates which were both analyzed by two separate TLC systems unless otherwise specified. In the total sediment/water system, the parent compound was initially 95.6% (single replicate) of the applied radioactivity, decreased to 80.5% by 1 day posttreatment, was 116.4% at 7 days, and decreased with variability to 86.8% by 30 days. In the water phase, the parent compound was initially 95.6% (single replicate; prior to flooding of the sediment) of the applied radioactivity and was 7.9% (reviewer-calculated) at 1 day posttreatment, the last sampling interval for which water phase [^{14}C]residues were characterized. In the sediment phase, the parent compound was 72.6% (reviewer-calculated) of the applied radioactivity at 1 day posttreatment, was 116.4% at 7 days, and decreased with variability to 86.8% by 30 days. Nonextractable [^{14}C]residues were ≤6.4% (reviewer-calculated) of the applied radioactivity throughout the incubation period. [^{14}C]Volatiles were not detected during the incubation period; tabular data were not presented. The distribution ratio (reviewer-calculated) of [^{14}C]residues between the sediment and water phases was 7.9:1 at 1 day posttreatment and 40.0:1 at 30 days.

METHODS

Triazole ring-labeled [3,5-^{14}C]difenoconazole {CGA-169374; 1-[[2-[2-chloro-4-(4-chlorophenoxy)phenyl]-4-methyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole; specific activity 19.7 µCi/mg; radiochemical purity 97.0%}, dissolved in acetonitrile, was added to sterile (200 mL) plus nonsterile (1600 mL) rice paddy water (pH 7.8, total alkalinity 21.0, total hardness 26.0, total suspended solids 190.0 mg/L; see Comment #8) at a nominal concentration of 10.0 µg/mL (reviewer-calculated; p. 9; see Comment #7). Samples (25 g) of loam sediment (collected from a rice paddy in Texas; 35% sand, 48%

silt, 17% clay, 5.7% organic matter, pH 5.9, CEC 14.9 meq/100 g; p. 8) were weighed into Erlenmeyer flasks and flooded with the treated water (50 mL); the final sediment:water ratio was 1:2 (w:v; reviewer-calculated; p. 9; see Comment #2). The flasks were covered with foil and sealed with a Telfon®-lined stopper (anaerobic study) OR a foam plug (aerobic study) equipped with an inlet and an outlet tube (p. 10; Figure 2, p. 33). Humidified nitrogen (anaerobic study) OR humidified air (aerobic study) was pumped through the headspace of the test systems. Selected samples (day 365, anaerobic study; day 30, aerobic study) were connected to a series of volatile traps containing ethylene glycol, 1 *N* H_2SO_4, and 1 *N* NaOH. Sediment/water systems were incubated in darkness at 25 ± 1 °C for up to 365 days (anaerobic study) OR 30 days (aerobic study). Sterile control samples were prepared as described previously for the anaerobic study and incubated under similar conditions, except they were purged with filter-sterilized (0.2 µm) nitrogen (p. 10). Only treated water samples were analyzed at time 0; duplicate sediment/water systems were removed for analysis at 1, 3, 7, 14, 30, 91, 183, 275, and 365 days posttreatment (anaerobic study) OR 1, 3, 7, 14, and 30 days posttreatment (aerobic study; p. 11; Tables III, IV; pp. 21, 22). Sterile samples were removed for analysis at 30 and 183 days posttreatment.

At each sampling interval, aliquots of the water phase from duplicate samples were centrifuged; the pellet was returned to the sediment phase (p. 12). The supernatant was analyzed for total radioactivity by LSC; the limit of detection was not reported. Aliquots of the supernatant were analyzed by one-dimensional TLC using two silica gel plates each developed with acetonitrile (developed twice) OR toluene:acetone (75:25, v:v; first development) followed by acetonitrile (second development; p. 13). Samples were co-chromatographed with nonradiolabeled reference standards of the parent (Table I, p. 19) and the potential degradates (degradates not specified), which were visualized with UV (254 nm) light. Areas of radioactivity were quantitated using radioimage scanning. The sediment phase was extracted by shaking with methanol (p. 12). The methanol phase was separated from the sediments using vacuum filtration; the sediments were rinsed repeatedly with methanol. The extract was analyzed by LSC and by TLC as described previously. Selected sediment samples (days 91-365; anaerobic only) were further refluxed with methanol:water (9:1, v:v). The extract was collected and analyzed (method not specified; data reported in Tables VI-IX, pp. 24-27). Post-extracted sediment samples were analyzed for total radioactivity by LSC following combustion (p. 12); combustion efficiency was not reported.

