APPENDIX D.8

CHIRONOMUS TENTANS, LIFE CYCLE CHRONIC TOXICITY TESTS

Method 100.5SGR

Chironomus tentans chronic survival, growth, and reproduction

Associated Protocol:

Methods for measuring the toxicity and bioaccumulation of sediment-associated contaminants with freshwater invertebrates (EPA/600/R-99/064)

	Parameter	Conditions
1.	Test Type:	Whole-sediment toxicity test with renewal of overlying water
2.	Temperature:	Average bath temperature 23 +/- 1 C; Instantaneous temperature 23 +/- 3 C
3.	Light Quality:	Wide-spectrum fluorescent lights
4.	Illuminance:	~100 to 1000 lux
5.	Photoperiod:	16L:8D
6.	Test chamber:	300mL beaker
7.	Sediment volume:	100ml
8.	Overlying water volume:	175ml
9.	Renewal of overlying water:	2 volume addiitions/d
10.	Life stage of organisms:	<24-h-old larvae
11.	Organisms/test chamber:	12
12.	Replicates/sample:	16 (12 at day -1 and 4 for auxilary males on day 10)
13.	Feeding:	Tetrafin goldfish food, 1.5 ml daily to each chamber starting at day -1
14.	Aeration:	None, unless DO drops below 2.5mg/l
15.	Overlying water:	Reconstituted water
16.	Test chamber cleaning:	When screen clogs, gently brush the outside of the screen
17.	Overlying water quality:	Hardness, alkalinity, conductivity, and ammonia on day 0, day 20 and end of test. Water bath temperature daily, conductivity weekly and DO and pH three times per week.
18.	Test duration:	About 50 to 65d
19.	Endpoints:	20-d survival/growth; emergence, adult survival, eggs produced and hatching success
20.	Test acceptability:	Average size in the control on day 20 must be 0.48 gm AFDW/surviving organism

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Toxicity Summary Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/10/01
Project: 01032
SDG 5286
Site: N0564-0322

Method 100.5SGR Species: *Chironomus tentans*

Sample ID	Sample Name	Control Group	Mean Proportion Surviving		Mean Weight (mg) Growth
019971	D03193 IPSD-WHO7-061801	A	0.75		2.04
019972	D03198 IPSD-TT2201-061801	A	0.83		1.80
019981	D03201 IPSD-TT1203-061901	A	0.60		1.43
019982	D03206 IPSD-TT2903-061901	A	0.96		1.21
019983	D03211 IPSD-TT1901-061901	A	0.63		2.00
020001	D03387 IPSD-TT3302-062001	A	0.79		1.37
020002	D03392 IPSD-TT3202-062001	A	0.75		1.29
020012	D03396 IPSD-WW06-062101	A	0.96		1.70
020013	D03401 IPSD-TT1802-062101	A	0.65		1.90
020024	D03407 IPSD-TT1002-062201	A	0.42		2.47
020025	D03412 IPSD-TT1301-062201	A	0.56		1.71
020026	D03417 IPSD-TT3001-062201	A	0.85		1.66
020038	Control	A	0.65		1.35
020039	D03424 IPSD-PPO3-062501	B	0.56		3.04
020040	D03429 IPSD-TTSA01-062501	B	0.56		2.42
020041	D03476 IPSD-TTSD01-062501	B	0.58		2.40
020072	D03486 IPSD-TT04-062601	B	0.60		2.71
020073	D03491 IPSD-HB00-062601	B	0.06	*	2.96
020074	D03496 IPSD-TT0603-062601	B	0.15	*	2.64

000001

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Toxicity Summary Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/10/01
Project: 01032
SDG 5286
Site: N0564-322

Method 100.5SGR Species: *Chironomus tentans*

Sample ID	Sample Name	Control Group	Mean Proportion Surviving	Mean Weight (mg) Growth
020118	D03504 IPSD-TTUF02-062701	B	0.73	2.09
020119	D03510 IPSD-TTUF03-062701	B	0.54	2.69
020182	Control	B	0.58	1.96

* Indicates a statistically significant reduction (P<0.05) in the response relative to the corresponding response in the laboratory control sample.

Toxicity Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/8/01
Project: 01032
SDG 5286
Site: N0564-322

Samples Received

Sample	Client Desciption	Date	Time	Matrix
019971	D03193 IPSD-WHO7-061801	6/18/01	11:30:00 AM	sediment
019972	D03198 IPSD-TT2201-061801	6/18/01	3:30:00 PM	sediment
019981	D03201 IPSD-TT1203-061901	6/19/01	9:45:00 AM	Sediment
019982	D03206 IPSD-TT2903-061901	6/19/01	11:30:00 AM	Sediment
019983	D03211 IPSD-TT1901-061901	6/19/01	2:30:00 PM	Sediment
020001	D03387 IPSD-TT3302-062001	6/20/01	11:20:00 AM	Sediment
020002	D03392 IPSD-TT3202-062001	6/20/01	2:10:00 PM	Sediment
020012	D03396 IPSD-WW06-062101	6/21/01	9:12:00 AM	Sediment
020013	D03401 IPSD-TT1802-062101	6/21/01	2:30:00 PM	Sediment
020024	D03407 IPSD-TT1002-062201	6/22/01	8:45:00 AM	Sediment
020025	D03412 IPSD-TT1301-062201	6/22/01	10:46:00 AM	Sediment
020026	D03417 IPSD-TT3001-062201	6/22/01	1:25:00 PM	Sediment
020039	D03424 IPSD-PPO3-062501	6/25/01	10:10:00 AM	Sediment
020040	D03429 IPSD-TTSA01-062501	6/25/01	1:50:00 PM	Sediment
020041	D03476 IPSD-TTSD01-062501	6/25/01	4:30:00 PM	Sediment
020072	D03486 IPSD-TT04-062601	6/26/01	9:15:00 AM	Sediment
020073	D03491 IPSD-HB00-062601	6/26/01	11:55:00 AM	Sediment
020074	D03496 IPSD-TT0603-062601	6/26/01	2:50:00 PM	Sediment
020118	D03504 IPSD-TTUF02-062701	6/27/01	9:50:00 AM	Sediment
020119	D03510 IPSD-TTUF03-062701	6/27/01	11:25:00 AM	Sediment

Submitted By: _____

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Toxicity Summary Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/8/01
Project: 01032
SDG 5286
Site: N0564-0322

Method 100.5SGR Species: *Chironomus tentans*

Sample ID	Sample Name	Control Group	Mean Proportion Emerged		Mean Days to Emergence		MeanDays to Mortality
019971	D03193 IPSD-WHO7-061801	A	0.83		28.3		4.6
019972	D03198 IPSD-TT2201-061801	A	0.75		31.2		4.6
019981	D03201 IPSD-TT1203-061901	A	0.49		30.6		4.6
019982	D03206 IPSD-TT2903-061901	A	0.60		30.9		4.5
019983	D03211 IPSD-TT1901-061901	A	0.67		29.2		4.5
020001	D03387 IPSD-TT3302-062001	A	0.73		38.0	*	3.8
020002	D03392 IPSD-TT3202-062001	A	0.72		37.1	*	4.5
020012	D03396 IPSD-WW06-062101	A	0.81		29.5		4.9
020013	D03401 IPSD-TT1802-062101	A	0.63		35.5	*	4.6
020024	D03407 IPSD-TT1002-062201	A	0.40		27.3		4.4
020025	D03412 IPSD-TT1301-062201	A	0.70		37.6	*	4.5
020026	D03417 IPSD-TT3001-062201	A	0.60		29.3		5.1
020038	Control	A	0.21		29.3		3.5
020039	D03424 IPSD-PPO3-062501	B	0.38		21.8		2.7
020040	D03429 IPSD-TTSA01-062501	B	0.63		24.6		2.7
020041	D03476 IPSD-TTSD01-062501	B	0.54		25.0		2.8
020072	D03486 IPSD-TT04-062601	B	0.53		22.2		3.4
020073	D03491 IPSD-HB00-062601	B	0.15	*	21.7		2.9
020074	D03496 IPSD-TT0603-062601	B	0.09	*	25.6		3.4
020118	D03504 IPSD-TTUF02-062701	B	0.46		26.0		2.9
020119	D03510 IPSD-TTUF03-062701	B	0.26	*	26.8		3.0
020182	Control	B	0.44		24.6		3.2

* Indicates a statistically significant difference (P<0.05) in the response relative to the corresponding response in the laboratory control sample.

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Toxicity Summary Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/10/01
Project: 01032
SDG 5286
Site: N0564-322

Samples Received

Sample	Client Desciption	Date	Time	Matrix
019971	D03193 IPSD-WHO7-061801	6/18/01	11:30:00 AM	sediment
019972	D03198 IPSD-TT2201-061801	6/18/01	3:30:00 PM	sediment
019981	D03201 IPSD-TT1203-061901	6/19/01	9:45:00 AM	Sediment
019982	D03206 IPSD-TT2903-061901	6/19/01	11:30:00 AM	Sediment
019983	D03211 IPSD-TT1901-061901	6/19/01	2:30:00 PM	Sediment
020001	D03387 IPSD-TT3302-062001	6/20/01	11:20:00 AM	Sediment
020002	D03392 IPSD-TT3202-062001	6/20/01	2:10:00 PM	Sediment
020012	D03396 IPSD-WW06-062101	6/21/01	9:12:00 AM	Sediment
020013	D03401 IPSD-TT1802-062101	6/21/01	2:30:00 PM	Sediment
020024	D03407 IPSD-TT1002-062201	6/22/01	8:45:00 AM	Sediment
020025	D03412 IPSD-TT1301-062201	6/22/01	10:46:00 AM	Sediment
020026	D03417 IPSD-TT3001-062201	6/22/01	1:25:00 PM	Sediment
020039	D03424 IPSD-PPO3-062501	6/25/01	10:10:00 AM	Sediment
020040	D03429 IPSD-TTSA01-062501	6/25/01	1:50:00 PM	Sediment
020041	D03476 IPSD-TTSD01-062501	6/25/01	4:30:00 PM	Sediment
020072	D03486 IPSD-TT04-062601	6/26/01	9:15:00 AM	Sediment
020073	D03491 IPSD-HB00-062601	6/26/01	11:55:00 AM	Sediment
020074	D03496 IPSD-TT0603-062601	6/26/01	2:50:00 PM	Sediment
020118	D03504 IPSD-TTUF02-062701	6/27/01	9:50:00 AM	Sediment
020119	D03510 IPSD-TTUF03-062701	6/27/01	11:25:00 AM	Sediment

Submitted By:

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Toxicity Summary Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/10/01
Project: 01032
SDG 5286
Site: N0564-0322

Method 100.5SGR Species: *Chironomus tentans*

Sample ID	Sample Name	Control Group	Mean Egg Count	Mean Egg Hatch Count	Mean Proportion Hatched	
019971	D03193 IPSD-WHO7-061801	A	1098	876	0.72	*
019972	D03198 IPSD-TT2201-061801	A	1153	1097	0.87	
019981	D03201 IPSD-TT1203-061901	A	1172	1287	0.88	
019982	D03206 IPSD-TT2903-061901	A	1208	1105	0.81	
019983	D03211 IPSD-TT1901-061901	A	1108	960	0.73	*
020001	D03387 IPSD-TT3302-062001	A	1128	895	0.70	*
020002	D03392 IPSD-TT3202-062001	A	1163	949	0.77	*
020012	D03396 IPSD-WW06-062101	A	1247	1126	0.90	
020013	D03401 IPSD-TT1802-062101	A	1248	1252	0.92	
020024	D03407 IPSD-TT1002-062201	A	880	661	0.84	
020025	D03412 IPSD-TT1301-062201	A	1098	946	0.74	
020026	D03417 IPSD-TT3001-062201	A	954	918	0.79	
020038	Control	A	919	866	0.94	
020039	D03424 IPSD-PPO3-062501	B	1128	1309	0.96	
020040	D03429 IPSD-TTSA01-062501	B	1208	1060	0.87	
020041	D03476 IPSD-TTSD01-062501	B	1570	1523	0.89	
020072	D03486 IPSD-TT04-062601	B	716	808	0.60	
020073	D03491 IPSD-HB00-062601	B	1440	1195	0.66	
020074	D03496 IPSD-TT0603-062601	B	995			
020118	D03504 IPSD-TTUF02-062701	B	1164	1263	0.87	
020119	D03510 IPSD-TTUF03-062701	B	1169	1420	0.98	
020182	Control	B	864	337	0.49	

* Indicates a statistically significan reduction (P<0.05) in the response relative to the corresponding response in the laboratory control sample.

