APPENDIX F

WESTSIDE BASIN

APPENDIX F: WESTSIDE BASIN

F1: 541STC019 – Orestimba Creek @ River Road

Station Code: 541STC019

Location: Latitude 37.41389, Longitude -121.01417

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/26/2000	1:50 PM	15.2	562	7.8		
11/30/2000	10:20 AM	9.4	583	8.0		
12/28/2000	9:36 AM	5.6	637	8.0		
1/25/2001	10:15 AM	8.2	838	8.4		
2/7/2001	10:41 AM	8.4	769	7.3		
2/22/2001	11:20 AM	11.4	769	8.0		
3/13/2001	11:55 AM	16.4	703	7.9		
3/29/2001	12:50 PM	19.5	848	8.4		
4/18/2001	11:38 AM	17.9	921	7.9		
4/26/2001	12:15 PM	22.6	667	8.0		
5/15/2001	12:13 PM	20.0	607	7.4		
5/31/2001	9:50 AM	23.7	864	7.7		
6/6/2001	9:45 AM	19.8	848	7.4	7.3	
6/13/2001	10:25 AM	19.8	702	8.2	8.3	
6/28/2001	11:24 AM	21.7	720	8.1	7.8	
7/26/2001	10:38 AM	23.3	707	8.0	9.2	
8/2/2001	12:17 PM	22.6	750	7.9	8.2	
8/9/2001	11:03 AM	23.6	775	8.0	7.9	
8/14/2001	11:32 AM	20.1	902	8.1	9.4	
8/16/2001	12:16 PM	22.2	908	8.0	8.9	
8/23/2001	11:29 AM	21.3	895	8.0	9.6	
8/30/2001	12:13 PM	22.0	953	8.1	8.0	
9/6/2001	11:22 AM	20.0	1030	7.9	8.0	
9/13/2001	12:44 PM	19.8	1190	8.4	11.5	
9/20/2001	9:06 AM	18.9	1250	8.0	7.7	
9/27/2001	9:33 AM	18.5	827	7.9	8.0	
10/4/2001	10:13 AM	18.7	946	8.0	9.0	
10/11/2001	11:35 AM	17.3	653	8.0	9.4	
10/18/2001	11:23 AM	18.6	716	8.0	9.1	
10/25/2001	12:46 PM	15.1	692	8.0	10.5	
11/1/2001	12:05 PM	16.2	718	8.1	9.3	
11/8/2001	12:52 PM	13.3	792	8.3	11.1	
11/15/2001	10:27 AM	15.3	659	8.2	9.9	
11/20/2001	10:03 AM	14.2	638	8.0	9.9	
11/29/2001	10:50 AM	12.2	655	7.6	NA	
12/6/2001	11:30 AM	9.9	660	7.9	12.1	
12/13/2001	11:04 AM	8.1	808	7.6	11.5	

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
12/20/2001	9:18 AM	7.9	703	8.1	11.9	
12/27/2001	11:23 AM	9.7	749	8.0	12.0	
1/3/2002	11:54 AM	12.7	578	8.0	11.1	
1/10/2002	11:27 AM	11.0	591	8.2	12.0	
1/17/2002	11:06 AM	5.4	581	7.9	13.3	
1/24/2002	10:58 AM	5.0	634	8.2	6.0	
1/31/2002	9:53 AM	3.6	860	8.6	13.9	
2/7/2002	10:39 AM	9.9	644	8.2	12.5	
2/14/2002	11:13 AM	10.8	748	8.3	11.8	
2/21/2002	9:45 AM	12.6	669	8.3	11.0	
2/28/2002	11:47 AM	13.6	748	8.3	11.1	
3/7/2002	10:10 AM	13.4	717	8.2	10.2	
3/14/2002	12:01 PM	11.6	738	8.0	12.3	
3/21/2002	12:01 PM	14.8	894	8.4	12.3	
3/28/2002	2:17 PM	17.6	805	8.1	12.1	
4/4/2002	10:37 AM	16.7	997	8.3	9.0	
4/11/2002	12:47 PM	17.6	849	7.5	9.9	
4/18/2002	9:52 AM	12.0	1020	8.3	10.8	
4/25/2002	9:32 AM	15.9	710	8.0	9.2	
5/2/2002	9:57 AM	16.1	743	7.8	10.2	
5/9/2002	INA	INA	INA	INA	INA	
5/16/2002	11:20 AM	20.5	696	7.4	NA	NA
5/23/2002	8:50 AM	15.2	845	7.4	NA	
5/30/2002	12:29 PM	24.3	767	7.6	7.0	
6/6/2002	10:12 AM	22.6	750	8.2	6.6	
6/13/2002	9:54 AM	21.2	815	7.8	NA	
6/20/2002	10:02 AM	22.0	753	7.3	NA	
6/27/2002	11:30 AM	22.6	614	7.9	7.9	
7/3/2002	8:50 AM	22.3	699	8.3	NA	
7/11/2002	11:03 AM	25.8	572	7.8	NA	
7/18/2002	11:30 AM	22.4	583	7.9	8.3	490
7/25/2002	10:08 AM	20.9	732	7.9	8.0	
8/1/2002	11:15 AM	22.1	800	8.1	8.0	
8/8/2002	11:29 AM	20.2	763	8.0	9.9	
8/15/2002	10:37 AM	22.9	772	8.0	8.3	
8/22/2002	10:28 AM	19.6	808	8.0	8.8	
8/29/2002	10:11 AM	20.9	799	8.0	NA	
9/5/2002	10:11 AM	19.1	848	8.0	8.7	
9/12/2002	10:29 AM	19.1	913	7.9	9.2	
9/19/2002	10:26 AM	20.2	928	8.0	8.3	NA
9/26/2002	10:13 AM	19.5	899	8.0	9.1	

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/3/2002	10:38 AM	12.8	873	7.9	11.9	
10/10/2002	10:01 AM	17.2	828	8.1	9.1	
10/17/2002	10:27 AM	15.1	742	8.5	10.2	154
10/24/2002	9:12 AM	15.1	909	7.8	9.5	
10/31/2002	11:23 AM	12.7	750	8.0	9.3	113
11/7/2002	10:57 AM	13.6	671	8.0	10.4	
11/14/2002	11:11 AM	13.1	571	7.7	10.4	
11/21/2002	10:38 AM	12.3	516	7.9	10.3	67.6
11/26/2002	10:29 AM	9.4	801	8.0	10.9	
12/5/2002	10:15 AM	DRY	DRY	DRY	DRY	DRY
12/12/2002	10:05 AM	DRY	DRY	DRY	DRY	
12/19/2002	10:29 AM	7.8	361	7.7	12.6	49.4
12/24/2002	9:26 AM	6.8	363	7.8	12.9	
1/2/2003	10:18 AM	8.3	360	8.2	16.2	
1/9/2003	11:18 AM	DRY	DRY	DRY	DRY	
1/16/2003	12:00 PM	DRY	DRY	DRY	DRY	DRY
1/23/2003	DRY	DRY	DRY	DRY	DRY	
1/30/2003	11:41 AM	11.5	515	7.5	11.7	251
2/6/2003	9:06 AM	8.1	627	8.1	11.8	
2/13/2003	10:13 AM	11.2	876	8.0	11.0	70.6
2/20/2003	9:27 AM	9.3	891	8.3	12.5	24.6
2/27/2003	10:17 AM	13.1	717	8.1	10.3	
3/6/2003	1:06 PM	14.3	547	8.3	14.1	NA
3/13/2003	11:35 AM	17.0	879	8.5	13.4	42.3
3/20/2003	10:49 AM	15.1	1120	8.1	10.6	68.8
3/27/2003	10:50 AM	14.6	909	8.0	10.6	86.3
4/3/2003	11:04 AM	13.3	1000	7.8	10.6	44.5
4/10/2003	11:30 AM	17.1	761	8.7	10.2	113
4/17/2003	11:28 AM	15.9	953	7.9	9.5	236
4/24/2003	11:35 AM	16.4	791	8.1	9.0	189
5/1/2003	11:04 AM	16.2	700	8.0	10.5	NA
5/8/2003	10:32 AM	15.7	663	7.6	10.2	190
5/15/2003	10:35 AM	18.3	675	8.1	10.3	
5/22/2003	12:22 PM	22.6	660	8.0	8.8	216
5/29/2003	10:53 AM	23.5	748	7.9	8.0	
6/5/2003	12:20 PM	24.0	840	8.1	8.4	198
6/12/2003	11:15 AM	20.9	8	8.0	7.8	166
6/19/2003	12:07 PM	21.2	619	8.0	6.3	362
6/26/2003	11:14 AM	22.7	751	8.1	8.5	146
7/3/2003	10:53 AM	20.9	591	8.1	9.4	

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
7/10/2003	10:44 AM	22.8	421	7.9	7.9	
7/17/2003	10:59 AM	23.4	642	8.0	8.1	
7/24/2003	11:03 AM	24.9	448	7.9	8.0	810
7/31/2003	11:35 AM	23.8	684	7.9	8.1	280
8/7/2003	10:55 AM	21.3	482	8.1	8.9	405
8/14/2003	10:37 AM	21.5	500	7.9	8.6	
8/21/2003	10:29 AM	22.5	532	8.0	8.1	360
8/28/2003	11:02 AM	20.8	567	7.9	8.9	230
9/4/2003	10:22 AM	22.3	936	8.1	7.7	116
9/11/2003	1:22 PM	21.1	773	8.1	9.8	113
9/18/2003	11:15 AM	17.3	714	8.1	9.7	164
9/25/2003	11:59 AM	18.9	753	8.3	10.1	53.7
10/2/2003	11:21 AM	17.6	615	8.1	10.0	101
10/9/2003	11:09 AM	20.2	556	8.0	9.0	295
10/16/2003	10:14 AM	15.6	591	7.9	10.8	73.7
10/23/2003	12:20 PM	19.2	602	7.9	9.3	177
10/30/2003	10:24 AM	15.8	622	7.9	10.2	91.8
11/6/2003	11:25 AM	13.4	575	8.2	11.2	85.6
11/13/2003	9:46 AM	11.9	619	8.0	10.4	49.7
11/20/2003	11:05 AM	DRY	DRY	DRY	DRY	DRY
11/26/2003	9:48 AM	5.2	1200	8.0	11.3	14.1
12/4/2003	10:28 AM	DRY	DRY	DRY	DRY	DRY
12/11/2003	9:56 AM	9.6	1290	8.0	12.0	NA
12/18/2003	11:00 AM	DRY	DRY	DRY	DRY	DRY
12/23/2003	10:30 AM	DRY	DRY	DRY	DRY	DRY
12/30/2003	11:12 AM	7.5	499	7.9	12.7	NA
1/8/2004	9:45 AM	9.3	763	7.9	8.8	NA
1/15/2004	11:02 AM	9.3	651	8.1	11.5	NA
1/22/2004	10:30 AM	7.6	653	8.1	17.2	80.7
1/29/2004	11:23 AM	9.9	542	8.1	10.5	NA
2/5/2004	10:13 AM	8.0	630	8.0	15.3	32.7
2/12/2004	10:27 AM	9.1	679	8.0	13.5	NA
2/19/2004	10:02 AM	12.2	699	7.8	10.3	NA
2/26/2004	10:59 AM	11.0	287	7.3	10.7	NA
3/4/2004	10:15 AM	12.1	752	8.1	10.6	112
3/11/2004	11:11 AM	15.6	634	8.0	9.7	NA
3/18/2004	9:33 AM	17.4	729	7.9	10.5	
3/24/2004	11:58 AM	17.8	717	8.0	9.0	NA
4/1/2004	10:36 AM	13.2	824	8.0	10.2	

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
4/8/2004	11:04 AM	15.1	683	8.1	9.5	270
4/15/2004	11:17 AM	16.1	845	8.3	11.2	285
4/22/2004	11:05 AM	13.9	764	8.0	10.9	329
4/29/2004	11:56 AM	16.7	711	8.0	9.1	147
5/6/2004	11:48 AM	19.1	821	7.9	12.2	244
5/13/2004	11:55 AM	18.0	830	8.1	16.3	216
5/20/2004	11:07 AM	18.1	815	7.8	9.1	250
5/27/2004	12:04 PM	20.5	746	8.0	8.3	309
6/3/2004	11:35 AM	20.3	978	8.1	8.5	256
6/10/2004	11:33 AM	19.5	716	8.2	9.8	262
6/17/2004	11:54 AM	22.7	572	8.1	8.8	402
6/24/2004	11:57 AM	21.2	815	8.0	10.3	NA
7/1/2004	10:56 AM	21.6	740	8.0	10.1	NA
7/8/2004	10:54 AM	23.3	726	7.7	7.7	NA
7/15/2004	11:41 AM	21.9	661	8.2	9.7	NA
7/22/2004	9:53 AM	23.9	717	7.9	9.2	NA
7/29/2004	11:10 AM	22.9	653	8.0	9.2	NA
8/5/2004	10:17 AM	21.6	828	8.1	8.4	NA
8/12/2004	11:00 AM	23.4	800	8.2	9.0	NA
8/19/2004	9:40 AM	22.1	682	8.1	NA	NA
8/26/2004	11:54 AM	20.7	869	7.9	8.2	NA
9/2/2004	10:39 AM	20.7	957	7.9	8.7	NA
9/9/2004	8:59 AM	20.7	933	8.0	8.0	NA
9/16/2004	9:40 AM	19.2	1050	7.8	7.6	NA
9/23/2004	1:50 PM	21.3	869	7.9	9.5	NA
9/30/2004	11:03 AM	17.1	663	7.8	8.9	NA
10/28/2004	11:39 AM	12.9	573	8.2	10.6	
11/3/2004	11:35 AM	12.8	568	8.0	10.5	
11/17/2004	10:31 AM	12.6	521	7.8	9.5	
12/8/2004	9:23 AM	9.3	667	8.0	12.0	
12/21/2004	9:07 AM	7.7	759	8.1	12.8	
1/5/2005	9:42 AM	8.2	374	8.2	12.0	
1/19/2005	9:23 AM	8.4	820	8.0	11.6	
2/2/2005	10:09 AM	10.4	748	8.0	10.6	
2/16/2005	9:50 AM	12.0	290	8.0	9.5	
3/9/2005	9:53 AM	16.4	675	8.3	10.1	
3/22/2005	10:48 AM	14.9	704	8.2	10.0	
4/6/2005	9:33 AM	16.6	380	8.0	9.5	
4/20/2005	11:01 AM	16.1	742	8.9	8.9	
4/21/2005	11:10 AM	17.2	785	8.0	9.7	
5/4/2005	10:05 AM	19.1	741	8.1	8.5	