To confirm the identity of the parent and degradates, selected sediment extracts (day 365, anaerobic study; day 30, aerobic study) were further analyzed by two-dimensional TLC using two silica gel plates each developed with toluene:acetonitrile (75:25, v:v; first development of first dimension) followed by acetonitrile (second development of first dimension) and chloroform:methanol:formic acid:water (75:20:4:2; v:v:v:v; second dimension) OR chloroform:methanol (9:1, v:v; first dimension) and chloroform:methanol:formic acid:water (75:20:4:2, v:v:v:v; second dimension; p. 13). Samples were co-chromatographed with reference standards of the parent and potential

degradates CGA-205375, CGA-143548, CGA-205374, CGA-131013, CGA-142856 (Figures 7, 8; pp. 38, 39), which were visualized using UV (254 nm) light. Areas of radioactivity were quantified using radioimage scanning. Areas of radioactivity were scraped from the plates and radioactivity was determined using an unspecified method.

At each sampling interval, volatile traps solutions were replaced (p. 12). Aliquots of the volatile trap solutions were analyzed for total radioactivity by LSC.

To confirm microbial viability, selected sediment samples (day 0, both studies; 6 months and 12 months, anaerobic study; day 30, aerobic study) were plated on selective media and incubated for 2 to 5 days (p. 14, Table I, p. 20). Separate counts of aerobic and anaerobic bacteria, fungi, and actinomycetes were performed; results indicated that the systems were viable (both studies). Sterility of the sterile controls was confirmed by the same method; <10 CFU were observed (see Comment #10).

To confirm the presence of anaerobic conditions (anaerobic study only), anaerobic indicator strips were used during the incubation period (data were not reported; p. 10; see Comment #3).

DATA SUMMARY

Anaerobic Aquatic Metabolism

Triazole ring-labeled [3,5-^{14}C]difenoconazole (radiochemical purity 97.0%), at a nominal concentration of 10.0 µg/mL (reviewer-calculated), was relatively stable (registrant-calculated half-life was 1245 days; $r^2 = 0.62$) in flooded loam sediment that was incubated in darkness at 25 ± 1 °C for up to 365 days (Table X, p. 28; figure not provided); however, data were variable between sampling intervals (see Comment #1). The parent compound was present at 78.0% of the applied radioactivity at 365 days posttreatment (see Comment #9). All reported data are the means of two replicates which were both analyzed by two separate TLC systems, unless otherwise reported. In the total sediment/water system, the parent compound was initially present at 95.6% (single replicate) of the applied radioactivity, decreased with variability to 83.3% of the applied by 7 days posttreatment, was 96.4% of the applied at 91 days, and decreased with variability to 78.0% of the applied by 365 days posttreatment (Table X, p. 28; see Comment #9). In the water phase, the parent compound was initially present at 95.6% (single replicate; prior to flooding of the sediment) of the applied radioactivity and was 8.7% of the applied at 1 day posttreatment (reviewer-calculated; Tables VI, VII; pp. 24, 25), the last sampling interval for which water phase [^{14}C]residues were characterized. Uncharacterized water phase [^{14}C]residues were ≤4.3% (reviewer-calculated) of the applied radioactivity from 3 to 365 days posttreatment (Table III, p. 21). In the sediment phase, the parent compound was present at 82.4% (reviewer-calculated; Tables VI, VII; pp. 24, 25) of the applied radioactivity at 1 day posttreatment, was 95.4% of the applied at

3 days posttreatment, was 83.3% of the applied at 7 days, was 96.4% of the applied at 91 days posttreatment, and decreased with variability to 78.0% of the applied by 365 days (Table X, p. 28). Uncharacterized origin material accounted for ≤4.3% (single replicate) of the applied radioactivity throughout the incubation period (Tables VI, VII; pp. 24, 25). Uncharacterized [^{14}C]residues (designated as "regions") were ≤5.3% (reviewer-calculated) of the applied radioactivity during the incubation period. Uncharacterized [^{14}C]residues (designated as "remainder") were ≤3.9% (reviewer-calculated) of the applied radioactivity during the incubation period. Nonextractable [^{14}C]residues were ≤8.1% (reviewer-calculated) of the applied radioactivity throughout the incubation period (Table III, p. 21). [^{14}C]Volatiles were not detected during the incubation period (p. 15; tabular data were not reported). The distribution ratio (reviewer-calculated from data in Table I, p. 21) of [^{14}C]residues between the sediment and water phases was 9.4:1 at 1 day posttreatment, 26.5:1 at 3 days posttreatment, and 52.9:1 (single replicate) at 365 days posttreatment.