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Toxicity Summary Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/8/01
Project: 01032
SDG 5286
Site: N0564-322

Samples Received

Sample	Client Desciption	Date	Time	Matrix
019971	D03193 IPSD-WHO7-061801	6/18/01	11:30:00 AM	sediment
019972	D03198 IPSD-TT2201-061801	6/18/01	3:30:00 PM	sediment
019981	D03201 IPSD-TT1203-061901	6/19/01	9:45:00 AM	Sediment
019982	D03206 IPSD-TT2903-061901	6/19/01	11:30:00 AM	Sediment
019983	D03211 IPSD-TT1901-061901	6/19/01	2:30:00 PM	Sediment
020001	D03387 IPSD-TT3302-062001	6/20/01	11:20:00 AM	Sediment
020002	D03392 IPSD-TT3202-062001	6/20/01	2:10:00 PM	Sediment
020012	D03396 IPSD-WW06-062101	6/21/01	9:12:00 AM	Sediment
020013	D03401 IPSD-TT1802-062101	6/21/01	2:30:00 PM	Sediment
020024	D03407 IPSD-TT1002-062201	6/22/01	8:45:00 AM	Sediment
020025	D03412 IPSD-TT1301-062201	6/22/01	10:46:00 AM	Sediment
020026	D03417 IPSD-TT3001-062201	6/22/01	1:25:00 PM	Sediment
020039	D03424 IPSD-PPO3-062501	6/25/01	10:10:00 AM	Sediment
020040	D03429 IPSD-TTSA01-062501	6/25/01	1:50:00 PM	Sediment
020041	D03476 IPSD-TTSD01-062501	6/25/01	4:30:00 PM	Sediment
020072	D03486 IPSD-TT04-062601	6/26/01	9:15:00 AM	Sediment
020073	D03491 IPSD-HB00-062601	6/26/01	11:55:00 AM	Sediment
020074	D03496 IPSD-TT0603-062601	6/26/01	2:50:00 PM	Sediment
020118	D03504 IPSD-TTUF02-062701	6/27/01	9:50:00 AM	Sediment
020119	D03510 IPSD-TTUF03-062701	6/27/01	11:25:00 AM	Sediment

Submitted By: _____

Qualifiers and Conditions

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/8/01
Project: 01032
SDG: 5286
Site: N0564-0322

Method 100.5SGR Species: *Chironomus tentans*

Explanation of codes for Detail Report

Certain abbreviations (codes) were used for reporting results (Detail Reports)

Life stage: A=adult, P=pupa, L=larva, P=pupa;
Emergence status: C=complete emergence, E=early emergence or escaped, P=partial, L=larva (did not emerge), N=did not emerge;
Sex: M=male, F=female
Egg case preparation: R=ring count method, D=direct egg count, A=direct count of acidified eggs.

Testing groups

The *Chironomus tentans* chronic tests were conducted as two testing groups. Testing group "A" was conducted concurrently with Control A (Sample 20038) and included samples 19971 (D03193), 19972 D03198), 19981 (D03201), 19982 (D03206), 19983 (D03211), 20001 (D03387), 20002 (D03392), 20012, (D03396), 20013 (D03401), 20024(D03407), 20025 (D03412), and 20026 (D03417). Group A tests were started on June 27, 2001, and the last sample from this group was completed on August 30, 2001. Control A (Sample 20038) was ended with the last sample on August 30, 2001. Sample 20087 was experimental natural sediment, not included as part of the study.

Testing Group "B" was conducted concurrently with Control B (Sample 20182) and included samples 20039 (D03424), 20040 (D03429), 20041 (D03476), 20072 (D03486), 20074 (D03496), 20118 (D03504), and 20119 (D03496). Samples tested as Group B were started on July 11, 2001, and the last sample from this group was completed on September 5, 2001. Control B (Sample 20182) was ended with the last sample on September 5, 2001. Sample 20204 was experimental natural sediment, not included as part of the study.

Early emergence

Emergence traps were installed Day 20, as specified in the USEPA test protocol for Method 100.5. For the Group A tests, early emergence (before the Day 20 assessment) was observed for some replicates terminated on Day 20 for the survival and growth (ash-free-dry weight) assessment. In some replicates body casts of emerged flies were present, indicating that flies had emerged prior to the assessment on Day 20 even though test temperatures were within the range specified by the protocol. For those replicates where body casts were observed,

it was assumed that the larva had survived and it was included in the Day 20 survival count but it was not included the growth analysis. The affected replicates included 19972 J (D03198) (1 emergent), 19972 L (D03198) (1 emergent). Other replicates of group A had pupae present on Day 20. The pupae were scored as alive but were not included in the growth analysis. The affected replicates included 19983 I and L (D03211)) (1 pupa each), 20024 K (D03407) (1 pupa).

Emergence traps were placed on the Group B tests on Days 18 and 19 (1-2 days earlier than specified in the USEPA protocol), however some pupation and emergence had already occurred even though test temperatures were within the range specified by the protocol. The affected samples included 20039 (D03424) replicates I (4 pupae, 1 emergent), J (1 pupa, 2 emergent), K (3 emergent), and L (1 emergent); 20040 (D03429) J (2 pupae, 1 emergent), K (2 pupae, 2 emergent), L (1 emergent); 20041 (D03476) I (3 pupae), J (1 pupa), K (1 emergent), L (1 pupa); 20072 (D03486) I (1 pupa), J (1 pupa, 4 emergent), K (2 pupae, 1 emergent); L (2 pupae, 1 emergent); 20073 (D03491) I (1 emergent), L (1 emergent); 20118 I (1 pupa), J (1 emergent), K (1 pupa), L (1 pupa); 20119 (D03510) J (1 pupa), K (3 pupae), L (1 pupa): and, 20182 (Control) J (2 pupae, 1 emergent); K (3 pupae, 1 emergent), and L (2 pupae). Pupae and emergent flies were included in the Day 20 survival count but were not included in the ash-free dry weight determinations. It is possible that early emergence occurred in other replicates (Replicates A-H) that were continued for the life-cycle test. Some early-emerging larvae may not have been accounted for.

Controls not ended using 7-d criterion

The control replicates were allowed to continue until the last sample was ended, (using the 7-days with no emergence criterion for the last test sample).

End-of-test final chemistry

Sediments for samples 20024 (D03407), 20026 (D03412), and 20074 (D03496) were sieved on August 18, 2001, to recover larvae that had not emerged (no emergence for 7 successive days) at the end of the test. Sub-samples of overlying water for final chemistry parameters of pH, conductivity, alkalinity, hardness, and total ammonia were inadvertently not collected.

Standard reference toxicant tests

Standard reference toxicant (SRT) tests were performed with larvae from the culture batches used for testing. Larvae for the SRT tests were grown out for 8-9 days before SRT testing because LC50 data for the SRT control charts are based on organisms within the age range of 8-13 days. The LC50 for the sub-sample of larvae used to start the chronic tests on June 27, 2001 (Group A, SRT test date July 5, 2001) was within the control chart limits. The LC50 for the sub-sample of larvae used to start the chronic tests on July 11, 2001 (Group B, SRT test date July 19, 2001) was slightly below the control chart limits (LC50 3.16 g KCl, lower limit 3.51 g KCl). The control chart limits (two SD from the mean)

incorporate the statistical assumption that one in twenty tests will fall outside the control chart limits. It is possible that the larvae used to start the chronic toxicity tests on July 11, 2001 were more sensitive to the reference toxicant. Follow-up testing of another batch of organisms (larvae hatched on September 2, 2001, test date September 13, 2001) resulted in an LC50 within the control chart limits.

Extra renewals and suspension of feeding

Generally D.O. measurements were above 2.5 mg/L. In a few instances measurements of less than 2.5 mg/L were recorded. Periodic depressions below 2.5 mg/L (but not below 1.5 mg/L) are not likely to affect test results (EPA/600/R-99/064, page 89). The lowest recorded D.O. measurement for Group A was 1.9 mg/L. The lowest recorded D.O. measurement for Group B was 2.4 mg/L.

Extra daily overlying water renewals (3-4 renewals per day) and suspension of feeding were used to maintain D.O. at acceptable levels. Feeding was suspended on the following days: July 3 (Group A), July 10 (Group A), July 13 (Group A), July 18 (Group A/B), July 29 (Group A), August 4 (Group A/B), August 15 (Group A/B), August 17 (Group A/B), August 20 (Group A), August 29 (Group A/B), September 3 (Group B).

Generally D.O. measurements were above 2.5 mg/L. In a few instances measurements of less than 2.5 mg/L were recorded. Periodic depressions below 2.5 mg/L (but not below 1.5 mg/L) are not likely to affect test results (EPA/600/R-99/064, page 89). The lowest recorded D.O. measurement for Group A was 1.9 mg/L. The lowest recorded D.O. measurement for Group B was 2.4 mg/L.

End-of-test recovery of larvae

Group A: No additional larvae or pupa were recovered when replicates were sieved at the end of the test with the exception of sample 20025 (D03412) which had two surviving larvae that had not emerged.

Group B: No additional larvae or pupa were recovered with the exception of samples 20039 (D03424) (1 pupa), 20074 (D03496) (2 larvae), and 20182(Control) (2 larvae):

Emergence and fly mortality data

In some instances, recording errors or escaped flies apparently occurred during the collection, pairing, and monitoring of emerged flies. The following is a summary of known or suspected discrepancies and clarifications:

1) Even though emergence traps were placed on the Group B test replicates 1-2 days early, some flies escaped due to early emergence. Early emergence was detected by the presence of the residual body cast. These were included in the survival tabulation, however, mortality and reproduction data were not generated. The following test replicates were affected by early emergence: 20039 (D03424) A, C, E, F, G; 20040

(D03429) A, G; 20041 (D03476) C, G, H; 20072 (D03486) A, G; 20073 (D03491) H; and, 20119 (D03510) A.

2) Several flies escaped during collection or transfer to reproduction / holding chambers. These were included in the survival tabulation, however, mortality and reproduction data were not generated. The following test replicates were affected by escapement: 19971 (D03193) D; 19983 (D03211) A, C; 2001 (D03387) B; 20002 (D03392) D; 20012 (D03396) D, and, 20182 (Control) B.
3) In several instances, male/female pairings were not recorded. There may have been a lack of available males for pairing or early mortality of females (e.g., within one day) may have occurred before pairing could be accomplished. In some cases, the pairing information for paired flies was apparently not recorded. The following replicates were affected: 19972 (D03198) H; 19981 (D03201) G; 19982 (D03206) A, D; 20012 (D03396) D; 20024 (D03407) C, D; 20025 (D03412) C, G; 20026 (D03417) A; 20072 (D03486) E; 20074 (D03496) A, D, and, 20119 (D03510) H.
4) The date of mortality of some adults was inadvertently not recorded, therefore, time-to-mortality data were not generated. The following replicates were affected: 19971 (D03193) B; 20001 (D03387) E, G; and, 20118 (D03504) H.
5) The date of death was double recorded (with different dates) for several flies. In these instances either the first recorded date was used or the tracking tag information was used to assign our best judgment regarding the date of mortality. The following replicates were affected: 19981 (D03201) B; 19983 (D03211) A; and, 20118 (D03504) G.
6) Two replicates apparently had more than 12 larvae added when the test was started because 1-2 extra larvae/adults were recovered. The following replicates were affected: 19983 (D03211) B, D.
7) Flies were accidentally injured during transfers, therefore time-to-mortality data were not generated. The following replicates were affected: 20013 (D03401) F; and, 20041 (D03476) D; and, 20072 (D03486) F1.
8) Biomonitoring (fly collection) was inadvertently missed on two subsequent days (July 18, 19, 2001) for three test replicates. Flies that had emerged in these replicates were collected on July 20, 2001 and were assumed to have emerged on that day. The following replicates were affected: 19983 (D03211) H; 20001 (D03387) C; and, 20026 (D03417) D.
9) For Sample 20024 (D03407) Replicate H the emergence of fly #4 was apparently not recorded. A male fly labeled as 024H-4 died on August 4, 2001. It was assumed to have emerged on July 30, 2001, the same day as female fly #3 emerged.

Egg Data

Statistical analysis of egg data (number of eggs per egg case and proportion of eggs hatching) was based upon data from females yielding egg cases (i.e., females that did not produce an egg case were excluded).

In some instances, recording errors apparently occurred during the collection, preparation, and counting of eggs. The following is a summary of known or suspected discrepancies and clarification of some events:

1) Transcription or recording errors apparently occurred: For sample 19971 (D03193) A, female #9, a direct count of eggs was performed. The number of eggs recorded (4475) may have been incorrectly written. Direct egg counts were performed only on egg cases having a low number of eggs. In our best judgment, the number of eggs for this egg case was 475, which has been used for data analysis. For sample 19981 (D03201) B, female #4 the egg count data (deposit date 8/4/01) may have been misidentified on the Egg Count form as 19981 G4. 19981 G4 deposited an egg case on 7/31/01 (egg case data recorded) and died on 8/1/01. Data were re-assigned to 19981 B4. For sample 20002 (D03392) A6, egg count data was recorded for this fly, which was a male. The egg count data could not be traced to a female, therefore the data were not used.
2) The initial counts of eggs were apparently not recorded for some egg cases, therefore egg count and hatchability data were not used. The following replicate females were affected: 19971 (D03193) H7; 19972 (D03198) A7; 20025 (D03412) A5 and F5; and, 20039 (D03424) C2.
3) Egg counts may have been conducted on secondary egg cases because data for a preceding egg case had already been recorded. Data from egg cases believed to be secondary were not used. The following replicates were affected: 20002 (D03392) D8; and, 20024 (D03407) H3.
4) Egg hatching data were associated with a male rather than a female in three instances. For replicate 20002 (D03392) F5 egg hatching data were recorded on a note associated with 20002 D5, a male. It appears that the note was written in the wrong location. The data were re-assigned to female 20002 F5 that was missing egg-hatching data. For replicate 20013 (D03401) B2 egg case data was recorded for 20013 C2, a male. The data are believed to be associated with female 20013 B2 and have been re-assigned with the number of un-hatched eggs not recorded. This female was paired with 20013 C-2 on 7/29/01. For replicate 20025 (D03412) G7 egg count data were recorded for 20025 G6, a male paired with this female. The data were assumed to apply to female 20025 G7, deposited on 8/7/01.
5) Egg count data were apparently recorded twice for several flies: For replicate 19972 (D03198) F6/7 the data for 19972 F6 may have been misidentified. The direct count egg data recorded for an egg case deposited on 8/2/01 (for 19972 F7) were re-assigned to 19973 F6. For replicate 20012 (D03396) B7 the count of 259 eggs recorded on the egg count sheet was used. The count of 342 eggs recorded on the Biological Monitoring sheet was not used. For replicate 20024 (D03407) H7 egg count data for this female were recorded twice on the egg count data form (8/4/01). Data from the first line of data appearing on the form (for this female) were used and the second line of data for the same female was not used. For replicate 20025 (D03412) A10 two egg case counts were

recorded for this female. This female, along with female 20025 A9 were paired with the same male (20025 D3) in the same mating chamber. It is possible that a secondary egg case from 20025 A9 was incorrectly identified as 20025 A10. The egg case deposited on 8/11/01 was used for 20025 A10 and the egg case deposited on 8/10/01 was assumed to be a secondary egg case from 20025 A9.