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
5/18/2005	9:31 AM	18.3	602	8.0	8.8	
6/8/2005	11:51 AM	19.2	461	8.0	9.3	
6/22/2005	10:14 AM	19.9	516	8.0	8.2	
7/6/2005	9:32 AM	23.0	513	7.9	7.7	
7/20/2005	9:11 AM	24.9	572	7.9	6.7	
8/3/2005	9:47 AM	22.9	626	7.9	8.5	
8/17/2005	9:08 AM	22.8	582	7.7	7.1	
9/7/2005	10:03 AM	19.5	769	7.8	8.2	
9/21/2005	10:18 AM	19.2	812	7.6	8.9	
Count		197	197	197	176	52
Min		3.6	8	7.3	6.0	14.1
Max		25.8	1290	8.9	17.2	810
Mean		16.6	723	8.0	9.9	190
Geo Mean		15.6	692	8.0	9.8	143
Median		17.3	720	8.0	9.7	165
Quartile 1		12.7	627	7.9	8.7	84.4
Quartile 3		20.9	820	8.1	10.8	258

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
10/26/2000	120	2.6		
11/30/2000	19	1.1		
12/28/2000	36	1.8		
1/25/2001	36	3.6		
2/22/2001	NA	2.1		
3/29/2001	73	<1		
4/26/2001		3.0		
5/31/2001	130	11		
6/28/2001	360	9.5		
7/26/2001		6.9		
8/30/2001	190	10		
9/27/2001	68	14		
10/25/2001		7.5		
11/29/2001		NA		
12/27/2001	41			
1/31/2002		NA		
2/17/2002	48			
2/17/2002	38			
2/18/2002	49			
2/18/2002	46			
2/28/2002		6.3		
3/7/2002	170			
3/7/2002	130			
3/8/2002	115			
3/8/2002	79			
3/9/2002	10			
3/9/2002	10			
3/11/2002	84			
3/11/2002	53			
3/28/2002		4.8		
4/25/2002		NA		
5/30/2002		5.7		
6/20/2002		2.5		
8/1/2002			>2419.6	613
9/26/2002		NA		
10/17/2002			>2419.6	488
10/31/2002		2.7		
11/21/2002		2.5		
12/19/2002		8.0		
1/16/2003			NA	NA
3/27/2003		1.9		

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
4/24/2003		4.5	>2419.6	517
5/29/2003		4.5		
6/26/2003		3.4		
7/31/2003			>2419.6	980
8/28/2003			>2419.6	1203
9/25/2003			>2419.6	411
10/30/2003			>2419.6	93
11/20/2003			DRY	DRY
1/29/2004			>2419.6	93
2/26/2004			>2419.6	2420
3/24/2004			>2419.6	185
4/29/2004			>2419.6	579
5/27/2004			>2419.6	921
6/24/2004			>2419.6	613
7/29/2004			>2419.6	387
8/26/2004			>2419.6	921
9/30/2004			>2419.6	613
10/28/2004		4.5	>2419.6	124
11/3/2004			>2419.6	113
11/17/2004	NA	5.8	>2419.6	88
12/8/2004			>2419.6	194
12/21/2004	39	4.6	>2419.6	328
1/5/2005			>2419.6	387
1/19/2005	63	5.0	>2419.6	96
2/2/2005			>2419.6	1986
2/16/2005	780	NA	1011	1011
3/9/2005			1553	40
3/22/2005	150	5.6	>2419.6	365
4/6/2005			>2419.6	96
4/20/2005	280	5.7	>2419.6	118
5/4/2005			>2419.6	980
5/18/2005	250	4.2	>2419.6	1046
6/8/2005			>2419.6	649

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
6/22/2005	190	NA	>2419.6	866
7/6/2005			>2419.6	649
7/20/2005	450	2.6	>2419.6	1120
8/3/2005			>2419.6	387
8/17/2005	140	5.1	>2419.6	2420
9/7/2005			>2419.6	179
9/21/2005	28	NA	>2419.6	1203
Count	32	33	39	39
Min	10	0.5	1011	40
Max	780	14	2420	2420
Mean	134	5.0	NA	NA
Geo Mean	81	4.1	2340	418
Median	76	4.5	2420	517
Quartile 1	41	2.6	2420	182
Quartile 3	155	5.8	2420	951

NOTE: For values reported as < (less than), half the detection limit was used
For values reported as > (greater than), 2420 was used

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	Nitrate (mg/L)	Nitrate-N (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Phosphorus (mg/L)	Ortho-phosphate-P (mg/L)	Potassium (mg/L)	BOD 5-Day (mg/L)	BOD 10-Day (mg/L)
10/26/2000	4.3		<2		NA	<1	5.2	1.2	1.8
11/30/2000	NA		<2		0.1	NA	NA	0.6	1
12/28/2000	5.2		<2		<0.1	<1	5.7	0.5	0.9
1/25/2001	7.1		<2		<0.1	<1	6.3	0.9	1.7
2/22/2001	11		<2		0.1	<1	6.8	0.9	2.1
3/29/2001	8.2		<2		0.2	<1	7.8	2.3	4
4/26/2001	9.2		<2	<1	0.4	<1	6	1.9	2.8
5/31/2001	19		<1.0		0.3	NA	9.4	4	6.5
6/28/2001	16		<2		0.4	<1	7.3	1.1	1.7
8/30/2001	20		<2		0.4	<1	7.9		
9/27/2001	11		<2		0.2	<1	9.2		
10/25/2001								0.8	1.6
11/29/2001	NA		NA		NA	0.1	6.6	1.3	2
12/27/2001								1	2.5
1/31/2002								1.2	1.7
2/28/2002								1.3	2.1
4/25/2002								2.2	3.6
5/30/2002								4	6.2
6/20/2002								1.1	1.8
8/29/2002								3	8.4
9/26/2002								1.6	2.6
10/31/2002								1	1.5
11/21/2002								1.7	3.2
12/19/2002								1.3	1.7
1/30/2003								2.7	4.3

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	Nitrate (mg/L)	Nitrate-N (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Phosphorus (mg/L)	Ortho-phosphate-P (mg/L)	Potassium (mg/L)	BOD 5-Day (mg/L)	BOD 10-Day (mg/L)
Count	10	NA	11	1	10	10	11	23	23
Min	4.3	NA	0.5	0.5	0.1	0.1	5.2	0.5	0.9
Max	20.0	NA	1.0	0.5	0.4	0.5	9.4	4.0	8.4
Mean	11.1	NA	1.0	0.5	0.2	0.5	7.1	1.6	2.9
Geo Mean	9.9	NA	0.9	0.5	0.2	0.4	7.0	1.4	2.4
Median	10.1	NA	1.0	0.5	0.2	0.5	6.8	1.3	2.1
Quartile 1	7.4	NA	1.0	0.5	0.1	0.5	6.2	1.0	1.7
Quartile 3	14.8	NA	1.0	0.5	0.4	0.5	7.9	2.1	3.4

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	Hardness (mg/L)	Total Arsenic (ug/L)	Total Cadmium (ug/L)	Total Chromium (ug/L)	Total Copper (ug/L)	Total Lead (ug/L)	Total Nickel (ug/L)	Total Zinc (ug/L)	Total Mercury (ug/L)
10/26/2000	130			7	6.4	<5	11.0	12	
11/30/2000	140			2.7	2.5	<5	<5	8.6	
12/28/2000	140			3.4	4.3	<5	6.6	6.4	
1/25/2001	170			3	4.3	<5	<5	4.4	
2/22/2001	180			2.8	6.1	<5	6.8	9.2	
3/29/2001	220			8.2	6.7	<5	14.0	11	
4/26/2001	180			12	10	<5	16.0	19	
5/31/2001	300			10	9.1	<5	14.0	14	
6/28/2001	290	NA	<1	21	18	6.5	25.0	42	<0.2
7/26/2001		NA	NA	21	16	6.1	28.0	37	NA
8/30/2001	280	4.1	<1	15	11	<5	18.0	21	
9/27/2001	220	<4	<1	1.1	3.2	<5	<5	<2	<0.2
10/25/2001	150	<4	<0.1	4.7	5.4	<5	7.9	8.5	<0.2
11/29/2001	140	<4	<0.1	4.2	3.8	<5	<5	6.7	<0.2
12/27/2001		<4	<0.1	6.7	6.9	<5	9.3	11	<0.2
1/31/2002		<4.0	<0.1	3.7	NA	<5.0	<5.0	<2.0	<0.2
2/28/2002		<4.0	<0.1	5	6.9	<5.0	7.6	7.2	<0.2
3/28/2002		<4.0	<0.1	4.4	5	<5.0	8.0	6.3	<0.2
4/25/2002		<4.0	<0.1	<1.0	4.1	<5.0	<5.0	<2.0	<0.2
5/30/2002		5	<0.1	49	31	12	91.0	65	<0.2
6/20/2002	290	<4.0	<0.1	17	13	<5.0	21.0	23	<0.2
9/26/2002	250	4.4	<0.1	13	NA	<5.0	18.0	20	<0.2
10/31/2002	160	<4.0	<0.1	6	6.3	<5.0	7.3	8.9	<0.2
11/21/2002	200	<4.0	<0.1	6.3	6.5	<5.0	9.2	9.1	<0.2
3/27/2003	310	<4.0	NA	5.9	3.7	<5.0	<5.0	3.0	<0.2
4/24/2003	240	<4.0	<0.1	NA	NA	NA	25.0	22	<0.2
5/29/2003	270	<4.0	0.2	22	16	5.7	28.0	29	<0.2
6/26/2003	290	<4.0	<0.1	11	7.4	<5.0	12.0	13	<0.2

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	Hardness (mg/L)	Total Arsenic (ug/L)	Total Cadmium (ug/L)	Total Chromium (ug/L)	Total Copper (ug/L)	Total Lead (ug/L)	Total Nickel (ug/L)	Total Zinc (ug/L)	Total Mercury (ug/L)
Count	21	18	18	27	25	27	28	28	18
Min	130.0	2.0	0.1	0.5	2.5	2.5	2.5	1.0	0.1
Max	310.0	5.0	0.5	49.0	31.0	12.0	91.0	65.0	0.1
Mean	216.7	2.4	0.1	9.9	8.5	3.3	14.3	15.0	0.1
Geo Mean	207.8	2.3	0.1	6.6	7.1	2.9	9.2	9.7	0.1
Median	220.0	2.0	0.1	6.3	6.5	2.5	9.3	10.1	0.1
Quartile 1	160.0	2.0	0.1	4.0	4.3	2.5	5.6	6.6	0.1
Quartile 3	280.0	2.0	0.1	12.5	10.0	2.5	18.0	20.3	0.1

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	Hardness (mg/L)	Dissolved Arsenic (ug/L)	Dissolved Cadmium (ug/L)	Dissolved Chromium (ug/L)	Dissolved Copper (ug/L)	Dissolved Lead (ug/L)	Dissolved Nickel (ug/L)	Dissolved Zinc (ug/L)	Dissolved Mercury (ug/L)
10/26/2000	130			<1	2.1	<5	<5	2.3	
11/30/2000	140			<1	1.6	<5	<5	<2	
12/28/2000	140			<1	1.1	<5	<5	<2	
1/25/2001	170			<1	1.6	<5	<5	<2	
2/22/2001	180			<1	2.8	<5	<5	<2	
3/29/2001	220			<1	3.4	<5	<5	<2	
4/26/2001	180			<1	1.8	<5	<5	<2	
5/31/2001	300			3.1	3	<5	<5	<2	
6/28/2001	290	NA	<1	2.9	<1	<5	<5	<2	<0.2
7/26/2001		NA	NA	NA	NA	NA	NA	NA	NA
8/30/2001	280	2.2	<1	4.2	4.9	<5	<5	16	
9/27/2001	220	<4	<1	1.3	2.3	<5	<5	<2	<0.2
10/25/2001	150	<4	<0.1	<1	1.9	<5	<5	<2	<0.2
11/29/2001	140	<4	<0.1	<1	3	<5	<5	4.5	<0.2
12/27/2001		<4	<0.1	<1	2.1	<5	<5	3.4	<0.2
1/31/2002		<4.0	<0.1	2.6	NA	<5.0	<5.0	<2.0	<0.2
2/28/2002		<4.0	<0.1	<1.0	3.1	<5.0	<5.0	4.7	<0.2
3/28/2002		<4.0	<0.1	1.5	2.9	<5.0	<5.0	3.7	<0.2
4/25/2002		4.1	<0.1	2.6	3	<5.0	<5.0	NA	<0.2
5/30/2002		<4.0	<0.1	1.6	4	<5.0	53	<2.0	<0.2
6/20/2002	290	<4.0	<0.1	2.3	1.9	<5.0	<5.0	<2.0	<0.2
9/26/2002	250	<4.0	<0.1	1.2	3.2	<5.0	<5.0	<2.0	<0.2
10/31/2002	160	<4.0	<0.1	1.3	2.3	<5.0	<5.0	<2.0	<0.2
11/21/2002	200	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	Hardness (mg/L)	Dissolved Arsenic (ug/L)	Dissolved Cadmium (ug/L)	Dissolved Chromium (ug/L)	Dissolved Copper (ug/L)	Dissolved Lead (ug/L)	Dissolved Nickel (ug/L)	Dissolved Zinc (ug/L)	Dissolved Mercury (ug/L)
Count	17	14	15	23	22	23	23	22	14
Min	130.0	2.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Max	300.0	4.1	0.5	4.2	4.9	2.5	53.0	16.0	0.1
Mean	202.4	2.2	0.1	1.3	2.4	2.5	4.7	2.3	0.1
Geo Mean	194.4	2.1	0.1	1.0	2.1	2.5	2.9	1.5	0.1
Median	180.0	2.0	0.1	0.5	2.3	2.5	2.5	1.0	0.1
Quartile 1	150.0	2.0	0.1	0.5	1.8	2.5	2.5	1.0	0.1
Quartile 3	250.0	2.0	0.1	2.0	3.0	2.5	2.5	2.0	0.1

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F1: 541STC019 – Orestimba Creek @ River Road continued…

Date	Chloride (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	TDS (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Total Alkalinity (mg/L)	Sodium (mg/L)
10/26/2000	77	54	24	16	320	<1	110	90	60
11/30/2000	75	53	28	17	350	<1	110	90	59
12/28/2000	97	57	27	17	330	<1	110	90	71
1/25/2001	120	97	33	21	430	<1	130	110	94
2/22/2001	96	100	36	20	440	<1	120	97	87
3/29/2001	86	130	46	26	520	<1	150	120	86
4/26/2001		89	37	22	410	<1	110	110	62
5/31/2001	74	120	64	34	550	<1	170	170	64
6/28/2001	60	150	60	35	420	<1	190	160	56
8/30/2001	110	91	56	34	550	<1	210	170	85
9/27/2001	NA	74	42	28	500	<1	NA	NA	89
10/25/2001	120	46	27	19	380	<1	120	NA	79
11/29/2001	100	59	27	18	380	<1	110	94	75
3/27/2003	91	120	66	35					
4/24/2003	90	110	50	27					
5/29/2003	70	110	56	31					
6/26/2003	53	120	63	33					
Count	15	17	17	17	13	13	12	11	13
Min	53	46	24	16	320	0.5	110	90	56
Max	120	150	66	35	550	0.5	210	170	94
Mean	88	93	44	25	430	0.5	140	120	74
Geo Mean	86	88	41	25	420	0.5	130	120	73
Median	90	97	42	26	420	0.5	120	110	75
Quartile 1	75	59	28	19	380	0.5	110	92	62
Quartile 3	99	120	56	33	500	0.5	160	140	86

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F1: 541STC019 – Orestimba Creek @ River Road continued…