Material balances (based on LSC analysis of individual replicates) were variable over time and ranged from 89.2 to 110.8% of the applied radioactivity throughout the incubation period (Table III, p. 21); a clear pattern of loss was not observed (see Comment #1).

Aerobic Aquatic Metabolism

Triazole ring-labeled [3,5-^{14}C]difenoconazole (radiochemical purity 97.0%), at a nominal concentration of 10.0 µg/mL (reviewer-calculated), was relatively stable (registrant-calculated half-life was 860 days, $r^2 = 0.03$) in flooded loam sediment that was incubated in darkness at 25 ± 1°C for up to 30 days (Table XI, p. 29; figure not provided); however data were variable between sampling intervals (see Comment #1). The parent compound was present at 86.8% of the applied radioactivity at 30 days posttreatment (see Comment #9). All reported data are the means of two replicates which were both analyzed by two separate TLC systems unless otherwise specified. In the total sediment/water system, the parent compound was initially present at 95.6% (single replicate) of the applied radioactivity, decreased to 80.5% of the applied by 1 day posttreatment, was 116.4% of the applied at 7 days, and decreased with variability to 86.8% of the applied by 30 days posttreatment (Table XI, p. 29; see Comment #9). In the water phase, the parent compound was initially present at 95.6% (single replicate; prior to flooding of the sediment) of the applied radioactivity and was 7.9% of the applied at 1 day posttreatment (reviewer-calculated; Tables VIII, IX; pp. 26, 27), the last sampling interval for which water phase [^{14}C]residues were characterized. Uncharacterized water phase [^{14}C]residues were ≤4.5% (reviewer-calculated) of the applied radioactivity from 3 to 30 days posttreatment (Table IV, p. 22). In the sediment phase, the parent compound was present at 72.6% (reviewer-calculated; Tables VIII, IX; pp. 26, 27) of the applied radioactivity at 1 day posttreatment, was 116.4% of the applied at 7 days posttreatment, and decreased with variability to 86.8% of the applied by 30 days posttreatment (Table XI, p. 29). Uncharacterized origin material accounted for ≤4.3% (single replicate) of the applied

radioactivity throughout the incubation period (Tables VII, IX; pp. 26, 27). Uncharacterized [^{14}C]residues (designated as "regions") were detected once, at ≤0.5% (single replicate) of the applied radioactivity during the incubation period. Uncharacterized [^{14}C]residues (designated as "remainder") were ≤6.0% (single replicate) of the applied radioactivity during the incubation period. Nonextractable [^{14}C]residues were ≤6.4% (reviewer-calculated) of the applied radioactivity throughout the incubation period (Table IV, p. 22). [^{14}C]Volatiles were not detected during the incubation period (tabular data not reported; p. 15). The distribution ratio (reviewer-calculated from data in Table IV, p. 22) of [^{14}C]residues between the sediment and water phases was 7.9:1 at 1 day posttreatment and 40:1 at 30 days posttreatment.

Material balances (based on LSC analysis of individual replicates) were variable over time and ranged from 82.8 to 101.2% throughout the incubation period, with the exception of 123.3-132.3% at day 7; a clear pattern of loss was not observed (Table IV, p. 22; see Comments #1 and #4).

Sterile control results data were similar to data from nonsterile systems for up to 183 days posttreatment, the last sampling interval for which control samples were monitored (Tables IV, VIII, IX; pp. 22, 26, 27).

COMMENTS

1. The scientific validity of the study was questionable. The data were variable over time for both the parent compound and the material balances throughout the study (both systems). In the anaerobic total sediment/water systems, the parent compound was highly variable over time, with the maximum concentration (96.4% of the applied radioactivity) occurring at 91 days posttreatment (rather than the initial sampling interval), and the minimum concentration (75.9% of the applied) occurring at 275 days posttreatment (rather than the final, 365-day sampling interval; Table X, p. 28). Similar variability was observed in the material balances (Table III, p. 21). In the aerobic total sediment/water systems, the parent compound was highly variable, with the minimum concentration (80.5% of the applied radioactivity; day 1) occurring before the maximum concentration (116.4% of the applied; day 7; Table XI, p. 29). Similar variability was observed in the material balances (Table IV, p. 22; also see Comment #4). The study author did not discuss the variability. However, the parent compound appeared to be relatively stable under both anaerobic and aerobic conditions; therefore, it is unlikely that a new study would provide additional information.