6) For sample 20074 (D03496) only one egg case (acidified for counting) was produced, therefore hatchability data were not generated for this sample.

Toxicity Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/8/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019971 Sample Name: D03193 IPSD-WHO7-061 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	7	0.58	2239.22	2255.83	2240.34	7	2.213
J	12	9	0.75	2120.50	2144.89	2122.61	9	2.476
K	12	10	0.83	2386.16	2406.9	2387.94	10	1.896
L	12	10	0.83	2286.80	2304.07	2288.48	10	1.559
	Mean Surviving:		0.75			Mean Weight (mg):		2.036

Sample ID: 019972 Sample Name: D03198 IPSD-TT2201-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	7	0.58	2313.38	2330.62	2314.29	7	2.333
J	12	11	0.92	2130.00	2147.47	2131.33	10	1.614
K	12	11	0.92	2181.10	2199.37	2182.82	11	1.505
L	12	11	0.92	2491.14	2509.99	2492.62	10	1.737
	Mean Surviving:		0.83			Mean Weight (mg):		1.797

Sample ID: 019981 Sample Name: D03201 IPSD-TT1203-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	10	0.83	2282.98	2296.98	2284.74	10	1.224
J	12	8	0.67	2321.07	2336.37	2322.78	8	1.699
K	12	11	0.92	2282.33	2299.58	2284.52	11	1.369
L	12	0	0.00					
	Mean Surviving:		0.60			Mean Weight (mg):		1.431

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Toxicity Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/8/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019982 Sample Name: D03206 IPSD-TT2903-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	10	0.83	2484.75	2500.18	2487.48	10	1.270
J	12	13	1.08	2263.32	2281.43	2265.39	13	1.234
K	12	12	1.00	2385.39	2397.91	2387.06	12	0.904
L	12	11	0.92	2426.32	2444.46	2428.58	11	1.444
	Mean Surviving:		0.96			Mean Weight (mg):		1.213

Sample ID: 019983 Sample Name: D03211 IPSD-TT1901-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	6	0.50	2444.83	2454.12	2445.58	4	2.135
J	12	5	0.42	2174.13	2188.85	2175.93	5	2.584
K	12	11	0.92	2377.53	2399.3	2380.21	11	1.735
L	12	8	0.67	2380.46	2392.49	2381.62	7	1.553
	Mean Surviving:		0.63			Mean Weight (mg):		2.002

Sample ID: 020001 Sample Name: D03387 IPSD-TT3302-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	10	0.83	2300.45	2312.99	2301.22	10	1.177
J	12	9	0.75	2421.80	2436.41	2423.29	9	1.458
K	12	10	0.83	2306.58	2321.02	2308.15	10	1.287
L	12	9	0.75	2301.76	2317.48	2303.49	9	1.554
	Mean Surviving:		0.79			Mean Weight (mg):		1.369

Toxicity Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/8/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020002 Sample Name: D03392 IPSD-TT3202-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	11	0.92	2162.83	2177.93	2164.68	11	1.205
J	12	9	0.75	2148.46	2161.32	2150.02	9	1.256
K	12	9	0.75	2103.19	2115.28	2104.78	9	1.167
L	12	7	0.58	2186.99	2199.17	2188.32	7	1.550
	Mean Surviving:		0.75			Mean Weight (mg):		1.294

Sample ID: 020012 Sample Name: D03396 IPSD-WW06-062 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	11	0.92	2247.81	2271.59	2249.79	11	1.982
J	12	12	1.00	2138.89	2160.86	2140.96	12	1.658
K	12	12	1.00	2030.60	2049.18	2032.05	12	1.427
L	12	11	0.92	2167.04	2188.34	2169.17	11	1.743
	Mean Surviving:		0.96			Mean Weight (mg):		1.703

Sample ID: 020013 Sample Name: D03401 IPSD-TT1802-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	6	0.50	2157.66	2173.09	2158.64	6	2.408
J	12	5	0.42	2182.46	2196.58	2183.86	5	2.544
K	12	10	0.83	2058.02	2075.8	2060.45	10	1.535
L	12	10	0.83	2194.89	2207.46	2196.19	10	1.127
	Mean Surviving:		0.65			Mean Weight (mg):		1.904

Toxicity Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/8/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020024 Sample Name: D03407 IPSD-TT1002-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	6	0.50	2111.27	2129.1	2112.64	6	2.743
J	12	0	0.00					
K	12	3	0.25	2204.44	2210.44	2204.73	2	2.855
L	12	11	0.92	2219.17	2240.62	2220.73	11	1.808
	Mean Surviving:		0.42			Mean Weight (mg):		2.469

Sample ID: 020025 Sample Name: D03412 IPSD-TT1301-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	6	0.50	2116.48	2127.45	2117.86	6	1.598
J	12	6	0.50	2053.02	2064.72	2054.13	6	1.765
K	12	6	0.50	2183.79	2197.51	2185.73	6	1.963
L	12	9	0.75	2138.40	2153.99	2140.50	9	1.499
	Mean Surviving:		0.56			Mean Weight (mg):		1.706

Sample ID: 020026 Sample Name: D03417 IPSD-TT3001-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	9	0.75	2204.78	2221.28	2207.22	9	1.562
J	12	11	0.92	2189.96	2212.29	2191.69	11	1.873
K	12	11	0.92	2181.43	2197.2	2182.95	11	1.295
L	12	10	0.83	2222.80	2241.73	2222.55	10	1.918
	Mean Surviving:		0.85			Mean Weight (mg):		1.662

Toxicity Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/8/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020038 Sample Name: Control Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	9	0.75	2175.33	2187.96	2178.13	9	1.092
J	12	6	0.50	2208.63	2221.33	2211.14	6	1.698
K	12	7	0.58	2165.65	2176.88	2168.09	7	1.256
L	12	9	0.75	2455.95	2473.41	2461.19	9	1.358
	Mean Surviving:		0.65			Mean Weight (mg):		1.351

Sample ID: 020039 Sample Name: D03424 IPSD-PPO3-062 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	7	0.58	2239.07	2244.56	2239.55	2	2.505
J	12	6	0.50	2120.36	2133.32	2121.52	3	3.933
K	12	7	0.58	2386.30	2401.03	2387.78	4	3.313
L	12	7	0.58	2286.80	2303.27	2288.88	6	2.398
	Mean Surviving:		0.56			Mean Weight (mg):		3.037

Sample ID: 020040 Sample Name: D03429 IPSD-TTSA01-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	7	0.58	2313.42	2331	2315.39	7	2.230
J	12	4	0.33	2130.08	2133.37	2130.61	1	2.760
K	12	8	0.67	2181.21	2192.41	2182.32	4	2.522
L	12	8	0.67	2491.22	2507.95	2492.80	7	2.164
	Mean Surviving:		0.56			Mean Weight (mg):		2.419

Toxicity Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/8/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020041 Sample Name: D03476 IPSD-TTSD01-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	8	0.67	2283.06	2296.89	2284.52	5	2.474
J	12	9	0.75	2321.16	2339.93	2322.98	8	2.119
K	12	4	0.33	2282.46	2290.27	2282.92	3	2.450
L	12	7	0.58	2389.56	2406.62	2391.22	6	2.567
	Mean Surviving:		0.58			Mean Weight (mg):		2.402

Sample ID: 020072 Sample Name: D03486 IPSD-TT04-0626 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	9	0.75	2484.85	2505.48	2486.75	8	2.341
J	12	7	0.58	2263.39	2269.76	2263.86	2	2.950
K	12	6	0.50	2385.42	2394.61	2386.01	3	2.867
L	12	7	0.58	2426.35	2438.29	2427.50	4	2.698
	Mean Surviving:		0.60			Mean Weight (mg):		2.714

Sample ID: 020073 Sample Name: D03491 IPSD-HB00-0626 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	2	0.17	2444.96	2451.25	2445.32	2	2.965
J	12	0	0.00					
K	12	0	0.00					
L	12	1	0.08					
	Mean Surviving:		0.06			Mean Weight (mg):		2.965

Toxicity Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/8/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020074 Sample Name: D03496 IPSD-TT0603-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	3	0.25	2300.57	2312.04	2302.14	3	3.300
J	12	1	0.08	2421.90	2423.68	2422.04	1	1.640
K	12	3	0.25	2306.63	2317.03	2308.09	3	2.980
L	12	0	0.00					
	Mean Surviving:		0.15			Mean Weight (mg):		2.640

Sample ID: 020118 Sample Name: D03504 IPSD-TTUF02-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	7	0.58	2163.01	2175.28	2164.61	6	1.778
J	12	6	0.50	2148.59	2165.7	2149.99	5	3.142
K	12	12	1.00	2103.31	2126.88	2106.47	11	1.855
L	12	10	0.83	2187.12	2204.09	2189.70	9	1.599
	Mean Surviving:		0.73			Mean Weight (mg):		2.094

Sample ID: 020119 Sample Name: D03510 IPSD-TTUF03-06 Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	6	0.50	2248.05	2264.38	2249.95	6	2.405
J	12	8	0.67	2139.07	2155.52	2141.01	7	2.073
K	12	8	0.67	2030.67	2043.38	2031.84	5	2.308
L	12	4	0.33	2167.14	2180.36	2168.45	3	3.970
	Mean Surviving:		0.54			Mean Weight (mg):		2.689

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Toxicity Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/8/01
Project: 01032
SDG 5286
Site: N0564-322

Sample ID: 020182 Sample Name: Control Method: 100.5SGR

Replicate	Start Count	Total Surviving	Proportion Surviving	Initial Weight	Larval Weight	Final Weight	Weighed	Mean Replicate Weight
I	12	9	0.75	2157.73	2176.07	2162.08	9	1.554
J	12	4	0.33	2182.51	2184.81	2182.82	1	1.990
K	12	7	0.58	2058.09	2066.92	2059.59	3	2.443
L	12	8	0.67	2194.95	2209.25	2198.14	6	1.852
		Mean Surviving:	0.58			Mean Weight (mg):		1.960

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Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019971 Sample Name: D03193 IPSD-WHO7-061 Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/19/01	22	7/26/01	7		
2	A	C	M	7/21/01	24	7/25/01	4		
3	A	C	F	7/24/01	27	7/26/01	2	7/24/01	19971B6
4	A	C	M	7/25/01	28	8/1/01	7		
5	A	C	F	7/27/01	30	7/30/01	3	7/28/01	19971G6
6	A	C	F	7/27/01	30	8/1/01	5	7/28/01	19971G6
7	A	C	F	7/28/01	31	8/1/01	4	7/28/01	19971P
8	A	C	F	7/28/01	31	8/1/01	4	7/28/01	19971P
9	A	C	F	7/30/01	33	8/1/01	2	7/30/01	19971A4

Proportion Emerged: 0.75 Average Days To Emergence 28.4 Average Days to Mortality 4.2

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/26/01	6		
2	A	C	M	7/21/01	24	7/25/01	4		
3	A	C	M	7/21/01	24				
4	A	C	M	7/22/01	25	7/25/01	3		
5	A	C	M	7/22/01	25	7/28/01	6		
6	A	C	M	7/24/01	27	7/29/01	5		
7	A	C	F	7/25/01	28	7/30/01	5	7/25/01	19971A4
8	A	C	F	7/28/01	31	8/1/01	4	7/28/01	19971H6
9	A	C	M	7/30/01	33	8/2/01	3		
10	A	C	F	8/3/01	37	8/7/01	4	8/4/01, 8/6/01	19971O, 19971O

Proportion Emerged: 0.83 Average Days To Emergence 27.7 Average Days to Mortality 4.4

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019971 Sample Name: D03193 IPSD-WHO7-061 Method: 100.5SGR

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/18/01	21	7/26/01	8		
2	A	C	M	7/19/01	22	7/25/01	6		
3	A	C	M	7/19/01	22	7/24/01	5		
4	A	C	M	7/22/01	25	7/30/01	8		
5	A	C	M	7/23/01	26	7/23/01	0		
6	A	C	M	7/23/01	26	7/26/01	3		
7	A	C	M	7/23/01	26	7/27/01	4		
8	A	C	M	7/24/01	27	8/1/01	8		
9	A	C	F	7/24/01	27	7/27/01	3	7/24/01	19971C8
10	A	C	M	7/26/01	29	8/1/01	6		
11	A	C	M	7/30/01	33	8/3/01	4		
12	A	C	F	8/2/01	36	8/6/01	4	8/2/01	19971P

Proportion Emerged: 1.00 Average Days To Emergence 26.7 Average Days to Mortality 4.9