	96h Acute Fathead Minnow (% Survival)		48h Acute Ceriodaphnia Dubia (% Survival)		Algae Cell Growth		
Date	Result	Control	Result	Control	Result (million/ml)	Control (million/ml)	MDD (%)
10/26/2000	100	100	NA	NA			
6/18/2001	100	100	100	90			
11/17/2004	100	100	100	100			
12/21/2004	100	100	100	100			
1/19/2005	100	100	100	100			
2/16/2005	100	100	100	100			
3/22/2005	95	100	100	100			
4/2/2005	100	97.5	100	100			
5/18/2005	97.5	97.5	0*	100			
6/22/2005	97.5	100	100	100			
7/20/2005	100	100	100	100			
8/17/2005	100	97.5	100	100			
9/21/2005	100	100	100	100			
Count	13	13	12	12	N/A	N/A	N/A

* Significantly reduced from the lab control.
** Significantly greater than the lab control.
^ Fish were from a "forced hatch," duplicate failed QA.
[1] Duplicate sample for the set was low - 77% recovery.
[2] Testing for the Fathead minnow was initiated when samples were approx. 48h old due to untimely shipping of fish by fish supplier.
[3] Samples qualified, but duplicate sample recovery for the set was high - 126% (53.8%/42.5%)
NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F2: 541STC515 – Salado Creek at HWY 33

Station Code: 541STC515

Location: Latitude 37.48139, Longitude -121.13556

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/24/2000	2:35 PM	20.0	622	7.7		
11/29/2000	10:30 AM	8.8	1140	6.6		
12/27/2000	10:20 AM	5.1	1420	7.4		
1/24/2001	10:00 AM	10.5	787	7.7		
2/21/2001	10:50 AM	14.0	787	7.8		
3/28/2001	12:25 PM	20.8	969	8.2		
4/25/2001	10:10 AM	21.6	1010	8.0		
5/30/2001	11:45 AM	23.5	843	7.7		
6/27/2001	11:08 AM	20.9	971	8.1	10.0	
7/25/2001	11:27 AM	23.6	922	8.2	8.5	
8/29/2001	12:21 PM	25.3	699	8.0	8.4	
9/26/2001	10:43 AM	19.1	1020	8.2	9.5	
10/24/2001	11:46 AM	13.4	1250	8.4	12.9	
11/28/2001	10:30 AM	11.6	830	8.1	11.1	
12/26/2001	10:45 AM	11.7	832	8.5	12.1	
1/30/2002	10:53 AM	7.9	1040	8.3	13.1	
2/27/2002	10:15 AM	14.8	1460	8.1	11.4	
3/27/2002	10:03 AM	13.0	570	7.7	10.2	
4/30/2002	10:47 AM	15.8	841	8.3	11.8	
5/29/2002	10:25 AM	21.7	898	8.0	8.4	
6/19/2002	10:12 AM	20.8	543	7.8	7.7	
7/30/2002	10:35 AM	22.3	824	8.3	8.4	43.5
8/28/2002	11:00 AM	25.2	762	8.6	NA	
9/25/2002	11:33 AM	21.7	674	8.3	9.1	
10/15/2002	10:05 AM	16.4	811	7.9	9.4	NA
10/30/2002	10:23 AM	14.7	714	7.4	10.1	
11/20/2002	10:18 AM	15.1	1030	8.2	11.5	
12/18/2002	9:55 AM	9.7	1250	8.1	11.1	1990
1/14/2003	12:28 PM	13.0	1450	8.2	11.1	111
1/29/2003	10:37 AM	11.3	1320	8.8	14.3	19.1
3/25/2003	9:40 AM	15.0	741	8.2	11.5	19.2
4/24/2003	1:19 PM	15.9	454	8.3	10.4	248
5/29/2003	12:20 PM	25.4	759	8.1	8.7	33.6
6/26/2003	11:51 AM	24.5	359	8.4	8.8	27.4
7/31/2003	12:35 PM	INA	INA	INA	INA	INA
8/28/2003	12:42 PM	22.7	684	8.3	10.6	630
9/25/2003	12:40 PM	21.2	732	8.5	9.3	695
10/30/2003	12:32 PM	18.8	1180	8.4	9.1	200
11/20/2003	12:41 PM	15.3	1450	8.6	14.9	14.4

F2: 541STC515 – Salado Creek at HWY 33 continued…

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
1/29/2004	12:20 PM	12.5	996	8.4	14.4	24.6
2/26/2004	11:53 AM	11.4	648	8.2	11.4	NA
3/24/2004	12:15 PM	18.6	498	9.0	9.6	NA
4/29/2004	12:43 PM	17.3	622	8.3	10.3	32
5/27/2004	12:41 PM	23.5	994	8.7	9.5	66.4
6/24/2004	1:11 PM	26.0	736	8.4	10.5	NA
7/29/2004	11:57 AM	23.8	496	8.7	9.6	
8/26/2004	12:46 PM	23.3	1020	8.7	9.1	
9/30/2004	12:00 PM	19.5	1220	8.3	9.5	
10/28/2004	12:28 PM	17.1	1800	8.0	9.4	
11/3/2004	11:58 AM	16.7	527	8.2	6.0	
11/17/2004	11:11 AM	16.7	1440	8.4	11.3	
12/8/2004	9:47 AM	12.4	315	8.2	11.6	
12/21/2004	9:34 AM	13.7	1020	8.4	11.6	
1/5/2005	10:03 AM	8.9	1930	8.1	10.7	
1/19/2005	9:48 AM	9.0	1320	8.2	10.9	
2/2/2005	11:02 AM	10.5	3860	8.3	10.8	
2/16/2005	10:18 AM	12.0	398	7.9	9.5	
3/9/2005	10:11 AM	14.1	4160	8.3	11.8	
3/22/2005	11:19 AM	14.3	778	8.2	10.2	
4/6/2005	10:18 AM	15.2	1070	8.2	10.7	
4/20/2005	12:00 PM	17.7	874	8.2	8.7	
5/4/2005	10:46 AM	18.8	734	8.4	9.5	
5/18/2005	11:41 AM	17.4	907	8.3	10.8	
6/8/2005	12:45 PM	20.5	557	8.7	10.1	
6/22/2005	11:40 AM	22.1	798	8.3	8.7	
7/6/2005	10:25 AM	23.0	434	7.9	8.1	
7/20/2005	10:19 AM	23.4	493	7.9	7.2	
8/3/2005	10:40 AM	23.4	607	8.3	8.7	
8/17/2005	10:00 AM	23.4	533	8.4	8.8	
9/7/2005	10:43 AM	20.7	725	8.4	8.8	
9/21/2005	11:25 AM	21.1	123	8.2	10.9	
Count		70.0	70	70.0	61.0	15
Min		5.1	123	6.6	6.0	14.4
Max		26.0	4160	9.0	14.9	1990
Mean		17.4	961	8.2	10.2	277
Geo Mean		16.6	838	8.2	10.1	82.2
Median		17.4	827	8.2	10.1	43.5
Quartile 1		13.5	655	8.1	9.1	26.0
Quartile 3		21.7	1040	8.4	11.1	224

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F2: 541STC515 – Salado Creek at HWY 33 continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
10/24/2000	83	3.2		
11/29/2000	NA	<1		
12/27/2000	<6	4.1		
1/24/2001	7	20		
2/21/2001	6	NA		
3/28/2001	210	NA		
4/25/2001	37	3.8		
5/30/2001	94	6.3		
6/27/2001	11	7.1		
7/25/2001		4.7		
8/29/2001	NA	6.2		
9/26/2001	NA	11		
11/28/2001		NA		
12/26/2001		6.0		
3/27/2002		NA		
4/30/2002		NA		
5/29/2002		3.8		
6/19/2002		NA		
7/30/2002			>2419.6	74
9/25/2002		NA		
10/15/2002			>2419.6	172
10/30/2002		2.6		
11/20/2002		1.9		
12/18/2002	3200			
1/14/2003			>2419.6	816
3/25/2003		3.4		
4/24/2003		NA	>2419.6	1414
5/29/2003		5.8		
6/26/2003		3.1		
7/31/2003			INA	INA
8/28/2003			>2419.6	70
9/25/2003			>2419.6	>2419.6
10/30/2003			>2419.6	>2419.6
11/20/2003			>2419.6	59
1/29/2004			>2419.6	276
2/26/2004			>2419.6	>2419.6
3/24/2004			>2419.6	157
4/29/2004			>2419.6	58
5/27/2004			>2419.6	140
6/24/2004			>2419.6	249
7/29/2004	NA	NA	>2419.6	411
8/26/2004	NA	NA	>2419.6	488

F2: 541STC515 – Salado Creek at HWY 33 continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
9/30/2004	NA	NA	>2419.6	84
10/28/2004	NA	4.1	145	2
11/3/2004	500	30	>2419.6	>2419.6
11/17/2004	NA	2.2	2420	62
12/8/2004	97	12	>2419.6	>2419.6
12/21/2004	5	1.0	1120	20
1/5/2005	7	9.3	>2419.6	770
1/19/2005	3	1.5	411	13
2/2/2005	28	9.5	>2419.6	548
2/16/2005	1500	NA	>2419.6	>2419.6
3/9/2005	2	11	>2419.6	416
3/22/2005	100	7.6	>2419.6	>2419.6
4/6/2005	10	3.1	>2419.6	579
4/20/2005	41	6.6	>2419.6	162
5/4/2005	76	4.4	>2419.6	104
5/18/2005	5	3.6	>2419.6	162
6/8/2005	14	NA	>2419.6	105
6/22/2005	37	NA	>2419.6	140
7/6/2005	67	5.2	>2419.6	387
7/20/2005	35	4.0	>2419.6	387
8/3/2005	77	3.5	>2419.6	548
8/17/2005	42	3.3	>2419.6	613
9/7/2005	100	3.1	>2419.6	687
9/21/2005	36	NA	>2419.6	1203
Count	30	36	40	40
Min	2	0.5	145	2
Max	3200	30	2420	2420
Mean	214	6.1	NA	NA
Geo Mean	35	4.5	2117	288
Median	37	4.1	2420	387
Quartile 1	8	3.2	2420	105
Quartile 3	91	6.7	2420	782

NOTE: For values reported as < (less than), half the detection limit was used
For values reported as > (greater than), 2420 was used

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F2: 541STC515 – Salado Creek at HWY 33 continued…

Date	Nitrate (mg/L)	Nitrate-N (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Phosphorus (mg/L)	Ortho-phosphate-P (mg/L)	Potassium (mg/L)	BOD 5-Day (mg/L)	BOD 10-Day (mg/L)
10/24/2000	6.9		<2		0.2	<1	6.6	0.8	1.3
11/29/2000	23		NA		0.4	<1	9	1.3	2.2
12/27/2000	9.9		<2		0.1	<1	10	1.8	2.9
1/24/2001	6.8		2.1		0.2	<1	7.9	8.2	14.9
2/21/2001	2.9		<2		0.2	<1	6.1	1.5	2.9
3/28/2001	7.9		<2		0.3	<1	7.9	2.2	3.5
4/25/2001	15		<2		0.1	<1	6.8	1.7	3.5
5/30/2001	11		<2		0.2	<1	5	1.9	3.1
6/27/2001	17		<2		0.1	<1	4.8	0.9	1.1
8/29/2001	4.6		<2		0.4	<1	NA		
9/26/2001	19		<2		0.4	<1	11		
10/24/2001	9.1		<2		0.2	<1	12	1.7	3.1
11/28/2001	NA		1.4		NA	0.2	12	1.2	1.8
12/26/2001								2	2.8
1/30/2002	NA		1.3		0.1	0.1	7.3	1	1.6
2/27/2002	NA		0.6		0.2	0.2	NA	0.3	1.3
3/27/2002	NA		0.8		NA	0.1	3.9	1.1	2.2
4/30/2002	NA		NA		0.1	0.1	NA	0.5	0.9
5/29/2002	NA		0.8		NA	0.1	5.3	1.9	3
6/19/2002	NA		1		0.2	NA	4.5	4.4	6.8
8/28/2002	NA		1		0.1	0.1	4.8	0.2	0.6
9/25/2002	NA		NA		0.1	0.1	5.8	1.5	2.6
10/30/2002	NA		NA		<0.05	0.1	3.3	1	1.3
11/20/2002	NA		1		0.1	0.1	3.9		
12/18/2002	NA		2.4		0.2	0.1	6.5	8.3	14
1/29/2003	NA		NA		0.1	0.1	6.9	1.1	2.2

F2: 541STC515 – Salado Creek at HWY 33 continued…

Date	Nitrate (mg/L)	Nitrate-N (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Phosphorus (mg/L)	Ortho-phosphate-P (mg/L)	Potassium (mg/L)	BOD 5-Day (mg/L)	BOD 10-Day (mg/L)
Count	12	NA	20	NA	22	24	22	23	23
Min	2.9	NA	0.6	NA	0.03	0.1	3.3	0.2	0.6
Max	23.0	NA	2.4	NA	0.4	0.5	12.0	8.3	14.9
Mean	11.1	NA	1.1	NA	0.2	0.3	6.9	2.0	3.5
Geo Mean	9.5	NA	1.1	NA	0.2	0.2	6.4	1.4	2.5
Median	9.5	NA	1.0	NA	0.2	0.4	6.6	1.5	2.6
Quartile 1	6.9	NA	1.0	NA	0.1	0.1	4.9	1.0	1.5
Quartile 3	15.5	NA	1.0	NA	0.2	0.5	7.9	1.9	3.1

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F2: 541STC515 – Salado Creek at HWY 33 continued…

Date	Hardness (mg/L)	Total Arsenic (ug/L)	Total Cadmium (ug/L)	Total Chromium (ug/L)	Total Copper (ug/L)	Total Lead (ug/L)	Total Nickel (ug/L)	Total Zinc (ug/L)	Total Mercury (ug/L)
10/24/2000	150			5.5	9.8	<5	7.4	14	
11/29/2000	320			16	16	5.2	18	39	
12/27/2000	430			9.6	3.7	<5	<5	<2	
1/24/2001	170			13	16	<5	9.2	36	
2/21/2001	220			1.1	3.5	<5	<5	<2	
3/28/2001	230			9.7	13	<5	19	23	
4/25/2001	270			5.9	5.2	<5	5.5	4.8	
5/30/2001	200			6.2	5.2	<5	8.2	8.3	
7/25/2001	NA			17	17	<5	17	32	
8/29/2001		4.2	<1	12	20	5.3	18	29	
9/26/2001	290	6.4	0.1	29	45	12	41	70	<0.2
10/24/2001	390	<4.0	<0.1	NA	6	<5.0	<5.0	4.0	<0.2
11/28/2001	210	<4.0	<0.1	3.5	1.8	<5.0	<5.0	4.5	<0.2
12/26/2001	200	<4	<0.1	1.8	2.9	<5	<5	4.0	<0.2
1/30/2002	290	<4	<0.1	5.7	3.8	<5	<5	<2	<0.2
3/27/2002	140	<4.0	<0.1	1.3	5.5	<5.0	5.8	6.9	<0.2
4/30/2002	230	<4.0	<0.1	4.1	1.6	<5.0	<5.0	<2.0	<0.2
5/29/2002	240	<4.0	<0.1	4.3	NA	<5.0	5.8	2.6	<0.2
6/19/2002	160	<4.0	<0.1	5.9	9	<5.0	8.4	12	<0.2
9/25/2002	150	4.3	<0.1	13	NA	5.2	35	26	<0.2
10/30/2002	170	<4.0	<0.1	5.4	NA	<5.0	13	8.1	<0.2
11/20/2002	260	<4.0	<0.1	6.2	3.3	<5.0	NA	NA	<0.2
3/25/2003	180	<4.0	<0.1	1.3	14	<5.0	<5.0	7.5	<0.2
4/24/2003	120	<4.0	<0.1	24	15	<5.0	75	27	<0.2
5/29/2003	190	<4.0	<0.1	2.8	4.1	<5.0	5.8	2.2	<0.2
6/26/2003	93	<4.0	<0.1	1.9	3.1	<5.0	<5.0	3.6	NA