2. In the anaerobic aquatic metabolism study, the reviewer was unable to confirm that anaerobicity was established by flooding the sediment for 30 days prior to adding the test compound. The reviewer noted that in the protocol (Appendix A, p. 45), it was stated that "if flooded soil is to be used for the study, a one month pre-dose incubation will be performed." However, the pre-dose one-month incubation procedure was not mentioned

in the Experimental Design section of the main text (pp. 8-11). A deviation from the protocol was not listed (p. 16). Subdivision N Guidelines require that the sediment be flooded for 30 days prior to adding the test compound. Clarification by the registrant is necessary.

3. It could not be determined whether anaerobic conditions were achieved and maintained in the anaerobic study; similarly, it could not be determined whether aerobic conditions existed in the aerobic study. Redox potential, dissolved oxygen, and pH were not measured for either study. The study author stated that anaerobic conditions were monitored using indicator strips during the incubation (data were not reported; p. 11); however, the reviewer notes that anaerobic strips could not confirm anaerobic conditions in the sediment at the initiation of the study. Because the parent compound was observed to be stable under both aerobic and anaerobic conditions, an additional study may not provide new information.

4. In the aerobic study, material balances (based on LSC analysis of individual replicates) were <90% or >110% of the applied radioactivity at three of the six sampling intervals (82.8% and 88.0% at day 1, 123.3% and 132.3% at 7 days, and 89.8% at 30 days; Table IV, p. 22) The mean material balance across all sampling intervals was 100.2% of the applied radioactivity. The reviewer noted that a pattern of decline of the parent compound was not observed. Subdivision N Guidelines require that the material balance be 90-110% of the applied radioactivity.

5. The registrant-calculated half-lives (both studies) are of questionable validity since they were determined beyond the scope of the observed data; the parent compound was present at 78.0% of the applied radioactivity at 365 days posttreatment (anaerobic study; Table X, p. 28) and 86.8% of the applied radioactivity at 30 days posttreatment (aerobic study; Table XI, p. 29). Data which appear linear may become curvilinear over time, and a half-life estimated using such data may be inaccurate. Also, the coefficients of determination (r^2) for the registrant-calculated half-lives were low ($r^2 = 0.62$, anaerobic study; $r^2 = 0.03$, aerobic study; Tables X, XI; pp. 28, 29).

6. Method detection limits were not reported for LSC and TLC analyses. It is necessary that both limits of detection and quantitation be reported to allow the reviewer to evaluate the adequacy of the method for the determination of the test compound and its degradates.

7. The study author reported that the nominal application rate was 9.74 ppm (p. 9); however, the reviewer was unable to confirm this value from the information reported. Based on the concentration of the parent compound in the dosing solution and the volume of water in the system, the reviewer-calculated nominal application rate was 10.0 µg/mL. Additionally, residue data were reported only as percentages of the nominal application; concentration data were not provided. In future studies submitted to the EPA, it is necessary that data be reported as both percentages of the applied and in units of concentration (e.g., ppm).

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8. The test water was not completely characterized (p. 9); the total dissolved solids and conductivity were not reported.

9. [^{14}C]Residues were not characterized in the water phase following 1 day posttreatment and in the sediment phase prior to 1 day posttreatment (both systems; Tables VI-IX, pp. 24-27). As a result, total sediment/water data for the parent represent only residues in the water phase data prior to 1 day posttreatment, and represent residues only in the sediment following 1 day posttreatment.

10. Sterile controls had <10 CFU/plate; however, the reviewer was unclear whether the samples were sterile (0 CFU) or if a limited number of colony forming units were observed (Table II, p. 20).

11. The water solubility of the test compound was reported as 20 ppm at 20 °C (p. 9).

12. The study was conducted using triazole [3,5-^{14}C]difenoconazole (Figure 1, p. 32). The compound contains two additional phenyl ring structures that were not radiolabeled.

13. Uncharacterized [^{14}C]residues designated as "regions" and "remainder" were reported (Tables VI-IX, pp. 24-27). The reviewer was unclear as to how these residues differed from one another.