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/18/01	21	7/25/01	7		
2	A	C	F	7/26/01	29	7/30/01	4	7/26/01	19971C10
3	A	C	F	7/28/01	31	8/3/01	6	7/29/01,7/30/01, 7/31/01, 8/1/01	19971F4,19971C8,19971 B9,19971M
4	A	C	F	7/29/01	32	8/3/01	5	7/29/01,8/1/01	19971O,19971O
5	A	C	F	7/31/01	34	8/5/01	5	7/31/01	19971D6
6	A	C	M	7/31/01	34	8/5/01	5		
7	A	C	F	8/1/01	35	8/7/01	6	8/1/01,8/3/01	19971O,19971M
8	A	C	F	8/3/01	37				
9	A	C	F	8/4/01	38	8/8/01	4	8/4/01	19971M
10	A	C	F	8/4/01	38	8/8/01	4	8/4/01	19971M
11	A	C	F	8/9/01	43	8/12/01	3	8/9/01,8/11/01	19971M,19971M
12	A	C	M	8/10/01	44	8/16/01	6		

Proportion Emerged: 1.00 Average Days To Emergence 34.7 Average Days to Mortality 5.0

000023

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019971 Sample Name: D03193 IPSD-WHO7-061 Method: 100.5SGR

Replicate: E

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/18/01	21	7/25/01	7		
2	A	C	M	7/20/01	23	7/25/01	5		
3	A	C	M	7/20/01	23	7/25/01	5		
4	A	C	F	7/21/01	24	7/26/01	5	7/21/01	19971E5
5	A	C	M	7/21/01	24	7/25/01	4		
6	A	C	M	7/25/01	28	7/29/01	4		
7	A	C	F	7/26/01	29	7/27/01	1	7/26/01	19971E6

Proportion Emerged: 0.58 Average Days To Emergence 24.6 Average Days to Mortality 4.4

Replicate: F

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/22/01	2		
2	A	C	F	7/20/01	23	7/26/01	6	7/20/01	19971F1
3	A	C	M	7/22/01	25	7/30/01	8		
4	A	C	M	7/22/01	25	7/30/01	8		
5	A	C	M	7/24/01	27	7/30/01	6		
6	A	C	F	7/25/01	28	7/30/01	5	7/25/01	19971F7
7	A	C	M	7/25/01	28	7/28/01	3		
8	A	C	F	7/27/01	30	8/1/01	5	7/27/01	19971M
9	A	C	F	7/29/01	32	7/31/01	2	7/29/01	19971H8
10	A	P	F	7/31/01	34	7/31/01	0		

Proportion Emerged: 0.75 Average Days To Emergence 27.5 Average Days to Mortality 4.5

000024

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019971 Sample Name: D03193 IPSD-WHO7-061 Method: 100.5SGR

Replicate: G

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/19/01	22	7/26/01	7		
2	A	C	M	7/23/01	26	8/1/01	9		
3	A	C	F	7/23/01	26	7/29/01	6	7/23/01	19971G2
4	A	C	F	7/23/01	26	7/29/01	6	7/23/01,7/26/01	19971C6,19971G7
5	A	C	F	7/25/01	28	7/30/01	5	7/25/01	19971G6
6	A	C	M	7/25/01	28	7/30/01	5		
7	A	C	M	7/25/01	28	8/1/01	7		
8	A	C	F	7/28/01	31	8/2/01	5	7/29/01,7/30/01,7/31/01	19971F3,19971G2,19971O
9	A	C	F	7/29/01	32	8/1/01	3	7/29/01	19971O
10	A	C	F	7/30/01	33	8/5/01	6	7/30/01	19971B9
11	A	C	F	7/30/01	33	8/1/01	2	7/30/01	19971C10
12	A	C	F	7/30/01	33	8/3/01	4	7/30/01	19971H4

Proportion Emerged: 1.00 Average Days To Emergence 28.8 Average Days to Mortality 5.4

Replicate: H

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/18/01	21	7/18/01	0		
2	A	C	M	7/21/01	24	7/27/01	6		
3	A	C	M	7/22/01	25	7/25/01	3		
4	A	C	M	7/23/01	26	8/2/01	10		
5	A	C	M	7/25/01	28	7/26/01	1		
6	A	C	M	7/28/01	31	8/1/01	4		
7	A	C	F	7/28/01	31	8/1/01	4	7/28/01	19971H6
8	A	C	M	7/29/01	32	7/31/01	2		
9	A	C	F	7/30/01	33	8/3/01	4	7/30/01	19971C4

Proportion Emerged: 0.75 Average Days To Emergence 27.9 Average Days to Mortality 3.8

000025

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019972 Sample Name: D03198 IPSD-TT2201-06 Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/20/01	23	7/24/01	4	7/20/01	19972F1
2	A	C	F	7/25/01	28	7/30/01	5	7/25/01	19972A3
3	A	C	M	7/25/01	28	7/28/01	3		
4	A	C	M	7/27/01	30	8/2/01	6		
5	A	C	F	7/27/01	30	7/31/01	4	7/27/01	19972A4
6	A	C	F	7/28/01	31	7/31/01	3	7/28/01	19972B6
7	A	C	F	7/28/01	31	8/2/01	5	7/28/01	19972B6
8	A	C	M	7/29/01	32	8/2/01	4		
9	A	C	F	8/1/01	35	8/5/01	4	8/1/01	19972P
10	A	C	F	8/4/01	38	8/7/01	3	8/4/01	19972C6

Proportion Emerged: 0.83 Average Days To Emergence 30.6 Average Days to Mortality 4.1

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/24/01	4		
2	A	C	M	7/23/01	26	7/29/01	6		
3	A	C	F	7/23/01	26	7/26/01	3	7/23/01	19972B2
4	A	C	M	7/26/01	29	8/1/01	6		
5	A	C	F	7/27/01	30	8/1/01	5	7/27/01	19972C3
6	A	C	M	7/28/01	31	8/4/01	7		
7	A	C	F	7/31/01	34	8/4/01	4	7/31/01	19972E9
8	A	C	F	8/1/01	35	8/5/01	4	8/1/01	19972M

Proportion Emerged: 0.67 Average Days To Emergence 29.3 Average Days to Mortality 4.9

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/23/01	26	7/27/01	4		
2	A	C	M	7/25/01	28	7/27/01	2		
3	A	C	M	7/27/01	30	7/31/01	4		
4	A	C	F	7/29/01	32	8/4/01	6	7/29/01	19972A8
5	A	C	F	8/1/01	35	8/3/01	2	8/1/01	19972C6
6	A	C	M	8/1/01	35	8/7/01	6		
7	A	C	F	8/3/01	37	8/7/01	4	8/3/01	19972D6
8	A	C	F	8/9/01	43	8/13/01	4	8/9/01	19972M

Proportion Emerged: 0.67 Average Days To Emergence 33.3 Average Days to Mortality 4.0

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019972 Sample Name: D03198 IPSD-TT2201-06 Method: 100.5SGR

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	7/26/01	4		
2	A	C	M	7/22/01	25	7/28/01	6		
3	A	C	F	7/25/01	28	7/30/01	5	7/25/01	19972D4
4	A	C	M	7/25/01	28	7/27/01	2		
5	A	C	F	8/1/01	35	8/7/01	6	8/1/01,8/5/01	19972O,19972N
6	A	C	M	8/2/01	36	8/5/01	3		
7	A	C	F	8/3/01	37	8/7/01	4	8/3/01	19972M
8	A	C	F	8/4/01	38	8/8/01	4	8/4/01	19972G5
9	A	C	M	8/7/01	41	8/9/01	2		

Proportion Emerged: 0.75 Average Days To Emergence 32.6 Average Days to Mortality 4.0

Replicate: E

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/25/01	5		
2	A	C	M	7/21/01	24	7/27/01	6		
3	A	C	F	7/22/01	25	7/26/01	4	7/22/01	19972D1
4	A	C	F	7/22/01	25	7/27/01	5	7/22/01	19972D2
5	A	C	F	7/23/01	26	7/27/01	4	7/23/01,7/25/01	19972E1,19972H2
6	A	C	F	7/23/01	26	7/30/01	7	7/23/01	19972E2
7	A	C	F	7/25/01	28	7/29/01	4	7/25/01	19972C1
8	A	C	M	7/26/01	29	8/2/01	7		
9	A	C	M	7/31/01	34	8/6/01	6		

Proportion Emerged: 0.75 Average Days To Emergence 26.7 Average Days to Mortality 5.3

Replicate: F

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/19/01	22	7/26/01	7		
2	A	C	F	7/23/01	26	7/30/01	7	7/23/01	19972H2
3	A	C	F	7/24/01	27	7/31/01	7	7/24/01	19972H3
4	A	C	F	7/25/01	28	7/30/01	5	7/25/01	19972E2
5	A	C	F	7/27/01	30	8/1/01	5	7/27/01	19972H7
6	A	C	F	7/30/01	33	7/31/01	1	7/30/01	19972B4
7	A	C	F	7/30/01	33	8/3/01	4	7/30/01,8/1/01	19972H6,19972G1
8	A	C	F	7/31/01	34	8/4/01	4	7/31/01	19972E8

Proportion Emerged: 0.67 Average Days To Emergence 29.1 Average Days to Mortality 5.0

000027

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019972 Sample Name: D03198 IPSD-TT2201-06 Method: 100.5SGR

Replicate: G

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/29/01	32	8/3/01	5		
2	A	C	F	7/31/01	34	8/7/01	7	7/31/01	19972G3
3	A	C	M	7/31/01	34	8/3/01	3		
4	A	C	F	8/3/01	37	8/8/01	5	8/3/01	19972G5
5	A	C	M	8/3/01	37	8/9/01	6		
6	A	C	F	8/5/01	39	8/11/01	6	8/5/01	19972M
7	A	C	F	8/9/01	43	8/14/01	5	8/9/01	19972M
8	A	C	F	8/10/01	44	8/14/01	4	8/10/01	19972O

Proportion Emerged: 0.67 Average Days To Emergence 37.5 Average Days to Mortality 5.1

Replicate: H

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/23/01	26	7/23/01	0		
2	A	C	M	7/23/01	26	7/29/01	6		
3	A	C	M	7/24/01	27	7/27/01	3		
4	A	C	F	7/25/01	28	8/3/01	9	7/25/01	19972D2
5	A	C	M	7/26/01	29	7/30/01	4		
6	A	C	M	7/26/01	29	8/1/01	6		
7	A	C	M	7/27/01	30	8/2/01	6		
8	A	C	F	7/29/01	32	8/3/01	5	7/29/01	19972G1
9	A	C	F	7/30/01	33	8/3/01	4	7/30/01,8/1/01,8/2/01	19972O,19972E8,19972D6
10	A	C	F	7/31/01	34	8/3/01	3	7/31/01	19972G1
11	A	C	F	8/1/01	35	8/6/01	5	8/1/01	19972E9
12	A	C	F	8/6/01	40	8/7/01	1		

Proportion Emerged: 1.00 Average Days To Emergence 30.8 Average Days to Mortality 4.3

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019981 Sample Name: D03201 IPSD-TT1203-06 Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/21/01	24	7/30/01	9		
2	A	C	M	7/24/01	27	7/29/01	5		
3	A	C	M	7/24/01	27	7/29/01	5		
4	A	C	F	7/26/01	29	7/28/01	2	7/26/01	19981A3
5	A	C	M	7/26/01	29	7/28/01	2		
6	A	C	F	7/31/01	34	8/3/01	3	7/31/01	19981G3
7	A	C	F	8/1/01	35	8/7/01	6	8/1/01	19981E4
8	A	C	M	8/2/01	36	8/4/01	2		
9	A	C	M	8/2/01	36	8/8/01	6		

Proportion Emerged: 0.75 Average Days To Emergence 30.8 Average Days to Mortality 4.4

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/21/01	24	7/25/01	4		
2	A	C	F	7/24/01	27	7/28/01	4	7/24/01	19981D2
3	A	C	M	7/31/01	34	8/3/01	3		
4	A	C	F	8/3/01	37	8/6/01	3	8/3/01	19981N
5	A	C	F	8/3/01	37	8/7/01	4	8/3/01	19981N

Proportion Emerged: 0.42 Average Days To Emergence 31.8 Average Days to Mortality 3.6

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/24/01	27	7/28/01	4		
2	A	C	M	7/24/01	27	7/30/01	6		
3	A	C	F	7/25/01	28	7/31/01	6	7/25/01	19981C4
4	A	C	M	7/25/01	28	8/2/01	8		
5	A	C	M	7/27/01	30	8/2/01	6		
6	A	C	F	7/28/01	31	7/31/01	3	7/28/01	19981G3
7	A	C	M	7/30/01	33	8/6/01	7		

Proportion Emerged: 0.58 Average Days To Emergence 29.1 Average Days to Mortality 5.7

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019981 Sample Name: D03201 IPSD-TT1203-06 Method: 100.5SGR

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/21/01	24	7/24/01	3	7/21/01	19981B1
2	A	C	M	7/24/01	27	8/1/01	8		
3	A	C	F	7/24/01	27	7/26/01	2	7/24/01	19981C2
4	A	C	F	7/24/01	27	7/28/01	4	7/24/01	19981C1

Proportion Emerged: 0.33 Average Days To Emergence 26.3 Average Days to Mortality 4.3