F2: 541STC515 – Salado Creek at HWY 33 continued…

Date	Hardness (mg/L)	Total Arsenic (ug/L)	Total Cadmium (ug/L)	Total Chromium (ug/L)	Total Copper (ug/L)	Total Lead (ug/L)	Total Nickel (ug/L)	Total Zinc (ug/L)	Total Mercury (ug/L)
Count	24	17	17	25	23	26	25	25	15
Min	93.0	2.0	0.1	1.1	1.6	2.5	2.5	1.0	0.1
Max	430.0	6.4	0.5	29.0	45.0	12.0	75.0	70.0	0.1
Mean	221.0	2.5	0.1	8.2	9.8	3.2	12.6	14.7	0.1
Geo Mean	207.7	2.3	0.1	5.7	6.8	2.9	7.2	7.4	0.1
Median	205.0	2.0	0.1	5.9	5.5	2.5	5.8	7.5	0.1
Quartile 1	167.5	2.0	0.1	3.5	3.6	2.5	2.5	3.6	0.1
Quartile 3	262.5	2.0	0.1	12.0	14.5	2.5	17.0	26.0	0.1

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F2: 541STC515 – Salado Creek at HWY 33 continued…

Date	Hardness (mg/L)	Dissolved Arsenic (ug/L)	Dissolved Cadmium (ug/L)	Dissolved Chromium (ug/L)	Dissolved Copper (ug/L)	Dissolved Lead (ug/L)	Dissolved Nickel (ug/L)	Dissolved Zinc (ug/L)	Dissolved Mercury (ug/L)
11/29/2000	320			2.8	1.1	<5	<5	<2	
12/27/2000	430			9.3	3.7	<5	<5	<2	
1/24/2001	170			7.1	8.3	<5	<5	3.3	
2/21/2001	220			<1	3.1	<5	<5	<2	
3/28/2001	230			<1	3.2	<5	<5	<2	
4/25/2001	270			4.1	2.4	<5	<5	<2	
5/30/2001	200			2.6	1.6	<5	<5	<2	
8/29/2001		2.1	<1	<1	2.2	<5	<5	7.1	
9/26/2001	290	<4	<0.1	3.7	2.9	<5	<5	<2	<0.2
10/24/2001	390	<4.0	<0.1	NA	5.6	<5.0	<5.0	<2.0	<0.2
11/28/2001	210	<4.0	<0.1	3.6	2.1	<5.0	<5.0	NA	<0.2
12/26/2001	200	<4	<0.1	1.7	2.6	<5	<5	6.1	<0.2
1/30/2002	290	<4	<0.1	3.9	2.0	<5	<5	<2	<0.2
3/27/2002	140	<4.0	<0.1	<1.0	4.1	<5.0	<5.0	5.1	<0.2
4/30/2002	230	<4.0	<0.1	3.7	<1.0	<5.0	<5.0	<2.0	<0.2
5/29/2002	240	<4.0	<0.1	2.7	1.5	<5.0	<5.0	<2.0	<0.2
6/19/2002	160	<4.0	<0.1	2.9	4.7	<5.0	<5.0	6.7	<0.2
9/25/2002	150	<4.0	<0.1	<1.0	NA	10	18	<2.0	<0.2
10/30/2002	170	<4.0	<0.1	1.2	2.9	<5.0	<5.0	<2.0	<0.2
11/20/2002	260	<4.0	<0.1	4.1	1.3	<5.0	<5.0	<2.0	<0.2
Count	19	13	13	19	19	20	20	19	12
Min	140.0	2.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Max	430.0	2.1	0.5	9.3	8.3	10.0	18.0	7.1	0.1
Mean	240.5	2.0	0.1	2.9	2.9	2.9	3.3	2.2	0.1
Geo Mean	229.6	2.0	0.1	2.0	2.5	2.7	2.8	1.6	0.1
Median	230.0	2.0	0.1	2.8	2.6	2.5	2.5	1.0	0.1
Quartile 1	185.0	2.0	0.1	0.9	1.8	2.5	2.5	1.0	0.1
Quartile 3	280.0	2.0	0.1	3.8	3.5	2.5	2.5	2.2	0.1

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F2: 541STC515 – Salado Creek at HWY 33 continued…

Date	Chloride (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	TDS (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Total Alkalinity (mg/L)	Sodium (mg/L)
10/24/2000	76	66	29	18	350	<1	120	90	63
11/29/2000	150	140	50	47	660	<1	200	160	120
12/27/2000	110	380	80	56	940	11	220	180	150
1/24/2001	94	120	35	19	450	<1	110	90	93
2/21/2001	66	160	36	31	490	<1	120	100	76
3/28/2001	110	130	47	28	510	<1	150	130	110
4/25/2001	110	NA	48	36	NA	<1	130	130	94
5/30/2001	91	120	32	29	NA	4	122	126	94
6/27/2001	110	160	38	32	580	<1	180	150	110
8/29/2001	110	NA	NA	NA	370	<1.0	110	99	80
9/26/2001	NA	NA	46	42	NA	<1	170	140	110
10/24/2001	150	250	73	51	870	<1	200	160	140
11/28/2001	110	120	41	27	500	<1	150	120	88
12/26/2001	100	130	39	25	490	24	140	120	87
1/30/2002	100	180	51	39	580	<1	200	160	120
2/27/2002	150	330	72	69	NA	<1.0	192	157	140
3/27/2002	67	70	30	16	330	<1.0	120	95	60
4/30/2002	130	130	39	32	NA	<1.0	110	90	81
5/29/2002	97	140	45	32	NA	<1.0	140	110	100
6/19/2002	66	71	28	22	NA	<1.0	110	88	52
9/25/2002	120	47	25	21	NA	<1.0	100	84	87
10/30/2002	110	67	28	24	410	<1.0	120	100	84
11/20/2002	97	82	43	37	620	<1.0	130	100	100
3/25/2003	88	110	37	21					
4/24/2003	32	50	22	15					
5/29/2003	96	110	37	23					
6/26/2003	40	40	19	11					

F2: 541STC515 – Salado Creek at HWY 33 continued…

Date	Chloride (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	TDS (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Total Alkalinity (mg/L)	Sodium (mg/L)
Count	26	24	26	26	15	23	23	23	23
Min	32	40	19	11	330	0.5	100	84	52
Max	150	380	80	69	940	24	220	180	150
Mean	99	130	41	31	543	2.1	150	120	97
Geo Mean	94	110	39	28	520	0.7	140	120	94
Median	100	120	39	29	500	0.5	130	120	94
Quartile 1	89	71	31	21	430	0.5	120	97	83
Quartile 3	110	150	47	37	600	0.5	180	150	110

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F2: 541STC515 – Salado Creek at HWY 33 continued…

	96h Acute Fathead Minnow (% Survival)		48h Acute Ceriodaphnia Dubia (% Survival)		Algae Cell Growth		
Date	Result	Control	Result	Control	Result (million/ml)	Control (million/ml)	MDD (%)
11/17/2004	100	100	100	100			
12/21/2004	95	100	100	100			
1/19/2005	100	100	100	100			
2/16/2005	100	100	100	100			
3/22/2005	95	100	100	100			
4/20/2005	100	97.5	100	100			
5/18/2005	97.5	97.5	100	100			
6/22/2005	100	100	100	100			
7/20/2005	100	100	100	100			
8/17/2005	97.5	97.5	100	100			
9/21/2005	100	100	100	100			
Count	11	11	11	11	N/A	N/A	N/A

* Significantly reduced from the lab control.
** Significantly greater than the lab control.
^ Fish were from a "forced hatch," duplicate failed QA.
[1] Duplicate sample for the set was low - 77% recovery.
[2] Testing for the Fathead minnow was initiated when samples were approx. 48h old due to untimely shipping of fish by fish supplier.
[3] Samples qualified, but duplicate sample recovery for the set was high - 126% (53.8%/42.5%)
NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F3: 541STC516 – Del Puerto Creek at Vineyard Avenue

Station Code: 541STC516

Location: Latitude 37.52139, Longitude -121.14861

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/24/2000	2:15 PM	20.6	594	8.0		
11/29/2000	10:11 AM	9.3	1100	7.6		
12/27/2000	10:30 AM	6.7	819	8.0		
1/24/2001	DRY	DRY	DRY	DRY		
2/7/2001	12:02 PM	8.5	637	8.1		
2/21/2001	11:28 AM	12.0	1030	8.2		
3/13/2001	12:18 PM	17.4	792	7.6		
3/28/2001	11:50 AM	21.5	1280	7.9		
4/18/2001	12:40 PM	21.3	956	8.3		
4/25/2001	9:54 AM	20.4	669	7.9		
5/15/2001	12:45 PM	23.8	572	7.9		
5/30/2001	11:30 AM	24.7	1190	7.2		
6/5/2001	9:23 AM	19.0	1350	8.1	8.1	
6/19/2001	10:22 AM	24.3	1350	7.9	8.5	
6/27/2001	10:45 AM	21.1	1130	7.8	8.0	
7/25/2001	11:02 AM	25.0	988	8.1	8.3	
8/14/2001	11:57 AM	21.7	1350	7.8	4.5	
8/29/2001	12:05 PM	23.8	1020	7.9	6.4	
9/26/2001	10:28 AM	18.0	690	7.3	7.3	
10/24/2001	11:22 AM	12.5	743	8.1	11.1	
11/28/2001	10:10 AM	DRY	DRY	DRY	DRY	
12/26/2001	10:35 AM	DRY	DRY	DRY	DRY	
1/30/2002	DRY	DRY	DRY	DRY	DRY	
2/27/2002	DRY	DRY	DRY	DRY	DRY	
3/27/2002	9:47 AM	13.2	1290	7.8	12.6	
4/30/2002	10:33 AM	18.0	1090	8.2	11.0	
5/29/2002	10:08 AM	21.8	1010	7.9	8.3	
6/19/2002	9:53 AM	20.5	1090	7.8	6.8	
7/30/2002	10:49 AM	21.9	771	8.2	7.1	16.8
8/28/2002	10:50 AM	23.8	907	7.8	NA	
9/25/2002	11:09 AM	20.9	1110	7.8	8.6	
10/15/2002	10:21 AM	14.8	1430	7.6	8.5	NA
10/30/2002	9:42 AM	12.0	801	7.6	10.9	
11/20/2002	DRY	DRY	DRY	DRY	DRY	
12/18/2002	9:38 AM	7.3	835	8.3	11.2	67.6
1/14/2003	DRY	DRY	DRY	DRY	DRY	DRY
1/29/2003	DRY	DRY	DRY	DRY	DRY	DRY
3/25/2003	9:29 AM	14.0	464	8.1	11.5	122
4/24/2003	1:38 PM	15.7	945	8.2	10.5	70.6

F3: 541STC516 – Del Puerto Creek at Vineyard Avenue continued…

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
5/29/2003	12:36 PM	26.2	1160	8.1	8.5	70.4
6/26/2003	12:06 PM	25.1	1070	8.5	9.1	106
7/31/2003	12:52 PM	25.6	727	7.6	5.2	54.6
8/28/2003	12:50 PM	DRY	DRY	DRY	DRY	DRY
9/25/2003	12:53 PM	21.7	743	8.4	9.3	88.0
10/30/2003	12:44 PM	14.4	605	8.7	12.0	9.8
11/20/2003	1:03 PM	15.7	1860	8.2	9.9	37.3
1/29/2004	12:29 PM	12.9	1570	8.6	14.8	5.7
2/26/2004	12:04 PM	11.0	459	8.4	11.3	NA
3/24/2004	12:29 PM	19.0	541	8.9	10.3	NA
4/29/2004	1:01 PM	21.3	962	8.3	9.9	89.0
5/27/2004	12:58 PM	25.9	1210	8.7	9.2	244
6/24/2004	1:23 PM	27.6	1160	8.0	6.9	NA
7/29/2004	12:07 PM	24.0	930	7.9	7.5	
8/26/2004	1:01 PM	25.4	1490	8.4	8.1	
9/30/2004	12:13 PM	21.3	1440	8.2	9.8	
10/28/2004	12:40 PM	12.2	576	8.7	12.0	
11/2/2004	8:29 AM	9.7	563	7.9	14.1	
11/16/2004	9:03 AM	13.4	421	7.7	9.2	
12/8/2004	8:57 AM	9.7	1030	7.4	6.6	
12/21/2004	7:59 AM	6.8	577	8.0	11.9	
1/4/2005	8:22 AM	8.0	760	8.5	11.2	
1/18/2005	8:28 AM	8.4	853	8.5	17.8	
2/1/2005	8:36 AM	DRY	DRY	DRY	DRY	
2/15/2005	8:10 AM	11.4	207	8.2	13.5	
3/8/2005	8:34 AM	12.3	780	8.5	11.5	
3/23/2005	8:52 AM	12.1	669	8.5	12.6	
4/5/2005	8:32 AM	13.5	356	8.4	10.6	
4/19/2005	8:52 AM	11.6	664	7.7	10.9	
5/3/2005	8:17 AM	16.8	557	7.9	10.0	
5/17/2005	8:49 AM	18.3	471	7.8	9.1	
6/8/2005	8:28 AM	18.2	378	7.7	8.3	
6/21/2005	9:13 AM	19.0	749	8.1	8.9	
7/6/2005	10:35 AM	22.6	917	7.8	7.7	
7/19/2005	9:16 AM	22.9	817	7.9	6.6	
8/2/2005	10:30 AM	23.6	436	7.8	6.8	
8/16/2005	10:50 AM	22.6	726	8.0	8.0	
9/6/2005	11:10 AM	21.7	376	7.9	9.1	
9/20/2005	10:49 AM	19.4	640	8.0	10.3	

F3: 541STC516 – Del Puerto Creek at Vineyard Avenue continued…

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
Count		68	68	68	56	13
Min		6.7	207	7.2	4.5	5.7
Max		27.6	1860	8.9	17.8	244
Mean		17.7	874	8.0	9.6	75.5
Geo Mean		16.7	808	8.0	9.3	51.0
Median		19.0	818	8.0	9.2	70.4
Quartile 1		12.5	629	7.8	8.1	37.3
Quartile 3		22.1	1090	8.2	11.1	89.0