RIN 0909-04

EFED Review for MRID # ~~44245134~~ 42245134

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Anaerobic System

Water	Rep	Extraction 1	Extraction 2	Avg. methanol reflux	Extraction 1	Extraction 2	Avg. methanol reflux	Extraction 1	Extraction 2	Avg. methanol reflux	Extraction 1	Extraction 2	Avg. methanol reflux	Avg. of extractions + Avg. methanol reflux				Total Sediment/ Water System
		Origin			Regions			Parent			Remainder			Origin	Regions	Parent	Remainder	Parent
day 0	1	4.27	3.91		0	0		95.22	96.06		0.49	0		4.09	0.00	95.64	0.25	95.64
day 1	1	0.45	0.43		0	0		9.77	9.81		9.81	0		0.84	0.00	8.67	0.00	see day 1 below
	2	1.3	1.16		0	0		7.47	7.61		7.61	0						

Sediment	Rep	Origin			Regions			Parent			Remainder			Origin	Regions	Parent	Remainder	Parent
day 1	1	0	0		0	0		88.16	88.16		0	0		0.00	0.00	82.35	0.00	91.02
	2	0	0		0	0		76.54	76.54		0	0						
day 3	1	0	0		0	0		102.58	102.68		0.1	0		0.31	0.22	95.44	0.33	95.44
	2	0.51	0.72		0.23	0.66		88.41	88.09		0.76	0.45						
day 7	1	0	0		0	0		83.88	83.88		0	0		0.32	0.50	83.33	0.64	83.33
	2	0.55	0.71		0.77	1.21		83.15	82.41		1.21	1.35						
day 14	1	0	0		0	0		90.07	90.55		0.46	0		0.03	0.02	88.71	0.51	88.71
	2	0.11	0		0.06	0		86.54	87.68		1.28	0.29						
day 30	1	0	0		0	0		95.91	95.9		0	0		0.00	0.00	94.59	0.00	94.59
	2	0	0		0	0		93.27	93.27		0	0						
day 91	1	0.11	0.44	0.22	2.33	1.25	0.43	92.24	93.53	5.18	0.92	0.37	0.11	0.55	2.25	96.37	1.18	96.37
	2	0.19	0.58		2.57	1.12		88.99	89.98		1.67	1.74						
day 183	1	1.41	1.1		4.04	1.59		73.17	76.9		1.41	0.44		1.57	3.41	79.08	1.11	79.08
	2	1.62	1.52	0.16	3.31	2.86	0.46	75.28	75.95	3.75	1.36	1.23	0.12					
day 275	1	2.66	2.63	0.41	3.83	2.87	0.63	61.85	63.79	5.42	3.45	2.49	0.12	2.48	4.17	75.88	3.82	75.88
	2	1.66	1.35		5.04	2.41		75.63	80.58		5.66	3.67						
day 365	1	0.79	0.78	0.11	5.14	4.93	0.20	79.21	79.36	2.09	3.16	3.23	0.05	1.05	5.47	78.03	2.83	78.03
	2	1.05	1.14		5.81	5.23		72.06	73.14		2.76	2.18						

Aerobic System

		Extraction 1	Extraction 2	Extraction 1	Extraction 2	Extraction 1	Extraction 2	Extraction 1	Extraction 2
Water	Rep	Origin		Regions		Parent		Remainder	
day 0	1	4.27	3.91	0	0	95.22	96.06	0.49	0
day 1	1	1.79	1.55	0	0	7.57	7.81	0	0
	2	1.41	2.12	0	0	8.41	7.7	0	0

Average of Extractions			
Origin	Regions	Parent	Remainder
4.09	0.00	95.64	0.25
1.72	0.00	7.87	0.00

Total Sediment/ Water System
Parent
95.64
see day 1 below

Sediment	Rep	Origin		Regions		Parent		Remainder	
day 1	1	0	0	0	0	70.42	70.43	0	0
	2	0.02	0	0	0	74.67	75.01	0.66	0.35
day 3	1	0	0	0	0	90.75	86.22	0	4.52
	2	0	0	0	0	88.56	88.56	0	0
day 7	1	0.15	0	0.15	0	112.52	108.09	1.25	5.98
	2	0	0	0	0	122.41	122.4	0	0
day 14	1	0	0	0	0	82.21	77.67	0	4.54
	2	0	0	0	0	89.54	89.18	0	0.34
day 30	1	0	0	0	0	93.54	93.54	0	0
	2	0	0	0	0	80.09	80.09	0	0

Origin	Regions	Parent	Remainder
0.01	0.00	72.63	0.25
0.00	0.00	88.52	1.13
0.04	0.04	116.36	1.81
0.00	0.00	84.65	1.22
0.00	0.00	86.82	0.00

Parent
80.51
88.52
116.36
84.65
86.82