Replicate: E

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	7/27/01	5		
2	A	C	M	7/22/01	25	7/30/01	8		
3	A	C	F	7/30/01	33	7/31/01	1	7/30/01	19981D2
4	A	C	F	8/1/01	35	8/3/01	2	8/1/01	19981M
5	A	C	F	8/1/01	35	8/2/01	1	8/1/01	19981M
6	A	C	M	8/2/01	36	8/8/01	6		
7	A	C	M	8/2/01	36	8/9/01	7		

Proportion Emerged: 0.58 Average Days To Emergence 32.1 Average Days to Mortality 4.3

Replicate: F

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/21/01	24	7/26/01	5	7/21/01	19981G1
2	A	C	M	7/23/01	26	7/28/01	5		

Proportion Emerged: 0.17 Average Days To Emergence 25.0 Average Days to Mortality 5.0

000030

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019981 Sample Name: D03201 IPSD-TT1203-06 Method: 100.5SGR

Replicate: G

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/21/01	24	7/26/01	5		
2	A	C	M	7/22/01	25	7/28/01	6		
3	A	C	M	7/28/01	31	8/3/01	6		
4	A	C	F	7/30/01	33	8/1/01	2	7/30/01	19981C5
5	A	C	F	8/4/01	38	8/7/01	3	8/4/01	19981A9
6	A	C	F	8/7/01	41	8/9/01	2	8/7/01	19981E7
7	A	C	F	8/7/01	41	8/10/01	3	8/7/01	19981E7
8	A	C	F	8/9/01	43	8/11/01	2		
9	A	C	F	8/13/01	47	8/16/01	3	8/13/01	19981P

Proportion Emerged: 0.75 Average Days To Emergence 35.9 Average Days to Mortality 3.6

Replicate: H

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/27/01	30	8/2/01	6	7/27/01	19981C5
2	A	C	F	7/30/01	33	8/4/01	5	7/30/01	19981C7
3	A	C	F	8/1/01	35	8/8/01	7	8/1/01	19981B3
4	A	C	F	8/2/01	36	8/8/01	6	8/2/01	19981E6

Proportion Emerged: 0.33 Average Days To Emergence 33.5 Average Days to Mortality 6.0

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019982 Sample Name: D03206 IPSD-TT2903-06 Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/18/01	21	7/23/01	5		
2	A	C	M	7/20/01	23	7/27/01	7		
3	A	C	M	7/22/01	25	7/23/01	1		
4	A	C	F	7/24/01	27	7/31/01	7		
5	A	C	F	7/26/01	29	8/1/01	6	7/26/01	19982H3

Proportion Emerged: 0.42 Average Days To Emergence 25.0 Average Days to Mortality 5.2

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/23/01	26	7/25/01	2		
2	A	C	M	7/23/01	26	7/27/01	4		
3	A	C	M	7/24/01	27	7/28/01	4		
4	A	C	M	7/24/01	27	8/1/01	8		
5	A	C	M	7/24/01	27	7/24/01	0		
6	A	C	M	7/29/01	32	8/2/01	4		
7	A	C	F	7/31/01	34	8/6/01	6	7/31/01,8/3/01	19982M,19982N
8	A	C	F	8/6/01	40	8/9/01	3	8/6/01	19982E1

Proportion Emerged: 0.67 Average Days To Emergence 29.9 Average Days to Mortality 3.9

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/19/01	22	7/27/01	8		
2	A	C	M	7/24/01	27	7/29/01	5		
3	A	C	F	7/24/01	27	7/28/01	4	7/24/01	19982C2
4	A	C	F	7/25/01	28	8/2/01	8	7/25/01	19982H2
5	A	C	F	7/27/01	30	7/30/01	3	7/27/01	19982H4
6	A	C	F	7/28/01	31	8/3/01	6	7/28/01,7/29/01	19982C2,19982H5
7	A	C	M	7/30/01	33	8/2/01	3		
8	A	C	F	8/2/01	36	8/3/01	1	8/2/01	19982O

Proportion Emerged: 0.67 Average Days To Emergence 29.3 Average Days to Mortality 4.8

000032

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019982 Sample Name: D03206 IPSD-TT2903-06 Method: 100.5SGR

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/28/01	8		
2	A	C	M	7/22/01	25	7/26/01	4		
3	A	C	F	7/25/01	28	7/31/01	6	7/25/01	19982B4
4	A	C	M	8/1/01	35	8/6/01	5		
5	A	C	F	8/2/01	36	8/3/01	1		
6	A	C	F	8/2/01	36	8/6/01	4	8/3/01	19982E1
7	A	C	F	8/7/01	41	8/14/01	7	8/7/01	19982O
8	A	C	F	8/9/01	43	8/11/01	2	8/9/01	19982N
9	A	C	F	8/10/01	44	8/17/01	7	8/10/01	19982E5

Proportion Emerged: 0.75 Average Days To Emergence 34.6 Average Days to Mortality 4.9

Replicate: E

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	8/3/01	37	8/10/01	7		
2	A	C	F	8/4/01	38	8/9/01	5	8/4/01	19982E3
3	A	C	M	8/4/01	38	8/9/01	5		
4	A	C	F	8/8/01	42	8/16/01	8	8/8/01	19982P
5	A	C	M	8/10/01	44	8/16/01	6		
6	A	C	F	8/12/01	46	8/15/01	3	8/12/01	19982N
7	A	C	M	8/13/01	47	8/17/01	4		
8	A	C	F	8/16/01	50	8/21/01	5	8/16/01	19982N

Proportion Emerged: 0.67 Average Days To Emergence 42.8 Average Days to Mortality 5.4

Replicate: F

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	7/27/01	5		
2	A	C	M	7/22/01	25	7/27/01	5		
3	A	C	M	7/24/01	27	7/26/01	2		
4	A	C	M	7/27/01	30	7/30/01	3		
5	A	C	F	7/27/01	30	7/30/01	3	7/27/01	19982F4
6	A	C	F	7/27/01	30	8/2/01	6	7/27/01	19982F4
7	A	C	M	7/29/01	32	7/31/01	2		
8	A	C	M	7/29/01	32	8/1/01	3		

Proportion Emerged: 0.67 Average Days To Emergence 28.9 Average Days to Mortality 3.6

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019982 Sample Name: D03206 IPSD-TT2903-06 Method: 100.5SGR

Replicate: G

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/21/01	24	7/30/01	9		
2	A	C	M	7/23/01	26	7/27/01	4		
3	A	C	M	7/24/01	27	7/29/01	5		
4	A	C	F	7/25/01	28	7/27/01	2	7/25/01	19982B3
5	A	C	F	7/26/01	29	7/27/01	1	7/26/01	19982H1

Proportion Emerged: 0.42 Average Days To Emergence 26.8 Average Days to Mortality 4.2

Replicate: H

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/24/01	27	7/31/01	7		
2	A	C	M	7/25/01	28	7/27/01	2		
3	A	C	M	7/26/01	29	7/31/01	5		
4	A	C	M	7/27/01	30	7/30/01	3		
5	A	C	M	7/29/01	32	8/3/01	5		
6	A	C	F	7/30/01	33	8/5/01	6	7/30/01	19982C7
7	A	C	F	7/31/01	34	8/3/01	3	7/31/01	19982O

Proportion Emerged: 0.58 Average Days To Emergence 30.4 Average Days to Mortality 4.4

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019983 Sample Name: D03211 IPSD-TT1901-06 Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/23/01	26	7/27/01	4		
2	A	C	F	7/24/01	27	7/30/01	6	7/24/01	19983H6
3	A	C	F	7/24/01	27	7/29/01	5	7/24/01,7/26/01	19983D3,19983G5
4	A	C	M	7/27/01	30	7/29/01	2		
5	A	C	M	7/28/01	31	8/2/01	5		
6	A	C	M	7/31/01	34	8/7/01	7		
7	A	C	F	8/1/01	35	8/4/01	3	8/1/01	19983C7

Proportion Emerged: 0.58 Average Days To Emergence 30.0 Average Days to Mortality 4.6

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/18/01	21	7/26/01	8		
2	A	C	M	7/21/01	24	7/26/01	5		
3	A	C	M	7/23/01	26	7/28/01	5		
4	A	C	F	7/24/01	27	7/28/01	4	7/24/01	19983G2
5	A	C	M	7/28/01	31	8/2/01	5		
6	A	C	F	7/29/01	32	7/29/01	0		
7	A	C	F	7/29/01	32	8/3/01	5	7/29/01	19983M
8	A	C	F	8/3/01	37	8/9/01	6	8/3/01	19983F8
9	A	C	F	8/5/01	39	8/8/01	3	8/5/01	19983B10
10	A	C	M	8/5/01	39	8/10/01	5		
11	A	C	M	8/7/01	41	8/12/01	5		
12	L	N							

Proportion Emerged: 0.92 Average Days To Emergence 31.7 Average Days to Mortality 4.6

000035

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019983 Sample Name: D03211 IPSD-TT1901-06 Method: 100.5SGR

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/27/01	7		
2	A	C	F	7/23/01	26	7/27/01	4	7/23/01	19983A1
3	A	C	F	7/30/01	33				
4	A	C	M	7/30/01	33				
5	A	C	M	7/30/01	33	7/31/01	1		
6	A	C	M	7/30/01	33	8/5/01	6		
7	A	C	M	8/1/01	35	8/9/01	8		
8	A	C	F	8/2/01	36	8/2/01	0		
9	A	C	F	8/9/01	43	8/13/01	4	8/9/01	19983B11

Proportion Emerged: 0.75 Average Days To Emergence 32.8 Average Days to Mortality 4.3

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/28/01	8		
2	A	C	M	7/22/01	25	7/23/01	1		
3	A	C	M	7/22/01	25	7/29/01	7		
4	A	C	M	7/22/01	25	7/28/01	6		
5	A	C	M	7/24/01	27	7/24/01	0		
6	A	C	F	7/29/01	32	8/2/01	4	7/29/01	19983B5
7	A	C	F	7/29/01	32	8/2/01	4	7/29/01	19983B5
8	A	C	F	8/2/01	36	8/7/01	5	8/2/01	19983F5
9	A	C	F	8/3/01	37	8/5/01	2	8/3/01	19983M
10	A	C	F	8/3/01	37	8/6/01	3	8/3/01	19983M
11	A	C	M	8/4/01	38	8/7/01	3		
12	L	N							
13	L	N							
14	L	N							

Proportion Emerged: 0.92 Average Days To Emergence 30.6 Average Days to Mortality 3.9

Replicate: E

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/21/01	24	7/25/01	4	7/21/01	19983B2
2	A	C	F	7/21/01	24	7/27/01	6	7/21/01	19983G3

Proportion Emerged: 0.17 Average Days To Emergence 24.0 Average Days to Mortality 5.0

000036

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 019983 Sample Name: D03211 IPSD-TT1901-06 Method: 100.5SGR

Replicate: F

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/20/01	23	7/23/01	3	7/20/01	19983G1
2	A	C	F	7/27/01	30	8/1/01	5	7/27/01	19983M
3	A	C	F	7/27/01	30	8/1/01	5	7/27/01	19983M
4	A	C	F	7/29/01	32	8/1/01	3	7/29/01	19983M
5	A	C	M	7/30/01	33	8/5/01	6		
6	A	C	F	8/1/01	35	8/2/01	1	8/1/01	19983A6
7	A	C	F	8/1/01	35	8/7/01	6	8/1/01	19983A6
8	A	C	M	8/3/01	37	8/8/01	5		

Proportion Emerged: 0.67 Average Days To Emergence 31.9 Average Days to Mortality 4.3

Replicate: G

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/23/01	3		
2	A	C	M	7/21/01	24	7/28/01	7		
3	A	C	M	7/21/01	24	7/29/01	8		
4	A	C	F	7/24/01	27	7/31/01	7	7/24/01	19983D4
5	A	C	M	7/26/01	29	7/28/01	2		
6	A	C	F	7/27/01	30	8/1/01	5	7/27/01,7/29/01	19983G5,19983A5
7	A	C	M	7/28/01	31				
8	A	C	M	7/29/01	32	8/6/01	8		
9	A	C	F	7/30/01	33	8/2/01	3	7/30/01	19983F5
10	A	C	F	8/2/01	36	8/7/01	5	8/2/01,8/5/01	19983C6,19983D11

Proportion Emerged: 0.83 Average Days To Emergence 28.9 Average Days to Mortality 5.3

Replicate: H

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/22/01	2		
2	A	C	M	7/20/01	23	7/25/01	5		
3	A	C	M	7/20/01	23	7/25/01	5		
4	A	C	M	7/20/01	23	7/25/01	5		
5	A	C	M	7/20/01	23	7/26/01	6		
6	A	C	M	7/23/01	26	7/26/01	3		

Proportion Emerged: 0.50 Average Days To Emergence 23.5 Average Days to Mortality 4.3

000037

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020001 Sample Name: D03387 IPSD-TT3302-06 Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	8/1/01	35	8/7/01	6	8/1/01	20001M
2	A	C	F	8/2/01	36	8/5/01	3	8/2/01	20001M
3	A	C	M	8/6/01	40	8/11/01	5		
4	A	C	F	8/7/01	41	8/9/01	2	8/7/01	20001P
5	A	C	F	8/7/01	41	8/7/01	0		
6	A	C	M	8/9/01	43	8/10/01	1		
7	A	C	M	8/9/01	43	8/13/01	4		
8	A	C	M	8/10/01	44	8/14/01	4		

Proportion Emerged: 0.67 Average Days To Emergence 40.4 Average Days to Mortality 3.1