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F3: 541STC516 – Del Puerto Creek at Vineyard Avenue continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
10/24/2000	38	3.7		
11/29/2000	NA	2.1		
12/27/2000	73	1.8		
2/21/2001	8	NA		
3/28/2001	9	NA		
4/25/2001	38	4.8		
5/30/2001	370	7.8		
6/27/2001	150	9.1		
7/25/2001		7.1		
8/29/2001	NA	19		
9/26/2001	NA	8.7		
3/27/2002		NA		
4/30/2002		NA		
5/29/2002		4.6		
6/19/2002		NA		
7/30/2002			>2419.6	548
9/25/2002		NA		
10/15/2002			>2419.6	>2419.6
10/30/2002		3.2		
12/18/2002		7.0		
1/14/2003			DRY	DRY
3/25/2003		3.0		
4/24/2003		NA	>2419.6	649
5/29/2003		7.3		
6/26/2003		5.2		
7/31/2003			>2419.6	>2419.6
8/28/2003			DRY	DRY
9/25/2003			>2419.6	158
10/30/2003			>2419.6	>2419.6
11/20/2003			>2419.6	>2419.6
1/29/2004			1300	93
2/26/2004			>2419.6	>2419.6
3/24/2004			>2419.6	1203
4/29/2004			>2419.6	>2419.6
5/27/2004			>2419.6	1733
6/24/2004			>2419.6	2420
7/29/2004	NA	NA	>2419.6	>2419.6
8/26/2004	NA	NA	>2419.6	194
9/30/2004	NA	NA	>2419.6	127
10/28/2004	NA	9.1	>2419.6	101
11/2/2004	22	5.4	>2419.6	1986
11/16/2004	40	4.8	>2419.6	1553

F3: 541STC516 – Del Puerto Creek at Vineyard Avenue continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
12/8/2004	55	12	>2419.6	276
12/21/2004	48	5.0	>2419.6	192
1/4/2005	20	6.2	>2419.6	649
1/18/2005	6	3.7	2420	387
2/1/2005	DRY	DRY	DRY	DRY
2/15/2005	660	5.2	>2419.6	>2419.6
3/8/2005	8	3.0	1986	921
3/23/2005	43	NA	>2419.6	>2419.6
4/5/2005	60	5.3	>2419.6	2420
4/19/2005	180	NA	>2419.6	>2419.6
5/3/2005	79	4.9	>2419.6	>2419.6
5/17/2005	77	NA	>2419.6	>2419.6
6/8/2005	NA	NA	>2419.6	649
6/21/2005	270	3.7	>2419.6	73
7/6/2005	43	5.0	>2419.6	>2419.6
7/19/2005	83	3.1	>2419.6	1203
8/2/2005	37	3.2	>2419.6	548
8/16/2005	90	2.7	>2419.6	727
9/6/2005	160	2.8	>2419.6	365
9/20/2005	26	3.5	>2419.6	105
Count	27	33	38	38
Min	6	1.8	1300	73
Max	660	19	2420	2420
Mean	100	5.5	NA	NA
Geo Mean	52	4.8	2368	819
Median	48	4.9	2420	1203
Quartile 1	32	3.2	2420	371
Quartile 3	86.5	7	2420	2420

NOTE: For values reported as < (less than), half the detection limit was used
For values reported as > (greater than), 2420 was used

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F3: 541STC516 – Del Puerto Creek at Vineyard Avenue continued…

Date	Nitrate (mg/L)	Nitrate-N (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Phosphorus (mg/L)	Ortho-phosphate-P (mg/L)	Potassium (mg/L)	BOD 5-Day (mg/L)	BOD 10-Day (mg/L)
10/24/2000	7.5		<2		0.2	<1	4.5	0.9	1.7
11/29/2000	12		NA		0.1	<1	5.8	0.7	0.9
12/27/2000	8.5		<2		0.2	<1	6.0	1.4	2.2
2/21/2001	<2		<2		<0.1	<1	4.1	0.9	1.4
3/28/2001	38		<2		<0.1	<1	5.7	1.1	1.5
4/25/2001	7.4		<2		0.3	<1	9.7	3.4	6.2
5/30/2001	20		2.4		0.5	<1	11	6.9	12.0
6/27/2001	73		<2		0.4	<1	8.5	3.2	8.1
8/29/2001	37		3.8		0.3	<1	NA		
9/26/2001	4.7		<2		0.2	<1	6.9		
10/24/2001	5.0		<2		0.1	<1	5.3	1.1	1.9
11/28/2001	NA		4.9		NA	3.5	16		
3/27/2002	NA		0.9		NA	0.1	5.6	2.2	3.6
4/30/2002	NA		NA		0.3	0.2	NA	1.5	2.5
5/29/2002	NA		1.4		NA	0.3	7.4	3.1	4.6
6/19/2002	NA		2.3		0.6	NA	6.1	6.2	11.5
8/28/2002	NA		16		0.3	0.2	5.7	1.9	8.2
9/25/2002	NA		NA		0.3	0.3	7.5	1.2	2.0
10/30/2002	NA		NA		0.2	0.1	2.8	0.9	1.5
12/18/2002	NA		0.7		0.1	0.1	2.6	0.9	1.3
Count	11	NA	16	NA	17	19	18	17	17
Min	1.0	NA	0.7	NA	0.1	0.1	2.6	0.7	0.9
Max	73.0	NA	16.0	NA	0.6	3.5	16.0	6.9	12.0
Mean	19.5	NA	2.5	NA	0.2	0.5	6.7	2.2	4.2
Geo Mean	11.0	NA	1.6	NA	0.2	0.4	6.1	1.7	3.0
Median	8.5	NA	1.0	NA	0.2	0.5	5.9	1.4	2.2
Quartile 1	6.2	NA	1.0	NA	0.1	0.3	5.4	0.9	1.5
Quartile 3	28.5	NA	2.3	NA	0.3	0.5	7.5	3.1	6.2

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F3: 541STC516 – Del Puerto Creek at Vineyard Avenue continued…

Date	Hardness (mg/L)	Total Arsenic (ug/L)	Total Cadmium (ug/L)	Total Chromium (ug/L)	Total Copper (ug/L)	Total Lead (ug/L)	Total Nickel (ug/L)	Total Zinc (ug/L)	Total Mercury (ug/L)
10/24/2000	62			2.9	3.5	<5	6.8	4.7	
11/29/2000	140			<1	1.1	<5	<5	<2	
12/27/2000	97			4.2	5.4	<5	9.0	9.1	
2/21/2001	160			1.3	2.8	<5	<5	<2	
3/28/2001	170			7.4	2.4	<5	<5	<2	
4/25/2001	NA			2.5	5.9	<5	7.2	4.7	
5/30/2001	180			24	22	<5	48	33	
7/25/2001				17	15	<5	37	60	
8/29/2001	NA	2.8	<1	6.2	6.6	<5	15	8.5	
9/26/2001	NA	<4	<0.1	1.4	2.5	<5	<5	2.5	<0.2
10/24/2001	91	<4.0	<0.1	NA	2.0	<5.0	<5.0	<2.0	<0.2
3/27/2002	220	<4.0	<0.1	3.5	6.2	<5.0	12	7.7	<0.2
4/30/2002	170	<4.0	<0.1	1.4	2.0	<5.0	<5.0	<2.0	<0.2
5/29/2002	130	<4.0	<0.1	6.5	NA	<5.0	15	<2.0	<0.2
6/19/2002	170	<4.0	<0.1	5.9	4.3	<5.0	6.1	<2.0	<0.2
9/25/2002	130	6.3	<0.1	2.9	NA	<5.0	8.0	5.2	<0.2
10/30/2002	99	<4.0	<0.1	2.4	NA	<5.0	6.4	2.6	<0.2
3/25/2003	55	<4.0	<0.1	6.0	6.8	<5.0	13	8.9	<0.2
4/24/2003	140	<4.0	<0.1	5.9	6.3	<5.0	13	8.6	<0.2
5/29/2003	170	<4.0	<0.1	5.7	6.4	<5.0	11	5.2	<0.2
6/26/2003	170	<4.0	<0.1	7.3	7.0	<5.0	15	10	NA
Count	17	13	13	20	18	21	21	21	11
Min	55.0	2.0	0.1	0.5	1.1	2.5	2.5	1.0	0.1
Max	220.0	6.3	0.5	24.0	22.0	2.5	48.0	60.0	0.1
Mean	138.5	2.4	0.1	5.7	6.0	2.5	11.3	8.5	0.1
Geo Mean	130.2	2.2	0.1	4.0	4.6	2.5	7.7	4.0	0.1
Median	140.0	2.0	0.1	5.0	5.7	2.5	8.0	4.7	0.1
Quartile 1	99.0	2.0	0.1	2.5	2.6	2.5	2.5	1.0	0.1
Quartile 3	170	2.0	0.1	6.3	6.6	2.5	13	8.6	0.1

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F3: 541STC516 – Del Puerto Creek at Vineyard Avenue continued…

Date	Hardness (mg/L)	Dissolved Arsenic (ug/L)	Dissolved Cadmium (ug/L)	Dissolved Chromium (ug/L)	Dissolved Copper (ug/L)	Dissolved Lead (ug/L)	Dissolved Nickel (ug/L)	Dissolved Zinc (ug/L)	Dissolved Mercury (ug/L)
11/29/2000	140			<1	<1	<5	<5	<2	
12/27/2000	97			<1	1.2	<5	<5	<2	
2/21/2001	160			<1	1.5	<5	<5	<2	
3/28/2001	170			6.7	2.3	<5	<5	<2	
4/25/2001	NA			<1	3.5	<5	<5	2.6	
5/30/2001	180			3.8	2.1	<5	<5	<2	
8/29/2001	NA	2.2	<1	1.0	2.0	<5	<5	4.2	
9/26/2001	NA	<4	<0.1	<1	2.4	<5	<5	4.4	<0.2
10/24/2001	91	<4.0	<0.1	NA	1.4	<5.0	<5.0	<2.0	<0.2
3/27/2002	220	<4.0	<0.1	<1.0	3.4	<5.0	<5.0	3.0	<0.2
4/30/2002	170	<4.0	<0.1	1.4	1.4	<5.0	<5.0	<2.0	<0.2
5/29/2002	130	<4.0	<0.1	<1.0	2.5	<5.0	<5.0	<2.0	<0.2
6/19/2002	170	<4.0	<0.1	2.6	2.0	<5.0	<5.0	<2.0	<0.2
9/25/2002	130	5.5	<0.1	<1.0	NA	<5.0	<5.0	<2.0	<0.2
10/30/2002	99	<4.0	<0.1	<1.0	2.1	<5.0	<5.0	<2.0	<0.2
Count	12	9	9	14	14	15	15	15	8
Min	91.0	2.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Max	220.0	5.5	0.5	6.7	3.5	2.5	2.5	4.4	0.1
Mean	146.4	2.4	0.1	1.4	2.0	2.5	2.5	1.7	0.1
Geo Mean	141.5	2.3	0.1	0.9	1.8	2.5	2.5	1.4	0.1
Median	150.0	2.0	0.1	0.5	2.1	2.5	2.5	1.0	0.1
Quartile 1	122.3	2.0	0.1	0.5	1.4	2.5	2.5	1.0	0.1
Quartile 3	170	2	0.05	1.3	2.4	2.5	2.5	1.8	0.1

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F3: 541STC516 – Del Puerto Creek at Vineyard Avenue continued…

Date	Chloride (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	TDS (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Total Alkalinity (mg/L)	Sodium (mg/L)
10/24/2000	71	140	26	18	340	<1	120	100	62
11/29/2000	150	250	47	32	650	2	170	140	130
12/27/2000	110	180	38	22	480	<1	150	120	93
2/21/2001	35	470	33	94	600	28	460	380	72
3/28/2001	150	360	53	56	710	2	210	170	120
4/25/2001	79	150	33	17	NA	<1	82	82	67
5/30/2001	140	340	51	51	NA	4	168	172	130
6/27/2001	120	320	59	42	670	<1	190	150	110
8/29/2001	140	NA	NA	NA	520	<1.0	150	130	100
9/26/2001	NA	170	22	28	NA	<1	120	98	91
10/24/2001	110	170	30	22	440	<1	130	100	91
3/27/2002	170	290	60	34	770	<1.0	180	150	160
4/30/2002	140	260	48	34	NA	<1.0	160	130	130
5/29/2002	120	260	48	33	NA	<1.0	170	140	120
6/19/2002	120	330	49	49	NA	<1.0	210	170	110
9/25/2002	160	230	45	28	NA	<1.0	170	140	150
10/30/2002	110	190	34	26	470	<1.0	140	110	90
3/25/2003	51	130	26	16					
4/24/2003	120	200	41	24					
5/29/2003	140	280	51	38					
6/26/2003	130	240	49	29					
Count	20	20	20	20	10	17	17	17	17
Min	35	130	22	16	340	0.5	82	82	62
Max	170	470	60	94	770	28	460	380	160
Mean	120	250	42	35	570	2.5	180	150	110
Geo Mean	110	230	41	31	550	0.8	160	140	100
Median	120	250	46	31	560	0.5	170	140	110
Quartile 1	110	180	33	24	470	0.5	140	110	91
Quartile 3	140	300	49.5	39	670	0.5	180	150	130

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F3: 541STC516 – Del Puerto Creek at Vineyard Avenue continued…

	96h Acute Fathead Minnow (% Survival)		48h Acute Ceriodaphnia Dubia (% Survival)		Algae Cell Growth		
Date	Result	Control	Result	Control	Result (million/ml)	Control (million/ml)	MDD (%)
10/24/2000	100	100	NA	NA			
2/21/2001	95	100	100	100			
3/28/2001	100	100	100	100			
4/25/2001	100	100	100	90			
5/30/2001	100	95	100	100			
6/19/2001	100	100	100	90			
6/27/2001	90	100	100	90			
Count	7	7	6	6	N/A	N/A	N/A

* Significantly reduced from the lab control.
** Significantly greater than the lab control.
^ Fish were from a "forced hatch," duplicate failed QA.
[1] Duplicate sample for the set was low - 77% recovery.
[2] Testing for the Fathead minnow was initiated when samples were approx. 48h old due to untimely shipping of fish by fish supplier.
[3] Samples qualified, but duplicate sample recovery for the set was high - 126% (53.8%/42.5%)
NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F4: 541STC040 – Ingram Creek at River Road

Station Code: 541STC040

Location: Latitude 37.60028, Longitude -121.22417

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/24/2000	1:25 PM	16.9	745	6.5		
11/29/2000	8:50 AM	11.9	1980	6.3		
12/27/2000	12:00 PM	11.1	1940	7.9		
1/24/2001	11:27 AM	13.4	2140	6.9		
2/21/2001	1:30 PM	16.3	1960	7.7		
3/28/2001	10:00 AM	18.7	1230	8.0		
4/25/2001	8:25 AM	16.5	908	7.7		
5/30/2001	9:40 AM	19.7	1000	7.5		
6/5/2001	9:04 AM	18.0	1220	8.1	8.4	
6/19/2001	9:55 AM	20.8	963	7.6	8.5	
6/27/2001	8:59 AM	20.1	951	7.9	8.9	
7/25/2001	9:39 AM	20.9	1060	7.9	8.6	
8/29/2001	9:21 AM	21.4	1350	7.9	7.9	
9/26/2001	9:02 AM	17.7	1370	7.9	9.3	
10/24/2001	9:45 AM	15.6	1370	7.9	9.5	
11/28/2001	9:18 AM	11.2	2050	8.0	10.3	
12/26/2001	9:37 AM	11.4	2070	8.0	10.4	
1/30/2002	9:24 AM	4.5	2190	8.1	13.2	
2/27/2002	8:48 AM	11.3	1040	7.9	10.2	
3/27/2002	8:35 AM	11.9	1020	8.3	11.2	
4/30/2002	9:32 AM	13.9	1090	7.8	10.6	
5/29/2002	8:53 AM	19.5	1110	7.9	9.4	
6/19/2002	12:19 PM	25.2	1300	8.1	7.6	
7/30/2002	11:09 AM	23.7	1070	8.0	8.0	840
8/28/2002	9:36 AM	21.1	1220	8.0	NA	
9/25/2002	9:41 AM	18.2	963	7.8	9.0	
10/15/2002	11:23 AM	16.3	1550	7.8	9.8	NA
10/30/2002	8:45 AM	13.5	771	7.2	10.1	
11/20/2002	8:39 AM	13.0	676	7.7	10.6	
12/18/2002	8:38 AM	10.6	1650	7.4	7.7	103
1/15/2003	10:33 AM	13.5	2110	8.0	9.6	57.6
1/29/2003	9:15 AM	11.9	2100	7.6	10.0	63.5
3/25/2003	8:34 AM	11.4	1390	7.6	10.7	139
4/22/2003	11:22 AM	16.9	868	8.0	9.7	475
5/27/2003	12:21 PM	22.4	1520	7.7	8.8	22.1
6/24/2003	8:43 AM	17.9	1030	8.3	10.8	1090
7/29/2003	10:06 AM	24.9	924	8.0	8.1	12.9
8/26/2003	11:31 AM	24.6	1030	8.0	7.7	1150
9/23/2003	11:15 AM	20.5	1430	7.8	9.5	274

F4: 541STC040 – Ingram Creek at River Road continued…

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/28/2003	1:07 PM	17.1	1100	8.1	13.0	3.6
11/18/2003	12:30 PM	16.0	1970	8.3	14.5	27.9
1/28/2004	10:30 AM	DRY	DRY	DRY	DRY	DRY
2/24/2004	11:20 AM	14.0	2130	8.0	9.5	24.0
3/24/2004	9:38 AM	13.4	2040	7.8	8.7	195
4/28/2004	9:42 AM	17.9	791	7.8	11.4	580
5/26/2004	11:35 AM	22.2	1460	8.0	8.3	1900
6/23/2004	10:28 AM	21.9	104	8.1	9.0	NA
7/28/2004	11:11 AM	24.6	1150	8.1	9.4	NA
8/25/2004	11:25 AM	23.0	912	8.0	8.2	NA
9/29/2004	11:16 AM	17.3	1350	7.8	7.7	NA
10/27/2004	10:56 AM	13.4	802	7.9	8.7	
11/2/2004	7:49 AM	13.5	823	7.8	12.9	
11/16/2004	8:30 AM	14.3	709	7.5	10.0	
12/8/2004	8:04 AM	12.2	1730	7.0	10.2	
12/21/2004	7:31 AM	9.7	1760	7.7	9.3	
1/4/2005	7:50 AM	11.5	1240	7.9	9.7	
1/18/2005	7:57 AM	12.9	1810	7.7	13.5	
2/1/2005	7:51 AM	10.9	1950	7.7	8.3	
2/15/2005	7:53 AM	14.0	101	7.5	10.4	
3/8/2005	7:59 AM	13.8	1970	7.8	9.6	
3/23/2005	8:00 AM	12.6	1240	8.1	9.7	
4/5/2005	8:03 AM	12.4	107	8.0	7.0	
4/19/2005	8:05 AM	9.2	531	7.0	11.2	
5/3/2005	7:45 AM	14.1	448	7.8	11.5	
5/17/2005	7:58 AM	14.7	483	7.8	10.0	
6/8/2005	8:12 AM	16.6	348	7.7	9.5	
6/21/2005	8:13 AM	17.9	794	7.4	9.2	
7/6/2005	10:18 AM	21.4	585	7.7	8.0	
7/19/2005	8:53 AM	22.2	712	7.8	7.8	
8/2/2005	10:11 AM	24.5	835	7.9	8.1	
8/16/2005	10:30 AM	22.8	789	7.9	8.7	
9/6/2005	10:47 AM	21.6	699	8.0	10.4	
9/20/2005	9:57 AM	18.9	695	7.6	12.5	
Count		72.0	72	72.0	63.0	17
Min		4.5	101	6.3	7.0	3.6
Max		25.2	2190	8.3	14.5	1900
Mean		16.5	1202	7.8	9.7	409
Geo Mean		15.8	1037	7.8	9.6	132
Median		16.4	1095	7.9	9.5	139
Quartile 1		13.0	800	7.7	8.6	27.9
Quartile 3		20.6	1575	8.0	10.4	580

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F4: 541STC040 – Ingram Creek at River Road continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
10/24/2000	1200	2.6		
11/29/2000	NA	<1		
12/27/2000	<6	<1		
1/24/2001	22	2.5		
2/21/2001	7	NA		
3/28/2001	180	NA		
4/25/2001	570	4.1		
5/30/2001	1000	9.8		
6/27/2001	1600	10		
7/25/2001		4.6		
8/29/2001	NA	13		
9/26/2001	NA	17		
11/28/2001		NA		
12/26/2001		4.4		
3/27/2002		NA		
4/30/2002		NA		
5/29/2002		3.2		
6/19/2002		NA		
7/30/2002			>2419.6	387
9/25/2002		NA		
10/15/2002			>2419.6	86
10/30/2002		2.8		
11/20/2002		2.4		
1/15/2003			>2419.6	38
3/25/2003		2.0		
4/22/2003		3.9	>2419.6	194
5/27/2003		NA		
6/24/2003		NA		
7/29/2003			>2419.6	687
8/26/2003			>2419.6	548
9/23/2003			>2419.6	173
10/28/2003			>2419.6	548
11/18/2003			>2419.6	81
1/28/2004			DRY	DRY
2/24/2004			1553	66
3/24/2004			>2419.6	>2419.6
4/28/2004			>2419.6	166
5/26/2004			>2419.6	326
6/23/2004	6200		>2419.6	158
7/28/2004			>2419.6	308
8/25/2004			>2419.6	691
9/29/2004			>2419.6	238
10/27/2004		8.4	>2419.6	39

F4: 541STC040 – Ingram Creek at River Road continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
11/2/2004			>2419.6	115
11/16/2004	14	4.8	>2419.6	210
12/8/2004			>2419.6	1300
12/21/2004	9	3.7	>2419.6	29
1/4/2005			>2419.6	435
1/18/2005	<1.0	3.6	1986	15
2/1/2005			>2419.6	9
2/15/2005	93	6.2	>2419.6	>2419.6
3/8/2005			>2419.6	135
3/23/2005	140	NA	1011	691
4/5/2005			>2419.6	194
4/19/2005	860	NA	>2419.6	119
5/3/2005			691	214
5/17/2005	1190	NA	>2419.6	613
6/8/2005			>2419.6	157
6/21/2005	1300	5.1	>2419.6	260
7/6/2005			>2419.6	1300
7/19/2005	960	3.5	>2419.6	161
8/2/2005	810		>2419.6	135
8/16/2005	1100	4.6	>2419.6	158
9/6/2005			>2419.6	276
9/20/2005	400	10	>2419.6	435
Count	21	25	40	40
Min	0.5	0.5	691	9
Max	6200	17	2420	2420
Mean	840	5.3	NA	NA
Geo Mean	180	4.0	2258	214
Median	570	4.1	2420	202
Quartile 1	22	2.8	2420	131
Quartile 3	1100	6.2	2420	463

NOTE: For values reported as < (less than), half the detection limit was used
For values reported as > (greater than), 2420 was used

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F4: 541STC040 – Ingram Creek at River Road continued…

Date	Nitrate (mg/L)	Nitrate-N (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Phosphorus (mg/L)	Ortho-phosphate-P (mg/L)	Potassium (mg/L)	BOD 5-Day (mg/L)	BOD 10-Day (mg/L)
10/24/2000	12		2.2		1	<1	13	1.8	2.9
11/29/2000	65		NA		<0.1	<1	2.9	0.3	0.4
12/27/2000	61		<2		<0.1	<1	3.1	0.6	0.7
1/24/2001	74		<2		<0.1	<1	3.1	0.6	0.8
2/21/2001	69		<2		<0.1	<1	2.7	0.6	1.2
3/28/2001	14		2.1		0.4	<1	9.1	4.8	7.7
4/25/2001	20		2.4		0.7	<1	12	3	4.9
5/30/2001	20		2.4		0.6	<1	14	4.4	7
6/27/2001	17		2.6		1.4	<1	15	2.4	4.2
8/29/2001	2.3		<2		0.5	<1	NA		
9/26/2001	25		<2		0.5	<1	11		
10/24/2001	37		<2		0.2	<1	4.3	0.6	1
11/28/2001	NA		1.9		NA	<0.03	4.8	0.2	0.3
12/26/2001	NA		0.1		<0.05	<0.03	1.3	0.4	0.7
1/30/2002	NA		3.3		<0.05	<0.03	2.5	0.2	0.3
2/27/2002	NA		1.1		0.1	<0.03	NA	1.7	3.3
3/27/2002	NA		1.8		NA	0.4	12	3.1	5.1
4/30/2002	NA		NA		0.3	0.2	NA	2.6	4.3
5/29/2002	NA		1.4		NA	0.2	6.1	2	3.1
6/19/2002	NA		5.8		0.5	NA	7.8	7.6	15.8
8/28/2002	NA		3.5		0.5	0.2	5.2	3.2	6.3
9/25/2002	NA		NA		0.2	0.2	6.2	1.7	3.2
10/30/2002	NA		NA		0.1	0.1	2.8	0.7	1
11/20/2002	NA		0.9		0.1	0.1	3.4		
12/18/2002	NA		4.2		0.5	0.3	8.5	7.4	10.5
1/29/2003	NA		NA		<0.05	<0.03	0.9	0.3	0.6

F4: 541STC040 – Ingram Creek at River Road continued…

Date	Nitrate (mg/L)	Nitrate-N (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Phosphorus (mg/L)	Ortho-phosphate-P (mg/L)	Potassium (mg/L)	BOD 5-Day (mg/L)	BOD 10-Day (mg/L)
Count	12	NA	21	NA	23	25	23	23	23
Min	2.3	NA	0.1	NA	0.03	0.02	0.9	0.2	0.3
Max	74.0	NA	5.8	NA	1.4	0.5	15.0	7.6	15.8
Mean	34.7	NA	2.0	NA	0.3	0.3	6.6	2.2	3.7
Geo Mean	24.6	NA	1.5	NA	0.2	0.2	5.1	1.3	2.1
Median	22.5	NA	1.8	NA	0.2	0.4	5.2	1.7	3.1
Quartile 1	16.3	NA	1.0	NA	0.1	0.1	3.0	0.6	0.8
Quartile 3	62.0	NA	2.4	NA	0.5	0.5	10.1	3.1	5.0

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F4: 541STC040 – Ingram Creek at River Road continued…

Date	Hardness (mg/L)	Total Arsenic (ug/L)	Total Cadmium (ug/L)	Total Chromium (ug/L)	Total Copper (ug/L)	Total Lead (ug/L)	Total Nickel (ug/L)	Total Zinc (ug/L)	Total Mercury (ug/L)
10/24/2000	260			61	47	18	90	110	
11/29/2000	520			15	<1	<5	5.9	<2	
12/27/2000	510			15	<1	<5	5.7	<2	
1/24/2001	580			18	1	<5	7.3	<2	
2/21/2001	520			18	<1	<5	6.4	<2	
3/28/2001	290			12	12	<5	17	22	
4/25/2001	270			38	34	12	62	73	
5/30/2001	310			48	38	16	79	85	
7/25/2001				38	31	13	64	73	
8/29/2001	NA	4.2	<1	18	13	5.2	26	26	
9/26/2001	360	<4	<0.1	10	13	<5	14	13	<0.2
10/24/2001	350	<4.0	<0.1	NA	1.2	<5.0	<5.0	<2.0	<0.2
11/28/2001	540	<4.0	<0.1	17	<1.0	<5.0	8.3	<2.0	<0.2
12/26/2001	560	4.3	<0.1	18	<1	<5	8.3	2.3	<0.2
1/30/2002	600	<4	<0.1	17	<1	<5	7	<2	<0.2
3/27/2002	260	7	<0.1	12	17	<5.0	21	24	<0.2
4/30/2002	290	<4.0	<0.1	9.5	2.5	<5.0	14	13	<0.2
5/29/2002	310	4.4	<0.1	33	NA	10	53	56	<0.2
6/19/2002	390	6.1	0.2	53	50	19	93	102	<0.2
9/25/2002	220	4.2	<0.1	7	NA	<5.0	10	9.4	<0.2
10/30/2002	190	<4.0	<0.1	3.6	NA	<5.0	<5.0	3.2	<0.2
11/20/2002	140	<4.0	<0.1	3.7	3.5	<5.0	NA	NA	<0.2
3/25/2003	380	<4.0	<0.1	14	5.9	<5.0	12	10	<0.2
4/22/2003	220	<4.0	<0.1	22	16	5.9	28	34	<0.2
5/27/2003	380	<4.0	<0.1	8.1	2.8	<5.0	53	<2.0	<0.2
6/24/2003	330	8	0.2	64	58	23	110	120	<0.2

F4: 541STC040 – Ingram Creek at River Road continued…

Date	Hardness (mg/L)	Total Arsenic (ug/L)	Total Cadmium (ug/L)	Total Chromium (ug/L)	Total Copper (ug/L)	Total Lead (ug/L)	Total Nickel (ug/L)	Total Zinc (ug/L)	Total Mercury (ug/L)
Count	24	17	17	25	23	26	25	25	16
Min	140.0	2.0	0.1	3.6	0.5	2.5	2.5	1.0	0.1
Max	600.0	8.0	0.5	64.0	58.0	23.0	110.0	120.0	0.1
Mean	365.8	3.4	0.1	22.9	15.2	6.3	32.0	31.4	0.1
Geo Mean	341.8	3.0	0.1	17.4	4.9	4.3	18.0	9.4	0.1
Median	340.0	2.0	0.1	17.0	5.9	2.5	14.0	13.0	0.1
Quartile 1	267.5	2.0	0.1	12.0	0.8	2.5	7.3	1.0	0.1
Quartile 3	512.5	4.3	0.1	33.0	24.0	9.0	53.0	56.0	0.1

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F4: 541STC040 – Ingram Creek at River Road continued…