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	7/25/01	3		
2	A	C	M	7/24/01	27	7/28/01	4		
3	A	C	F	7/24/01	27	7/29/01	5	7/24/01	20001B2
4	A	C	M	7/25/01	28	7/27/01	2		
5	A	C	M	7/26/01	29	7/31/01	5		
6	A	C	F	7/27/01	30	8/1/01	5	7/27/01	20001C4
7	A	C	M	7/28/01	31				
8	A	C	F	7/31/01	34	8/5/01	5	7/31/01	20001D6
9	A	C	M	8/4/01	38	8/10/01	6		
10	A	C	F	8/5/01	39	8/8/01	3	8/5/01	20001F5

Proportion Emerged: 0.83 Average Days To Emergence 30.8 Average Days to Mortality 4.2

000038

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020001 Sample Name: D03387 IPSD-TT3302-06 Method: 100.5SGR

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/23/01	3		
2	A	C	M	7/20/01	23	7/24/01	4		
3	A	C	M	7/23/01	26	7/30/01	7		
4	A	C	M	7/27/01	30	8/1/01	5		
5	A	C	M	7/29/01	32	8/5/01	7		
6	A	C	F	7/30/01	33	7/30/01	0		
7	A	C	F	8/1/01	35	8/5/01	4	8/1/01	20001P
8	A	C	F	8/3/01	37	8/7/01	4	8/3/01,8/5/01	20001C5,20001G6
9	A	C	F	8/7/01	41	8/10/01	3	8/7/01	20001C10
10	A	C	M	8/7/01	41	8/13/01	6		
11	A	C	M	8/22/01	56	8/27/01	5		

Proportion Emerged: 0.92 Average Days To Emergence 34.3 Average Days to Mortality 4.4

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/18/01	21	7/24/01	6		
2	A	C	M	7/24/01	27	7/28/01	4		
3	A	C	M	7/24/01	27	7/28/01	4		
4	A	C	M	7/28/01	31	8/1/01	4		
5	A	C	F	7/30/01	33	8/3/01	4	7/30/01	20001F2
6	A	C	M	7/31/01	34	8/4/01	4		
7	A	C	F	8/1/01	35	8/7/01	6	8/1/01	20001C5
8	A	C	F	8/2/01	36	8/4/01	2	8/2/01	20001G3
9	A	C	F	8/5/01	39	8/8/01	3	8/5/01	20001O

Proportion Emerged: 0.75 Average Days To Emergence 31.4 Average Days to Mortality 4.1

000039

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020001 Sample Name: D03387 IPSD-TT3302-06 Method: 100.5SGR

Replicate: E

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/25/01	28	7/31/01	6		
2	A	C	M	8/3/01	37	8/3/01	0		
3	A	C	F	8/11/01	45	8/14/01	3	8/11/01	20001A8
4	A	C	F	8/11/01	45	8/14/01	3	8/11/01	20001A8
5	A	C	M	8/11/01	45				
6	A	C	F	8/12/01	46	8/15/01	3	8/12/01	20001H2
7	A	C	F	8/13/01	47	8/16/01	3	8/13/01	20001H3
8	A	C	F	8/13/01	47	8/15/01	2	8/13/01	20001H3
9	A	C	F	8/19/01	53	8/22/01	3	8/19/01	20001F7

Proportion Emerged: 0.75 Average Days To Emergence 43.7 Average Days to Mortality 2.9

Replicate: F

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/26/01	29	7/29/01	3	7/26/01	20001B5
2	A	C	M	7/28/01	31	8/1/01	4		
3	A	C	M	7/29/01	32	8/1/01	3		
4	A	C	F	8/3/01	37	8/3/01	0		
5	A	C	M	8/5/01	39	8/8/01	3		
6	A	C	F	8/18/01	52	8/21/01	3	8/18/01	20001H5
7	A	C	M	8/19/01	53	8/24/01	5		

Proportion Emerged: 0.58 Average Days To Emergence 39.0 Average Days to Mortality 3.0

Replicate: G

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/18/01	21				
2	A	C	F	7/30/01	33	8/2/01	3	7/30/01	20001G3
3	A	C	M	7/30/01	33	8/4/01	5		
4	A	C	F	8/3/01	37	8/7/01	4	8/3/01	20001G5
5	A	C	M	8/3/01	37	8/7/01	4		
6	A	C	M	8/4/01	38	8/7/01	3		
7	A	C	F	8/12/01	46	8/16/01	4	8/12/01	20001C10
8	A	C	F	8/13/01	47	8/17/01	4	8/14/01	20001H4
9	A	C	F	8/13/01	47	8/18/01	5	8/14/01	20001H4
10	A	C	F	8/21/01	55	8/23/01	2	8/21/01	20001F7

Proportion Emerged: 0.83 Average Days To Emergence 39.4 Average Days to Mortality 3.8

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020001 Sample Name: D03387 IPSD-TT3302-06 Method: 100.5SGR

Replicate: H

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/29/01	32	8/1/01	3	7/29/01	20001F3
2	A	C	M	8/8/01	42	8/15/01	7		
3	A	C	M	8/13/01	47	8/19/01	6		
4	A	C	M	8/14/01	48	8/17/01	3		
5	A	C	M	8/16/01	50	8/20/01	4		
6	A	C	F	8/18/01	52	8/23/01	5	8/18/01	20001P

Proportion Emerged: 0.50 Average Days To Emergence 45.2 Average Days to Mortality 4.7

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020002 Sample Name: D03392 IPSD-TT3202-06 Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/25/01	5		
2	A	C	F	7/25/01	28	8/2/01	8	7/25/01	20002H1
3	A	C	F	7/27/01	30	8/1/01	5	7/27/01	20002B2
4	A	C	F	7/31/01	34	8/1/01	1	7/31/01	20002N
5	A	C	F	7/31/01	34	8/1/01	1	7/31/01	20002D5
6	A	C	M	8/1/01	35	8/5/01	4		
7	A	C	F	8/3/01	37	8/3/01	0		

Proportion Emerged: 0.58 Average Days To Emergence 31.6 Average Days to Mortality 3.4

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/23/01	26	7/26/01	3		
2	A	C	M	7/27/01	30	8/1/01	5		
3	A	C	F	7/28/01	31	8/3/01	6	7/28/01	20002H3,20002H4
4	A	C	F	7/29/01	32	7/29/01	0		
5	A	C	M	7/29/01	32	7/29/01	0		
6	A	C	F	8/1/01	35	8/4/01	3	8/1/01	20002A6
7	A	C	M	8/6/01	40	8/9/01	3		
8	A	C	F	8/9/01	43	8/11/01	2	8/9/01	20002E2
9	A	C	F	8/9/01	43	8/15/01	6	8/9/01	20002E2

Proportion Emerged: 0.75 Average Days To Emergence 34.7 Average Days to Mortality 3.1

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	8/1/01	35	8/9/01	8		
2	A	C	F	8/2/01	36	8/6/01	4	8/2/01	20002C1
3	A	C	M	8/3/01	37	8/7/01	4		
4	A	C	M	8/5/01	39	8/13/01	8		
5	A	C	F	8/8/01	42	8/14/01	6	8/8/01	20002H8
6	A	C	F	8/10/01	44	8/15/01	5	8/10/01	20002C4
7	A	C	F	8/11/01	45	8/14/01	3	8/11/01,8/13/01	20002C4,20002P

Proportion Emerged: 0.58 Average Days To Emergence 39.7 Average Days to Mortality 5.4

000042

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020002 Sample Name: D03392 IPSD-TT3202-06 Method: 100.5SGR

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	8/1/01	10		
2	A	C	M	7/28/01	31	8/2/01	5		
3	A	C	F	7/28/01	31	8/2/01	5	7/28/01	20002D2
4	A	C	M	7/29/01	32				
5	A	C	M	7/29/01	32	8/6/01	8		
6	A	C	M	8/1/01	35	8/7/01	6		
7	A	C	F	8/7/01	41	8/11/01	4	8/7/01	20002E2
8	A	C	F	8/11/01	45	8/17/01	6	8/12/01,8/14/01	20002E4,20002P

Proportion Emerged: 0.67 Average Days To Emergence 34.0 Average Days to Mortality 6.3

Replicate: E

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/31/01	34	8/3/01	3	7/31/01	20002F3
2	A	C	M	8/7/01	41	8/11/01	4		
3	A	C	F	8/8/01	42	8/14/01	6	8/8/01	20002E4
4	A	C	M	8/8/01	42	8/14/01	6		
5	A	C	F	8/9/01	43	8/14/01	5	8/9/01	20002E6
6	A	C	M	8/9/01	43	8/12/01	3		
7	A	C	F	8/16/01	50	8/16/01	0		
8	A	C	F	8/18/01	52	8/22/01	4	8/18/01	20002H10
9	A	C	F	8/18/01	52	8/21/01	3	8/18/01	20002H10
10	A	C	F	8/19/01	53	8/21/01	2	8/19/01	20002P
11	A	C	F	8/20/01	54	8/24/01	4	8/21/01	20002H10

Proportion Emerged: 0.92 Average Days To Emergence 46.0 Average Days to Mortality 3.6

000043

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020002 Sample Name: D03392 IPSD-TT3202-06 Method: 100.5SGR

Replicate: F

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/26/01	29	8/3/01	8		
2	A	C	F	7/28/01	31	8/5/01	8	7/28/01	20002G1
3	A	C	M	7/30/01	33	8/4/01	5		
4	A	C	F	8/3/01	37	8/7/01	4	8/3/01	20002C3
5	A	C	F	8/4/01	38	8/10/01	6	8/4/01	20002F6
6	A	C	M	8/4/01	38	8/10/01	6		
7	A	C	F	8/9/01	43	8/10/01	1	8/9/01	20002H8
8	A	C	F	8/9/01	43	8/12/01	3	8/11/01	20002E4
9	A	C	F	8/11/01	45	8/16/01	5	8/11/01	20002P
10	A	C	F	8/11/01	45	8/16/01	5	8/11/01	20002P

Proportion Emerged: 0.83 Average Days To Emergence 38.2 Average Days to Mortality 5.1

Replicate: G

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/28/01	31	8/1/01	4		
2	A	C	M	7/29/01	32	8/3/01	5		
3	A	C	M	8/1/01	35	8/6/01	5		
4	A	C	M	8/3/01	37	8/9/01	6		
5	A	C	F	8/5/01	39	8/9/01	4	8/5/01	20002C4
6	A	C	F	8/8/01	42	8/11/01	3	8/8/01	20002C4
7	A	C	F	8/16/01	50	8/19/01	3	8/16/01	20002P

Proportion Emerged: 0.58 Average Days To Emergence 38.0 Average Days to Mortality 4.3

Replicate: H

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/25/01	28	7/31/01	6		
2	A	C	M	7/26/01	29	8/3/01	8		
3	A	C	M	7/27/01	30	8/3/01	7		
4	A	C	M	7/27/01	30	7/31/01	4		
5	A	C	M	7/28/01	31	7/28/01	0		
6	A	C	M	7/28/01	31	7/30/01	2		
7	A	C	F	7/31/01	34	8/4/01	4	7/31/01	20002G2
8	A	C	M	8/7/01	41	8/11/01	4		
9	A	C	F	8/11/01	45	8/16/01	5	8/12/01	20002P
10	A	C	M	8/17/01	51	8/23/01	6		

Proportion Emerged: 0.83 Average Days To Emergence 35.0 Average Days to Mortality 4.6

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020012 Sample Name: D03396 IPSD-WW06-062 Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/19/01	22	7/27/01	8		
2	A	C	M	7/22/01	25	7/28/01	6		
3	A	C	F	7/24/01	27	7/29/01	5	7/24/01	20012B2
4	A	C	F	7/25/01	28	7/31/01	6	7/25/01	20012D8
5	A	C	M	7/28/01	31	8/1/01	4		
6	A	C	M	7/30/01	33	8/5/01	6		
7	A	C	M	7/30/01	33	8/5/01	6		
8	A	C	M	7/31/01	34	8/7/01	7		
9	A	C	F	8/2/01	36	8/4/01	2	8/2/01	20012A9
10	A	C	M	8/2/01	36	8/7/01	5		
11	A	C	F	8/2/01	36	8/6/01	4	8/2/01	20012A9

Proportion Emerged: 0.92 Average Days To Emergence 31.0 Average Days to Mortality 5.4

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/21/01	24	7/27/01	6		
2	A	C	M	7/24/01	27	7/31/01	7		
3	A	C	M	7/26/01	29	8/1/01	6		
4	A	C	F	7/27/01	30	8/1/01	5	7/28/01	20012N
5	A	C	M	7/29/01	32	8/3/01	5		
6	A	C	M	7/30/01	33	8/5/01	6		
7	A	C	F	7/31/01	34	8/3/01	3	7/31/01	20012B8
8	A	C	M	7/31/01	34	8/5/01	5		
9	A	C	F	8/1/01	35	8/7/01	6	8/1/01	20012B10
10	A	C	M	8/1/01	35	8/7/01	6		
11	A	C	F	8/2/01	36	8/8/01	6	8/2/01	20012A6

Proportion Emerged: 0.92 Average Days To Emergence 31.7 Average Days to Mortality 5.5

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020012 Sample Name: D03396 IPSD-WW06-062 Method: 100.5SGR