Date	Hardness (mg/L)	Dissolved Arsenic (ug/L)	Dissolved Cadmium (ug/L)	Dissolved Chromium (ug/L)	Dissolved Copper (ug/L)	Dissolved Lead (ug/L)	Dissolved Nickel (ug/L)	Dissolved Zinc (ug/L)	Dissolved Mercury (ug/L)
11/29/2000	520			15	<1	<5	6.2	<2	
12/27/2000	510			15	<1	<5	5.3	<2	
1/24/2001	580			18	<1	<5	7.2	<2	
2/21/2001	520			18	<1	<5	6	<2	
3/28/2001	290			1.2	2.9	<5	<5	2.3	
4/25/2001	270			2.1	3.3	<5	<5	<2	
5/30/2001	310			2.2	3.7	<5	<5	<2	
8/29/2001	NA	2.9	<1	4.6	1.1	<5	<5	<2	
9/26/2001	360	<4	<0.1	3.7	7.2	<5	<5	3.3	<0.2
10/24/2001	350	<4.0	<0.1	NA	<1.0	<5.0	<5.0	<2.0	<0.2
11/28/2001	540	<4.0	<0.1	16	<1.0	<5.0	7.8	NA	<0.2
12/26/2001	560	<4	<0.1	17	<1	<5	7.5	2.4	<0.2
1/30/2002	600	<4	<0.1	11	<1	<5	<5	<2	<0.2
3/27/2002	260	5.2	<0.1	1.6	6.8	<5.0	<5.0	2.4	<0.2
4/30/2002	290	<4.0	<0.1	2.4	1.6	<5.0	<5.0	<2.0	<0.2
5/29/2002	310	<4.0	<0.1	3.6	1.6	<5.0	<5.0	<2.0	<0.2
6/19/2002	390	<4.0	<0.1	25	23	8.6	44	47	<0.2
9/25/2002	220	<4.0	<0.1	1.9	NA	<5.0	<5.0	<2.0	<0.2
10/30/2002	190	<4.0	<0.1	1.6	3.4	<5.0	6	<2.0	<0.2
11/20/2002	140	<4.0	<0.1	1.7	1.9	<5.0	<5.0	<2.0	<0.2
Count	19	13	13	19	19	20	20	19	12
Min	140.0	2.0	0.1	1.2	0.5	2.5	2.5	1.0	0.1
Max	600.0	5.2	0.5	25.0	23.0	8.6	44.0	47.0	0.1
Mean	379.5	2.3	0.1	8.5	3.2	2.8	6.0	3.8	0.1
Geo Mean	351.6	2.2	0.1	5.2	1.5	2.7	4.0	1.5	0.1
Median	350.0	2.0	0.1	3.7	1.6	2.5	2.5	1.0	0.1
Quartile 1	280.0	2.0	0.1	2.0	0.5	2.5	2.5	1.0	0.1
Quartile 3	520.0	2.0	0.1	15.5	3.4	2.5	6.1	1.7	0.1

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F4: 541STC040 – Ingram Creek at River Road continued…

Date	Chloride (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	TDS (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Total Alkalinity (mg/L)	Sodium (mg/L)
10/24/2000	85	87	43	36	460	<1	140	120	79
11/29/2000	260	270	120	52	1300	<1	300	240	220
12/27/2000	280	280	120	52	1200	5	280	230	220
1/24/2001	290	310	130	59	1300	<1	300	250	240
2/21/2001	290	290	120	56	1300	6	230	190	220
3/28/2001	160	190	57	37	710	<1	180	150	140
4/25/2001	100	NA	55	33	NA	<1	110	110	91
5/30/2001	120	140	57	40	NA	<1	120	120	110
6/27/2001	120	130	60	38	540	<1	160	130	100
8/29/2001	190	NA	NA	NA	1600	<1.0	220	180	160
9/26/2001	NA	NA	75	41	NA	<1	200	160	150
10/24/2001	180	180	78	38	840	<1	220	180	160
11/28/2001	280	290	130	55	1300	<1	310	250	230
12/26/2001	300	310	130	55	1400	<1	320	270	230
1/30/2002	300	310	150	57	1400	<1	320	260	240
2/27/2002	140	130	61	25	NA	<1.0	182	149	100
3/27/2002	110	180	58	29	1700	<1.0	150	120	100
4/30/2002	150	170	61	33	NA	<1.0	150	130	130
5/29/2002	140	150	66	35	NA	<1.0	170	140	140
6/19/2002	170	210	79	47	NA	<1.0	180	150	160
9/25/2002	180	92	43	28	NA	<1.0	170	140	120
10/30/2002	110	92	36	24	470	<1.0	140	110	90
11/20/2002	110	59	30	17	380	<1.0	110	93	73
3/25/2003	180	200	88	38					
4/22/2003	110	120	45	26					
5/27/2003	220	230	85	39					
6/24/2003	140	170	58	44					

F4: 541STC040 – Ingram Creek at River Road continued…

Date	Chloride (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	TDS (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Total Alkalinity (mg/L)	Sodium (mg/L)
Count	26	24	26	26	15	23	23	23	23
Min	85	59	30	17	380	0.5	110	93	73
Max	300	310	150	59	1700	6.0	320	270	240
Mean	180	190	78	40	1100	0.9	200	170	150
Geo Mean	170	170	71	38	953	0.6	190	160	140
Median	170	180	64	38	1300	0.5	180	150	140
Quartile 1	120	130	57	33	625	0.5	150	130	100
Quartile 3	250	270	110	51	1400	0.5	260	210	220

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F4: 541STC040 – Ingram Creek at River Road continued…

Date	96h Acute Fathead Minnow (% Survival)		48h Acute Ceriodaphnia Dubia (% Survival)		Algae Cell Growth		
	Result	Control	Result	Control	Result (million/ml)	Control (million/ml)	MDD (%)
6/19/2001	95	100	100	90			
11/16/2004	100	100	100	100			
12/21/2004	100	100	100	100			
1/18/2005	100	100	100	100			
2/15/2005	100	97.5	100	100			
3/23/2005	97.5	97.5	100	100			
4/19/2005	95	100	100	100			
5/17/2005	97.5	100	100	100			
6/21/2005	100	100	90	100			
7/21/2005	97.5	100	100	100			
8/16/2005	97.5	100	95	95.2			
9/20/2005	100	100	100	100			
Count	12	12	12	12	N/A	N/A	N/A

* Significantly reduced from the lab control.
** Significantly greater than the lab control.
^ Fish were from a "forced hatch," duplicate failed QA.
[1] Duplicate sample for the set was low - 77% recovery.
[2] Testing for the Fathead minnow was initiated when samples were approx. 48h old due to untimely shipping of fish by fish supplier.
[3] Samples qualified, but duplicate sample recovery for the set was high - 126% (53.8%/42.5%)
NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F5: 541STC042 – Hospital creek at River Road

Station Code: 541STC042

Location: Latitude 37.61056, Longitude -121.22861

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/24/2000	1:05 PM	16.0	694	8.1		
11/29/2000	DRY	DRY	DRY	DRY		
12/27/2000	12:20 PM	DRY	DRY	DRY		
1/24/2001	11:43 AM	8.8	353	7.5		
2/10/2001	12:50 PM	DRY	DRY	DRY		
2/11/2001	2:35 AM	DRY	DRY	DRY		
2/21/2001	1:35 PM	DRY	DRY	DRY		
3/28/2001	9:50 AM	15.1	1080	7.7		
4/25/2001	8:10 AM	17.1	789	7.9		
5/30/2001	9:20 AM	20.3	1150	7.1		
6/5/2001	8:59 AM	17.4	991	8.1	7.7	
6/19/2001	9:45 AM	20.8	1240	7.6	7.9	
6/27/2001	8:52 AM	19.8	946	8.1	9.3	
7/25/2001	9:30 AM	20.5	916	8.2	9.0	
8/29/2001	9:49 AM	21.0	1050	7.7	7.7	
9/26/2001	8:46 AM	16.4	1190	7.7	9.2	
2/27/2002	DRY	DRY	DRY	DRY	DRY	
3/27/2002	8:20 AM	12.6	1220	8.4	10.5	
4/30/2002	9:24 AM	11.8	651	7.6	11.3	
5/29/2002	8:42 AM	19.1	712	8.0	9.5	
6/19/2002	8:44 AM	19.8	208	7.7	8.5	
7/30/2002	11:18 AM	22.1	75	8.3	8.8	300
8/28/2002	9:30 AM	19.8	1380	7.2	NA	
9/25/2002	9:20 AM	19.9	662	8.1	9.3	
10/15/2002	11:32 AM	15.7	962	7.9	10.1	NA
10/30/2002	8:29 AM	DRY	DRY	DRY	DRY	
1/15/2003	DRY	DRY	DRY	DRY	DRY	DRY
3/25/2003	8:27 AM	12.2	615	7.9	11.5	208
4/22/2003	11:10 AM	14.4	511	8.1	9.8	365
5/27/2003	12:05 PM	23.8	833	7.9	8.4	53.4
6/24/2003	8:56 AM	17.5	877	7.6	9.0	80.6
7/29/2003	10:14 AM	24.4	721	7.9	8.9	6.8
8/26/2003	11:24 AM	25.3	385	8.2	7.8	108
9/23/2003	11:06 AM	22.0	611	7.9	7.9	355
10/28/2003	12:59 PM	17.9	939	8.1	10.7	15.9
11/18/2003	12:15 PM	DRY	DRY	DRY	DRY	DRY
1/28/2004	10:22 AM	11.6	1980	7.9	15.2	181
2/24/2004	DRY	DRY	DRY	DRY	DRY	DRY
3/24/2004	9:32 AM	13.8	339	8.2	10.6	350

F5: 541STC042 – Hospital creek at River Road continued…

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
4/28/2004	9:36 AM	17.4	640	7.9	11.5	307
5/26/2004	11:29 AM	21.2	836	7.7	7.7	264
6/23/2004	10:18 AM	20.4	1090	8.1	10.1	NA
7/28/2004	11:05 AM	23.4	1110	8.0	9.1	NA
8/25/2004	11:18 AM	22.7	830	8.1	8.2	NA
9/29/2004	11:09 AM	16.7	1290	7.7	9.5	NA
10/27/2004	11:09 AM	15.8	1010	8.0	12.1	
11/2/2004	7:43 AM	DRY	DRY	DRY	DRY	
11/16/2004	8:42 AM	14.9	507	7.5	4.8	
12/8/2004	7:55 AM	10.8	503	6.7	10.3	
12/21/2004	7:26 AM	DRY	DRY	DRY	DRY	
1/4/2005	7:44 AM	9.5	290	8.7	9.8	
1/18/2005	7:41 AM	DRY	DRY	DRY	DRY	
2/1/2005	7:50 AM	DRY	DRY	DRY	DRY	
2/15/2005	7:44 AM	11.1	188	8.1	13.3	
3/8/2005	7:51 AM	11.9	739	8.2	10.5	
3/23/2005	7:40 AM	13.5	523	7.9	7.2	
4/5/2005	7:55 AM	DRY	DRY	DRY	DRY	
4/19/2005	7:55 AM	11.0	453	6.5	10.6	
5/3/2005	7:40 AM	14.4	449	8.0	11.6	
5/17/2005	7:50 AM	13.8	391	7.8	9.9	
6/8/2005	8:08 AM	17.5	190	7.9	9.5	
6/21/2005	8:04 AM	17.8	413	7.0	9.3	
7/6/2005	10:10 AM	22.3	454	7.4	7.2	
7/19/2005	8:44 AM	22.2	402	8.2	8.5	
8/2/2005	10:00 AM	21.3	585	7.8	8.5	
8/16/2005	10:16 AM	22.4	415	8.1	9.5	
9/6/2005	10:40 AM	21.8	649	8.1	10.6	
9/20/2005	9:41 AM	19.5	415	7.6	12.1	
Count		53	53	53	47	13
Min		8.8	75	6.5	4.8	6.8
Max		25.3	1980	8.7	15.2	365
Mean		17.6	726	7.8	9.6	200
Geo Mean		17.0	626	7.8	9.4	126
Median		17.5	662	7.9	9.5	208
Quartile 1		14.4	449	7.7	8.5	80.6
Quartile 3		21.0	962	8.1	10.6	307

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F5: 541STC042 – Hospital creek at River Road continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
10/24/2000	2900	2.8		
1/24/2001	34	5.1		
3/28/2001	420	NA		
4/25/2001	27	3.9		
5/30/2001	59	9.7		
6/27/2001	730	13		
7/25/2001		3.1		
8/29/2001	NA	13		
9/26/2001	NA	17		
3/27/2002		NA		
4/30/2002		NA		
5/29/2002		5.4		
6/19/2002		NA		
7/30/2002			>2419.6	152
9/25/2002		NA		
10/15/2002			>2419.6	1553
1/15/2003			NA	NA
3/25/2003		4.5		
4/22/2003		5.7	>2419.6	126
5/27/2003		NA		
6/24/2003		NA		
7/29/2003			>2419.6	488
8/26/2003			>2419.6	411
9/23/2003			>2419.6	>2419.6
10/28/2003			>2419.6	272
11/18/2003			DRY	DRY
1/28/2004			>2419.6	8
2/24/2004			DRY	DRY
3/24/2004			>2419.6	272
4/28/2004			>2419.6	107
5/26/2004			>2419.6	>2419.6
6/23/2004			>2419.6	365
7/28/2004			>2419.6	222
8/25/2004			>2419.6	691
9/29/2004			>2419.6	167
10/27/2004		4.1	>2419.6	99
11/2/2004	DRY		DRY	DRY
11/16/2004	110	8.1	>2419.6	162
12/8/2004			>2419.6	199
12/21/2004	DRY	DRY	DRY	DRY
1/4/2005			>2419.6	>2419.6
1/18/2005	DRY	DRY	DRY	DRY

F5: 541STC042 – Hospital creek at River Road continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
2/1/2005			DRY	DRY
2/15/2005	490	23	691	173
3/8/2005			>2419.6	579
3/23/2005	130	NA	>2419.6	1986
4/5/2005	DRY	DRY	DRY	DRY
4/19/2005	340	NA	>2419.6	228
5/3/2005			>2419.6	579
5/17/2005	503	NA	>2419.6	579
6/8/2005			>2419.6	31
6/21/2005	1500	7.7	>2419.6	1986
7/6/2005			>2419.6	>2419.6
7/19/2005	3000	3.2	>2419.6	142
8/2/2005			>2419.6	687
8/16/2005	3300	4.7	>2419.6	2420
9/6/2005			>2419.6	61
9/20/2005	27	3.2	>2419.6	238
Count	15	18	33	33
Min	27	2.8	691	8
Max	3300	23	2420	2420
Mean	900	7.6	NA	NA
Geo Mean	310	6.2	2330	353
Median	420	5.3	2420	272
Quartile 1	85	4.0	2420	162
Quartile 3	1100	9.3	2420	691

NOTE: For values reported as < (less than), half the detection limit was used
For values reported as > (greater than), 2420 was used

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F5: 541STC042 – Hospital creek at River Road continued…