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/27/01	7		
2	A	C	M	7/20/01	23	7/27/01	7		
3	A	C	M	7/21/01	24	7/26/01	5		
4	A	C	M	7/21/01	24	7/26/01	5		
5	A	C	M	7/22/01	25	7/22/01	0		
6	A	C	F	7/24/01	27	7/31/01	7	7/24/01	20012D7
7	A	C	F	7/26/01	29	7/30/01	4	7/26/01	20012B3
8	A	C	F	7/26/01	29	7/29/01	3	7/26/01	20012G7
9	A	C	M	8/2/01	36	8/2/01	0		
10	A	C	F	8/3/01	37	8/6/01	3	8/3/01	20012O

Proportion Emerged: 0.83 Average Days To Emergence 27.7 Average Days to Mortality 4.1

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/28/01	8		
2	A	C	M	7/20/01	23				
3	A	C	M	7/20/01	23				
4	A	C	M	7/21/01	24	7/31/01	10		
5	A	C	M	7/22/01	25	7/27/01	5		
6	A	C	M	7/22/01	25	7/29/01	7		
7	A	C	M	7/24/01	27	7/28/01	4		
8	A	C	M	7/25/01	28	8/2/01	8		
9	A	C	F	7/27/01	30	7/28/01	1		
10	A	C	F	8/2/01	36	8/5/01	3	8/2/01	20012F7

Proportion Emerged: 0.83 Average Days To Emergence 26.4 Average Days to Mortality 5.8

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020012 Sample Name: D03396 IPSD-WW06-062 Method: 100.5SGR

Replicate: E

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	7/28/01	6		
2	A	C	M	7/22/01	25	7/27/01	5		
3	A	C	F	7/22/01	25	7/24/01	2	7/22/01	20012-2
4	A	C	F	7/23/01	26	7/30/01	7	7/23/01	20012E1
5	A	C	F	7/24/01	27	7/26/01	2	7/24/01	20012G3
6	A	C	F	7/27/01	30	8/3/01	7	7/28/01	20012N
7	A	C	F	7/29/01	32	7/30/01	1	7/29/01	20012G7
8	A	C	M	8/1/01	35	8/1/01	0		
9	A	C	F	8/4/01	38	8/7/01	3	8/4/01	20012O

Proportion Emerged: 0.75 Average Days To Emergence 29.2 Average Days to Mortality 3.7

Replicate: F

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	7/27/01	5		
2	A	C	M	7/25/01	28	8/1/01	7		
3	A	C	M	7/27/01	30	8/3/01	7		
4	A	C	F	7/27/01	30	8/1/01	5	7/27/01	20012F3
5	A	C	F	7/29/01	32	8/4/01	6	7/29/01	20012F6
6	A	C	M	7/29/01	32	8/2/01	4		
7	A	C	M	7/30/01	33	8/5/01	6		
8	A	C	M	7/31/01	34	8/7/01	7		
9	A	C	F	8/2/01	36	8/4/01	2	8/2/01	20012G10
10	A	C	F	8/4/01	38	8/9/01	5	8/4/01	20012F8

Proportion Emerged: 0.83 Average Days To Emergence 31.8 Average Days to Mortality 5.4

000047

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020012 Sample Name: D03396 IPSD-WW06-062 Method: 100.5SGR

Replicate: G

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/18/01	21	7/23/01	5		
2	A	C	M	7/21/01	24	7/30/01	9		
3	A	C	M	7/22/01	25	7/26/01	4		
4	A	C	F	7/24/01	27	7/27/01	3	7/24/01	20012H2
5	A	C	F	7/25/01	28	7/30/01	5	7/25/01	20012G6
6	A	C	M	7/25/01	28	7/31/01	6		
7	A	C	M	7/26/01	29	8/1/01	6		
8	A	C	F	7/28/01	31	7/31/01	3	7/28/01	20012A5
9	A	C	M	7/29/01	32	8/3/01	5		
10	A	C	M	7/30/01	33	8/3/01	4		

Proportion Emerged: 0.83 Average Days To Emergence 27.8 Average Days to Mortality 5.0

Replicate: H

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/21/01	24	7/31/01	10		
2	A	C	M	7/22/01	25	7/27/01	5		
3	A	C	F	7/23/01	26	7/30/01	7	7/23/01	20012A2
4	A	C	F	7/28/01	31	7/31/01	3	7/28/01	20012P
5	A	C	F	7/29/01	32	8/5/01	7	7/29/01	20012A6
6	A	C	F	7/31/01	34	8/2/01	2	7/31/01	20012F8
7	A	P	F	7/31/01	34	7/31/01	0		
8	A	C	F	8/2/01	36	8/2/01	0		

Proportion Emerged: 0.58 Average Days To Emergence 30.3 Average Days to Mortality 4.3

000048

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020013 Sample Name: D03401 IPSD-TT1802-06 Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/19/01	22	7/25/01	6		
2	A	C	F	7/21/01	24	7/27/01	6	7/21/01	20013A1
3	A	C	M	7/22/01	25	7/28/01	6		
4	A	C	M	7/22/01	25	7/26/01	4		
5	A	C	F	7/22/01	25	7/29/01	7	7/22/01	20013A4
6	A	C	F	7/29/01	32	8/3/01	5	7/29/01	20013H4

Proportion Emerged: 0.50 Average Days To Emergence 25.5 Average Days to Mortality 5.7

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/25/01	28	7/29/01	4	7/25/01	20013D1
2	A	C	F	7/29/01	32	8/4/01	6	7/29/01	20013C2
3	A	C	M	7/30/01	33	8/6/01	7		
4	A	C	F	8/2/01	36	8/6/01	4	8/2/01	20013G4
5	A	C	F	8/7/01	41	8/11/01	4	8/7/01	20013N

Proportion Emerged: 0.42 Average Days To Emergence 34.0 Average Days to Mortality 5.0

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	P	ND	7/24/01	27	7/24/01	0		
2	A	C	M	7/28/01	31	8/2/01	5		
3	A	C	F	7/29/01	32	8/2/01	4	7/29/01,7/30/01	20013H3,20013D2
4	A	C	M	7/30/01	33	7/30/01	0		
5	A	C	F	7/31/01	34	8/3/01	3	7/31/01	20013B3
6	A	C	F	8/3/01	37	8/3/01	0		

Proportion Emerged: 0.42 Average Days To Emergence 32.3 Average Days to Mortality 2.0

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020013 Sample Name: D03401 IPSD-TT1802-06 Method: 100.5SGR

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/25/01	28	7/30/01	5		
2	A	C	M	7/30/01	33	8/4/01	5		
3	A	C	F	8/6/01	40	8/10/01	4	8/6/01,8/7/01	20013D4,20013M
4	A	C	M	8/6/01	40	8/7/01	1		
5	A	C	F	8/7/01	41	8/10/01	3	8/7/01	20013F8
6	A	C	M	8/8/01	42	8/14/01	6		
7	A	C	F	8/11/01	45	8/15/01	4	8/11/01	20013G9
8	A	C	F	8/14/01	48	8/20/01	6	8/14/01,8/15/01	20013D9,20013E4
9	A	C	M	8/14/01	48	8/15/01	1		
10	A	C	F	8/17/01	51	8/20/01	3	8/17/01	20013M

Proportion Emerged: 0.83 Average Days To Emergence 41.6 Average Days to Mortality 3.8

Replicate: E

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/31/01	34	7/31/01	0		
2	A	C	F	8/2/01	36	8/9/01	7	8/2/01	20013F4
3	A	C	M	8/5/01	39	8/13/01	8		
4	A	C	M	8/13/01	47	8/19/01	6		

Proportion Emerged: 0.33 Average Days To Emergence 39.0 Average Days to Mortality 5.3

Replicate: F

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/23/01	26	7/29/01	6		
2	A	C	M	7/24/01	27	7/29/01	5		
3	A	C	F	7/31/01	34	8/7/01	7	7/31/01	20013H4
4	A	C	M	8/2/01	36	8/8/01	6		
5	A	C	M	8/3/01	37	8/4/01	1		
6	A	C	F	8/4/01	38	8/9/01	5	8/4/01	20013M
7	A	C	F	8/6/01	40	8/10/01	4	8/6/01	20013F8
8	A	C	M	8/6/01	40	8/10/01	4		
9	A	C	M	8/8/01	42	8/9/01	1		
10	A	C	M	8/10/01	44				

Proportion Emerged: 0.83 Average Days To Emergence 36.4 Average Days to Mortality 4.3

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020013 Sample Name: D03401 IPSD-TT1802-06 Method: 100.5SGR

Replicate: G

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/31/01	34	8/6/01	6		
2	A	C	F	7/31/01	34	8/1/01	1	7/31/01	20013G1
3	A	C	F	8/1/01	35	8/7/01	6	8/1/01	20013G1
4	A	C	M	8/2/01	36	8/7/01	5		
5	A	C	F	8/3/01	37	8/8/01	5	8/3/01	20013F5
6	A	C	M	8/4/01	38	8/10/01	6		
7	A	C	F	8/5/01	39	8/7/01	2	8/5/01	20013E3
8	A	C	F	8/8/01	42	8/12/01	4	8/8/01	20013D6
9	A	C	M	8/11/01	45	8/16/01	5		
10	A	C	M	8/13/01	47	8/20/01	7		

Proportion Emerged: 0.83 Average Days To Emergence 38.7 Average Days to Mortality 4.7

Replicate: H

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	7/29/01	7		
2	A	C	M	7/24/01	27	8/1/01	8		
3	A	C	M	7/25/01	28	7/30/01	5		
4	A	C	M	7/28/01	31	8/4/01	7		
5	A	C	F	8/1/01	35	8/7/01	6	8/1/01	20013D3
6	A	C	M	8/4/01	38	8/11/01	7		
7	A	C	F	8/9/01	43	8/16/01	7	8/9/01	20013E3
8	A	C	F	8/10/01	44	8/16/01	6	8/10/01	20013O
9	A	C	F	8/12/01	46	8/14/01	2	8/12/01	20013H10
10	A	C	M	8/12/01	46	8/19/01	7		

Proportion Emerged: 0.83 Average Days To Emergence 36.3 Average Days to Mortality 6.2

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020024 Sample Name: D03407 IPSD-TT1002-06 Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/19/01	22	7/23/01	4	7/19/01	20024D1

Proportion Emerged: 0.08 Average Days To Emergence 22.0 Average Days to Mortality 4.0

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
0		N							

Proportion Emerged: 0.00 Average Days To Emergence Average Days to Mortality

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/18/01	21	7/23/01	5		
2	A	C	M	7/18/01	21	7/25/01	7		
3	A	C	F	7/19/01	22	7/21/01	2	7/19/01	20024C2
4	A	C	F	7/29/01	32	8/1/01	3		
5	A	C	F	7/29/01	32	8/5/01	7	8/1/01	20024H3

Proportion Emerged: 0.42 Average Days To Emergence 25.6 Average Days to Mortality 4.8

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/19/01	22	7/24/01	5		
2	A	C	M	7/21/01	24	7/24/01	3		
3	A	C	F	7/26/01	29	8/1/01	6	7/27/01	20024O
4	A	C	F	7/26/01	29	7/27/01	1	7/26/01	20024D2
5	A	C	F	7/26/01	29	8/1/01	6	7/26/01	20024F2
6	A	C	F	7/27/01	30	8/1/01	5		
7	A	C	F	7/29/01	32	7/31/01	2	7/29/01	20024H3
8	A	C	F	7/30/01	33	8/3/01	4	7/31/01	20024H3

Proportion Emerged: 0.67 Average Days To Emergence 28.5 Average Days to Mortality 4.0

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020024 Sample Name: D03407 IPSD-TT1002-06 Method: 100.5SGR

Replicate: E

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/25/01	5		

Proportion Emerged: 0.08 Average Days To Emergence 23.0 Average Days to Mortality 5.0

Replicate: F

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/19/01	22	7/23/01	4	7/19/01	20024C1
2	A	C	M	7/23/01	26	7/28/01	5		
3	A	C	F	7/23/01	26	7/29/01	6	7/23/01	20024F2

Proportion Emerged: 0.25 Average Days To Emergence 24.7 Average Days to Mortality 5.0

Replicate: G

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/27/01	30	8/3/01	7		
2	A	C	F	7/27/01	30	8/1/01	5	7/27/01	20024G1
3	A	C	F	7/27/01	30	8/1/01	5	7/27/01	20024G1
4	A	C	F	7/28/01	31	8/3/01	6	7/28/01	20024H2
5	A	C	F	7/28/01	31	8/4/01	7	7/28/01	20024H2
6	A	C	F	7/28/01	31	8/3/01	6	7/28/01	20024H2
7	A	C	M	7/30/01	33	8/1/01	2		
8	A	C	F	8/2/01	36	8/5/01	3	8/2/01	20024M
9	A	C	F	8/2/01	36	8/7/01	5	8/2/01	20024M

Proportion Emerged: 0.75 Average Days To Emergence 32.0 Average Days to Mortality 5.1

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020024 Sample Name: D03407 IPSD-TT1002-06 Method: 100.5SGR

Replicate: H

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	7/22/01	0		
2	A	C	M	7/28/01	31	7/31/01	3		
3	A	C	F	7/30/01	33	8/4/01	5	8/1/01	20024G1
4	A	C	M	7/30/01	33	8/4/01	5		
5	A	C	F	7/31/01	34	8/3/01	3	7/31/01	20024P
6	A	C	F	8/1/01	35	8/5/01	4	8/1/01	20024N
7	A	C	F	8/2/01	36	8/8/01	6	8/2/01	20024H3
8	A	C	F	8/3/01	37	8/8/01	5	8/3/01	20024P
9	A	C	F	8/3/01	37	8/3/01	0		
10	A	C	M	8/6/01	40	8/9/01	3		
11	A	C	F	8/11/01	45	8/11/01	0		

Proportion Emerged: 0.92 Average Days To Emergence 35.1 Average Days to Mortality 3.1

000054

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020025 Sample Name: D03412 IPSD-TT1301-06 Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	7/25/01	3		
2	A	C	F	7/23/01	26	7/28/01	5	7/23/01	20025A1
3	A	C	F	7/24/01	27	7/28/01	4	7/24/01	20025E1
4	A	C	M	8/1/01	35	8/7/01	6		
5	A	C	F	8/2/01	36	8/8/01	6	8/3/01	20025E3
6	A	C	F	8/2/01	36	8/8/01	6	8/3/01	20025E3
7	A	C	F	8/6/01	40	8/10/01	4	8/6/01	20025A8
8	A	C	M	8/6/01	40	8/11/01	5		
9	A	C	F	8/8/01	42	8/13/01	5	8/8/01	20025D3
10	A	C	F	8/8/01	42	8/15/01	7	8/8/01	20025D3

Proportion Emerged: 0.83 Average Days To Emergence 34.9 Average Days to Mortality 5.1

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/27/01	30	8/1/01	5	7/27/01	20025F4
2	A	C	M	7/30/01	33	8/5/01	6		
3	A	C	F	8/2/01	36	8/6/01	4	8/2/01	20025H2
4	A	C	F	8/4/01	38	8/8/01	4	8/4/01	20025E3
5	A	C	F	8/6/01	40	8/10/01	4	8/6/01	20025F8
6	A	C	F	8/23/01	57	8/29/01	6	8/23/01,8/26/01	20025E8,20025E10

Proportion Emerged: 0.50 Average Days To Emergence 39.0 Average Days to Mortality 4.8

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/21/01	24	7/26/01	5		
2	A	C	F	7/22/01	25				
3	A	C	F	7/28/01	31	7/28/01	0		
4	A	C	F	8/1/01	35	8/5/01	4	8/1/01	20025A4
5	A	C	M	8/2/01	36	8/2/01	0		
6	A	C	F	8/2/01	36	8/7/01	5	8/2/01	20025E3
7	A	C	F	8/3/01	37	8/7/01	4	8/4/01	20025H6
8	A	C	F	8/12/01	46	8/16/01	4	8/12/01	20025G10
9	L	N							

Proportion Emerged: 0.67 Average Days To Emergence 33.8 Average Days to Mortality 3.1

000055

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020025 Sample Name: D03412 IPSD-TT1301-06 Method: 100.5SGR

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/31/01	34	8/4/01	4		
2	A	C	F	8/3/01	37	8/9/01	6	8/3/01	20025H2
3	A	C	M	8/7/01	41	8/12/01	5		
4	A	C	F	8/8/01	42	8/11/01	3	8/8/01	20025A8
5	A	C	F	8/16/01	50	8/21/01	5	8/18/01	20025H8
6	A	C	F	8/16/01	50	8/20/01	4	8/18/01	20025N
7	A	C	F	8/16/01	50	8/20/01	4	8/18/01	20025N
8	L	N							

Proportion Emerged: 0.58 Average Days To Emergence 43.4 Average Days to Mortality 4.4

Replicate: E

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/23/01	26	7/31/01	8		
2	A	C	M	7/28/01	31	8/3/01	6		
3	A	C	M	8/2/01	36	8/7/01	5		
4	A	C	F	8/8/01	42	8/11/01	3	8/8/01	20025F8
5	A	C	F	8/10/01	44	8/15/01	5	8/10/01	20025F8
6	A	C	M	8/13/01	47	8/17/01	4		
7	A	C	F	8/17/01	51	8/22/01	5	8/17/01	20025N
8	A	C	M	8/19/01	53	8/24/01	5		
9	A	C	F	8/20/01	54	8/23/01	3	8/20/01	20025E8
10	A	C	M	8/26/01	60	8/31/01	5		

Proportion Emerged: 0.83 Average Days To Emergence 44.4 Average Days to Mortality 4.9

Replicate: F

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	7/26/01	4		
2	A	C	M	7/23/01	26	7/29/01	6		
3	A	C	F	7/24/01	27	7/30/01	6	7/24/01	20025F2
4	A	C	M	7/27/01	30	8/1/01	5		
5	A	C	F	7/30/01	33	8/4/01	5	7/30/01	20025G3
6	A	C	F	8/1/01	35	8/3/01	2	8/1/01	20025O
7	A	C	M	8/5/01	39	8/10/01	5		
8	A	C	M	8/6/01	40	8/12/01	6		

Proportion Emerged: 0.67 Average Days To Emergence 31.9 Average Days to Mortality 4.9

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020025 Sample Name: D03412 IPSD-TT1301-06 Method: 100.5SGR

Replicate: G

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/22/01	25	7/26/01	4	7/22/01	20025F1
2	A	C	M	7/27/01	30	8/2/01	6		
3	A	C	M	7/30/01	33	8/2/01	3		
4	A	C	F	7/31/01	34	8/5/01	5	7/31/01	20025B2
5	A	C	F	8/1/01	35	8/7/01	6	8/1/01	20025D1
6	A	C	M	8/5/01	39	8/10/01	5		
7	A	C	F	8/6/01	40	8/13/01	7	8/6/01	20025G6
8	A	C	F	8/10/01	44	8/11/01	1		
9	A	C	M	8/12/01	46	8/12/01	0		
10	A	C	M	8/12/01	46	8/17/01	5		

Proportion Emerged: 0.83 Average Days To Emergence 37.2 Average Days to Mortality 4.2

Replicate: H

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/23/01	26	7/30/01	7		
2	A	C	M	7/30/01	33	8/6/01	7		
3	A	C	F	8/1/01	35	8/6/01	5	8/1/01	20025H4
4	A	C	M	8/1/01	35	8/4/01	3		
5	A	C	F	8/2/01	36	8/4/01	2	8/2/01	20025D1
6	A	C	M	8/4/01	38	8/7/01	3		
7	A	C	F	8/6/01	40	8/10/01	4	8/6/01	20025F7
8	A	C	M	8/14/01	48	8/20/01	6		

Proportion Emerged: 0.67 Average Days To Emergence 36.4 Average Days to Mortality 4.6

000057

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020026 Sample Name: D03417 IPSD-TT3001-06 Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/21/01	24	7/29/01	8		
2	A	C	F	7/27/01	30	8/1/01	5	7/27/01	20026E2
3	A	C	F	7/28/01	31	7/31/01	3	7/28/01,7/31/01	20026N,20026A5
4	A	C	F	7/28/01	31	8/3/01	6	7/28/01	20026N
5	A	C	M	7/30/01	33	8/4/01	5		
6	A	C	F	7/31/01	34	8/6/01	6	7/31/01	20026G3
7	A	C	F	8/1/01	35	8/7/01	6	8/1/01	20026E11
8	A	C	F	8/1/01	35	8/7/01	6	8/1/01	20026E11
9	A	C	F	8/7/01	41	8/11/01	4		

Proportion Emerged: 0.75 Average Days To Emergence 32.7 Average Days to Mortality 5.4

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/25/01	5		
2	A	C	F	7/21/01	24	7/23/01	2	7/21/01	20026A1
3	A	C	F	7/23/01	26	7/27/01	4	7/23/01	20026B1

Proportion Emerged: 0.25 Average Days To Emergence 24.3 Average Days to Mortality 3.7

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
0									
1	A	C	M	7/21/01	24	7/25/01	4		
2	A	C	F	7/22/01	25	7/27/01	5	7/22/01	20026G1
3	A	C	M	7/24/01	27	7/30/01	6		
4	A	C	M	7/25/01	28	7/31/01	6		
5	A	C	M	7/26/01	29	8/1/01	6		
6	A	C	F	7/28/01	31	8/3/01	6	7/28/01,8/1/01,8/2/01	20026H6,20026G3,20026E8
7	A	C	F	7/31/01	34	8/4/01	4	7/31/01,8/2/01	20026M,20026E9
8	A	C	F	7/31/01	34	8/6/01	6	7/31/01,8/2/01	20026M,20026E9
9	A	C	F	8/1/01	35	8/7/01	6	8/1/01	20026E9

Proportion Emerged: 0.75 Average Days To Emergence 29.7 Average Days to Mortality 5.4

000058

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020026 Sample Name: D03417 IPSD-TT3001-06 Method: 100.5SGR

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/20/01	23	7/26/01	6		

Proportion Emerged: 0.08 Average Days To Emergence 23.0 Average Days to Mortality 6.0

Replicate: E

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/23/01	26	7/23/01	0		
2	A	C	M	7/27/01	30	8/1/01	5		
3	A	C	F	7/29/01	32	8/1/01	3	7/29/01	20026E2
4	A	C	F	7/30/01	33	8/6/01	7	7/30/01	20026G3
5	A	C	F	7/31/01	34	8/4/01	4	7/31/01	20026E6
6	A	C	M	7/31/01	34	8/7/01	7		
7	A	C	F	8/1/01	35	8/3/01	2	8/1/01	20026E8
8	A	C	M	8/1/01	35	8/3/01	2		
9	A	C	M	8/1/01	35	8/6/01	5		
10	A	C	F	8/2/01	36	8/7/01	5	8/2/01	20026E6
11	A	C	M	8/3/01	37	8/7/01	4		
12	A	C	M	8/4/01	38	8/7/01	3		

Proportion Emerged: 1.00 Average Days To Emergence 33.8 Average Days to Mortality 3.9

Replicate: F

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/19/01	22	7/23/01	4		
2	A	C	F	7/21/01	24	7/25/01	4	7/21/01	20026C1
3	A	C	M	7/24/01	27	7/30/01	6		
4	A	C	F	7/26/01	29	7/28/01	2	7/26/01	20026C5
5	A	C	F	7/27/01	30	8/3/01	7	7/27/01	20026G3

Proportion Emerged: 0.42 Average Days To Emergence 26.4 Average Days to Mortality 4.6

000059

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020026 Sample Name: D03417 IPSD-TT3001-06 Method: 100.5SGR

Replicate: G

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	7/27/01	5		
2	A	C	F	7/25/01	28	8/2/01	8	7/25/01	20026C4
3	A	C	M	7/27/01	30	8/2/01	6		
4	A	C	F	7/29/01	32	8/3/01	5	7/29/01	20026C5
5	A	C	F	7/29/01	32	8/5/01	7	7/29/01	20026C5
6	A	C	F	7/30/01	33	8/6/01	7	7/30/01	20026A5
7	A	C	F	8/1/01	35	8/7/01	6	8/4/01	20026E12
8	A	C	F	8/2/01	36	8/2/01	0		

Proportion Emerged: 0.67 Average Days To Emergence 31.4 Average Days to Mortality 5.5

Replicate: H

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/23/01	26	7/30/01	7	7/23/01,7/26/01	20026D1,20026C3
2	A	C	M	7/24/01	27	7/30/01	6		
3	A	C	M	7/24/01	27	7/31/01	7		
4	A	C	F	7/26/01	29	8/3/01	8	7/26/01	20026H2
5	A	C	F	7/26/01	29	8/3/01	8	7/26/01	20026H3
6	A	C	M	7/28/01	31	8/1/01	4		
7	A	C	F	8/1/01	35	8/7/01	6	8/3/01	20026E11
8	A	C	F	8/2/01	36	8/7/01	5	8/5/01	20026E12
9	A	C	F	8/5/01	39	8/10/01	5	8/5/01	20026H10
10	A	C	M	8/5/01	39	8/7/01	2		
11	A	C	M	8/11/01	45	8/18/01	7		

Proportion Emerged: 0.92 Average Days To Emergence 33.0 Average Days to Mortality 5.9

Emergence Detail Report

Tetra Tech NUS Inc
55 Jonspin Road

Wilmington, MA 01887-1062

Date: 10/4/01
Project: 01032
SDG 5286
Site: N0564-0322

Sample ID: 020038 Sample Name: Control Method: 100.5SGR

Replicate: A

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/21/01	24	7/22/01	1		
2	A	C	M	7/23/01	26	7/23/01	0		
3	A	C	M	7/23/01	26	7/25/01	2		
4	A	C	F	8/4/01	38	8/9/01	5	8/4/01	20038D4

Proportion Emerged: 0.33 Average Days To Emergence 28.5 Average Days to Mortality 2.0

Replicate: B

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	L	N							
2	A	C	M	7/19/01	22	7/21/01	2		
3	A	C	M	7/19/01	22	7/23/01	4		

Proportion Emerged: 0.17 Average Days To Emergence 22.0 Average Days to Mortality 3.0

Replicate: C

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	F	7/29/01	32	8/2/01	4	7/29/01	20038M,20038N

Proportion Emerged: 0.08 Average Days To Emergence 32.0 Average Days to Mortality 4.0

Replicate: D

Larvae Number	Life Stage	Emergence Status	Sex:	Date Emerged	Days to Emergence	Date Died	Days To Mortality	Date(s) Paired	Male Pairing
1	A	C	M	7/22/01	25	7/22/01	0		
2	A	C	M	7/28/01	31	7/29/01	1		
3	A	C	M	7/30/01	33	8/2/01	3		
4	A	C	M	8/2/01	36	8/8/01	6		
5	A	C	M	8/2/01	36	8/2/01	0		
6	A	C	F	8/5/01	39	8/5/01	0		

Proportion Emerged: 0.50 Average Days To Emergence 33.3 Average Days to Mortality 1.7