Date	Nitrate (mg/L)	Nitrate-N (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Phosphorus (mg/L)	Ortho-phosphate-P (mg/L)	Potassium (mg/L)	BOD 5-Day (mg/L)	BOD 10-Day (mg/L)
10/24/2000	9.7		3.4		4	<1	4	3.3	5
1/24/2001	8.7		<2		0.3	<1	6.8	3.6	8
3/28/2001	11		<2		0.5	<1	11	1.6	2.7
4/25/2001	7.1		<2		0.1	<1	4.8	1.1	1.9
5/30/2001	11		<2		0.2	<1	11	4	6.5
6/27/2001	18		<2		0.6	<1	12	0.5	1
8/29/2001	12		<2		0.7	<1	NA		
9/26/2001	25		4.2		0.5	<1	13		
3/27/2002	NA		1.7		NA	0.1	6.4	0.5	1
4/30/2002	NA		NA		0.6	0.5	NA	6.7	12
5/29/2002	NA		1		NA	0.3	8.3	4	6
6/19/2002	NA		2.1		0.4	NA	8.1	8.3	13.7
8/28/2002	NA		2.5		0.4	0.4	5.4	1.3	2.6
9/25/2002	NA		NA		0.4	NA	5.7	0.9	1.4
Count	8	NA	12	NA	12	12	12	12	12
Min	7.1	NA	1.0	NA	0.1	0.1	4.0	0.5	1.0
Max	25.0	NA	4.2	NA	4.0	0.5	13.0	8.3	13.7
Mean	12.8	NA	1.7	NA	0.7	0.4	8.0	3.0	5.2
Geo Mean	11.9	NA	1.5	NA	0.5	0.4	7.5	2.0	3.6
Median	11.0	NA	1.0	NA	0.5	0.5	7.5	2.5	3.9
Quartile 1	9.5	NA	1.0	NA	0.4	0.5	5.6	1.1	1.8
Quartile 3	13.5	NA	2.2	NA	0.6	0.5	11.0	4.0	6.9

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F5: 541STC042 – Hospital creek at River Road continued…

Date	Hardness (mg/L)	Total Arsenic (ug/L)	Total Cadmium (ug/L)	Total Chromium (ug/L)	Total Copper (ug/L)	Total Lead (ug/L)	Total Nickel (ug/L)	Total Zinc (ug/L)	Total Mercury (ug/L)
10/24/2000				110	98	35	180	211	
1/24/2001	110			3.8	8.3	<5	8.8	8.7	
3/28/2001	270			29	25	7.2	43	48	
4/25/2001	180			2.2	3.6	<5	<5	2.5	
5/30/2001	270			5	7.8	<5	8.1	7.7	
7/25/2001				56	43	15	81	91	
8/29/2001	NA	4.8	<1	23	20	7.6	35	38	
9/26/2001	310	<4	<0.1	13	15	<5	20	20	<0.2
3/27/2002	340	<4.0	<0.1	5.4	4.1	<5.0	<5.0	7.6	<0.2
4/30/2002	160	<4.0	<0.1	8.9	9.7	<5.0	16	20	<0.2
5/29/2002	190	5.2	<0.1	27	NA	8.5	41	46	<0.2
6/19/2002	370	6.9	0.18	60	55	19	91	100	0.2
9/25/2002	130	<4.0	<0.1	1.9	NA	<5.0	<5.0	3.4	<0.2
3/25/2003	130	<4.0	<0.1	12	12	<5.0	16	20	<0.2
4/22/2003	140	<4.0	<0.1	20	17	5.2	28	31	<0.2
5/27/2003	190	4.2	<0.1	2.6	6.9	<5.0	5.5	5	<0.2
6/24/2003	210	4.7	<0.1	3.2	8.3	<5.0	7.1	7.4	<0.2
Count	14	11	11	17	15	17	17	17	10
Min	110.0	2.0	0.1	1.9	3.6	2.5	2.5	2.5	0.1
Max	370.0	6.9	0.5	110.0	98.0	35.0	180.0	211.0	0.2
Mean	214.3	3.4	0.1	22.5	22.2	7.2	34.6	39.3	0.1
Geo Mean	199.8	3.1	0.1	11.2	14.2	4.7	16.5	19.2	0.1
Median	190.0	2.0	0.1	12.0	12.0	2.5	16.0	20.0	0.1
Quartile 1	145.0	2.0	0.1	3.8	8.1	2.5	7.1	7.6	0.1
Quartile 3	270.0	4.8	0.1	27.0	22.5	7.6	41.0	46.0	0.1

*half of the detection limit used for calculations

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F5: 541STC042 – Hospital creek at River Road continued…

Date	Hardness (mg/L)	Dissolved Arsenic (ug/L)	Dissolved Cadmium (ug/L)	Dissolved Chromium (ug/L)	Dissolved Copper (ug/L)	Dissolved Lead (ug/L)	Dissolved Nickel (ug/L)	Dissolved Zinc (ug/L)	Dissolved Mercury (ug/L)
1/24/2001	110			<1	4.4	<5	<5	2.4	
3/28/2001	270			<1	3.6	<5	<5	<2	
4/25/2001	180			<1	1.9	<5	<5	3.9	
5/30/2001	270			1.1	4.9	<5	<5	<2	
8/29/2001	NA	2.2	<1	1.5	3.4	<5	<5	2.6	
9/26/2001	310	<4	<0.1	2	4.5	<5	<5	<2	<0.2
3/27/2002	340	<4.0	<0.1	3.5	2.2	<5.0	<5.0	2.8	<0.2
4/30/2002	160	<4.0	<0.1	<1.0	2.3	<5.0	<5.0	4	<0.2
5/29/2002	190	<4.0	<0.1	<1.0	2.3	<5.0	<5.0	<2.0	<0.2
6/19/2002	370	<4.0	<0.1	37	34	12	56	61	<0.2
9/25/2002	130	<4.0	<0.1	<1.0	NA	<5.0	<5.0	2.5	<0.2
Count	10	7	7	11	10	11	11	11	6
Min	110.0	2.0	0.1	0.5	1.9	2.5	2.5	1.0	0.1
Max	370.0	2.2	0.5	37.0	34.0	12.0	56.0	61.0	0.1
Mean	233.0	2.0	0.1	4.4	6.4	3.4	7.4	7.6	0.1
Geo Mean	216.1	2.0	0.1	1.2	3.9	2.9	3.3	2.6	0.1
Median	230.0	2.0	0.1	0.5	3.5	2.5	2.5	2.5	0.1
Quartile 1	165.0	2.0	0.1	0.5	2.3	2.5	2.5	1.0	0.1
Quartile 3	300.0	2.0	0.1	1.8	4.5	2.5	2.5	3.4	0.1

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F5: 541STC042 – Hospital creek at River Road continued…

Date	Chloride (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	TDS (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Total Alkalinity (mg/L)	Sodium (mg/L)
10/24/2000	96	82	49	62	460	<1	150	120	76
1/24/2001	28	33	28	10	200	<1	100	80	24
3/28/2001	140	160	55	33	630	<1	160	130	120
4/25/2001	110	NA	39	21	NA	<1	100	100	80
5/30/2001	140	160	57	32	NA	4	146	150	120
6/27/2001	120	130	54	33	540	<1	160	130	99
8/29/2001	160	NA	NA	NA	600	<1.0	160	130	110
9/26/2001	NA	NA	66	34	NA	<1	180	140	120
3/27/2002	27	43	79	33	740	<1.0	160	130	120
4/30/2002	83	94	33	18	NA	<1.0	110	88	71
5/29/2002	89	89	41	23	NA	<1.0	130	110	81
6/19/2002	140	160	68	48	NA	<1.0	170	140	130
9/25/2002	130	35	21	18	NA	<1.0	100	84	85
3/25/2003	70	74	28	15					
4/22/2003	58	63	28	18					
5/27/2003	110	120	42	21					
6/24/2003	110	120	46	23					
Count	16	14	16	16	6	13	13	13	13
Min	27	33	21	10	200	0.5	100	80	24
Max	160	160	79	62	740	4.0	180	150	130
Mean	100	97	46	28	530	0.8	140	120	95
Geo Mean	90	86	43	25	490	0.6	140	120	89
Median	110	92	44	23	570	0.5	150	130	99
Quartile 1	80	66	32	18	480	0.5	110	100	80
Quartile 3	130	130	56	33	620	0.5	160	130	120

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F5: 541STC042 – Hospital creek at River Road continued…

	96h Acute Fathead Minnow (% Survival)		48h Acute Ceriodaphnia Dubia (% Survival)		Algae Cell Growth		
Date	Result	Control	Result	Control	Result (million/ml)	Control (million/ml)	MDD (%)
1/24/2001	95	100	NA	NA			
3/28/2001	100	100	100	100			
4/25/2001	100	100	80	90			
5/30/2001	85	95	90	100			
6/27/2001	95	100	100	90			
11/16/2004	100	100	100	100			
2/15/2005	92.5	97.5	100	100			
3/23/2005	100	97.5	0*	100			
4/19/2005	100	100	0*	100			
5/17/2005	95	100	100	100			
6/21/2005	97.5	100	100	100			
7/19/2005	97.5	100	100	100			
8/16/2005	95	100	0*	95.2			
9/20/2005	100	100	100	100			
Count	14	14	13	13	N/A	N/A	N/A

* Significantly reduced from the lab control.
** Significantly greater than the lab control.
^ Fish were from a "forced hatch," duplicate failed QA.
[1] Duplicate sample for the set was low - 77% recovery.
[2] Testing for the Fathead minnow was initiated when samples were approx. 48h old due to untimely shipping of fish by fish supplier.
[3] Samples qualified, but duplicate sample recovery for the set was high - 126% (53.8%/42.5%)
NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F6: 541STC030 – Grayson Road Drain at Grayson

Station Code: 541STC030

Location: Latitude 37.56194, Longitude -121.17417

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/24/2000	1:45 PM	20.1	671	7.7		
11/29/2000	9:10 AM	12.3	1140	7.3		
12/27/2000	10:55 AM	7.1	627	8.1		
1/24/2001	DRY	DRY	DRY	DRY		
2/21/2001	12:10 PM	13.3	1370	8.5		
3/28/2001	10:30 AM	18.2	799	7.9		
4/25/2001	8:47 AM	17.9	728	8.1		
5/30/2001	10:05 AM	20.3	960	7.6		
6/27/2001	9:25 AM	20.7	308	8.0	10.1	
7/25/2001	9:57 AM	21.3	1120	8.2	9.0	
8/29/2001	10:12 AM	22.6	806	8.0	8.6	
9/26/2001	9:22 AM	20.8	947	8.1	9.2	
10/24/2001	10:10 AM	13.8	958	8.2	10.3	
11/28/2001	9:31 AM	DRY	DRY	DRY	DRY	
12/26/2001	9:59 AM	DRY	DRY	DRY	DRY	
1/30/2002	9:52 AM	8.6	826	7.7	9.5	
2/27/2002	9:11 AM	14.1	1280	8.0	10.0	
3/27/2002	8:52 AM	14.7	1060	8.2	10.5	
4/30/2002	8:48 AM	13.5	964	7.7	9.8	
5/29/2002	9:11 AM	19.5	946	7.9	9.3	
6/19/2002	9:01 AM	19.6	340	8.1	8.8	
7/31/2002	8:27 AM	21.7	919	7.5	8.6	515
8/28/2002	9:55 AM	22.1	1330	8.1	NA	
9/25/2002	9:58 AM	18.9	1460	7.6	NA	
10/15/2002	10:38 AM	16.2	1500	8.2	10.0	NA
10/30/2002	9:01 AM	14.7	814	7.6	9.7	
11/20/2002	9:14 AM	12.8	653	7.8	10.6	
12/18/2002	8:53 AM	DRY	DRY	DRY	DRY	DRY
1/14/2003	1:00 PM	11.6	161	7.7	5.4	477
1/29/2003	DRY	DRY	DRY	DRY	DRY	DRY
3/25/2003	8:49 AM	14.4	655	8.5	10.6	5.9
4/24/2003	1:54 PM	15.4	883	8.2	10.3	10.2
5/29/2003	12:50 PM	30.9	1430	8.5	7.6	742
6/26/2003	12:26 PM	22.1	786	8.5	9.1	80.5
7/31/2003	1:06 PM	25.7	518	7.9	8.0	139
8/28/2003	1:04 AM	27.2	1220	8.5	9.1	1340
9/25/2003	1:10 PM	DRY	DRY	DRY	DRY	DRY
10/30/2003	12:55 PM	DRY	DRY	DRY	DRY	DRY
11/20/2003	1:23 PM	15.4	1630	8.4	10.3	5.3

F6: 541STC030 – Grayson Road Drain at Grayson continued…

Date	Time	Temp (ºC)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
1/29/2004	12:35 PM	DRY	DRY	DRY	DRY	DRY
2/26/2004	12:25 PM	12.1	176	8.1	10.8	NA
3/24/2004	12:45 PM	16.2	763	8.1	9.9	NA
4/29/2004	1:24 PM	20.2	793	8.1	9.3	1070
5/27/2004	1:17 PM	28.1	1190	8.8	7.9	560
6/24/2004	1:40 PM	25.1	1030	8.2	9.4	NA
7/29/2004	12:19 PM	27.0	1060	8.2	8.5	NA
8/26/2004	1:19 PM	25.0	924	8.1	7.9	NA
9/29/2004	11:31 AM	20.1	1450	8.1	9.1	NA
10/28/2004	12:58 PM	17.1	636	8.2	8.4	
11/3/2004	12:24 PM	16.3	699	8.1	9.8	
11/17/2004	12:19 PM	DRY	DRY	DRY	DRY	
12/8/2004	10:03 AM	12.4	715	7.9	11.8	
12/21/2004	9:53 AM	DRY	DRY	DRY	DRY	
1/5/2005	10:24 AM	11.7	595	8.3	12.0	
1/19/2005	10:00 AM	DRY	DRY	DRY	DRY	
2/2/2005	10:45 AM	DRY	DRY	DRY	DRY	
2/16/2005	10:38 AM	12.4	145	7.9	10.0	
3/9/2005	10:20 AM	DRY	DRY	DRY	DRY	
3/22/2005	11:41 AM	14.1	358	8.0	10.2	
4/6/2005	DRY	DRY	DRY	DRY	DRY	
4/20/2005	11:16 AM	DRY	DRY	DRY	DRY	
5/4/2005	11:01 AM	17.1	583	8.1	9.5	
5/18/2005	12:02 PM	18.0	424	8.3	10.3	
6/8/2005	1:05 PM	21.8	303	7.5	7.1	
6/22/2005	12:01 PM	21.1	808	8.1	9.0	
7/6/2005	10:42 AM	22.4	546	8.0	8.5	
7/20/2005	10:43 AM	24.4	686	8.1	8.6	
8/3/2005	11:01 AM	22.5	758	7.7	3.4	
8/17/2005	10:20 AM	22.7	686	8.2	9.1	
9/7/2005	11:00 AM	22.0	940	8.2	8.8	
9/21/2005	11:51 AM	26.6	715	7.8	11.3	
Count		56	56	56	47	11
Min		7.1	145	7.3	3.4	5.3
Max		30.9	1630	8.8	12.0	1340
Mean		18.6	836	8.0	9.3	450
Geo Mean		17.9	745	8.0	9.1	143
Median		19.2	803	8.1	9.3	477
Quartile 1		14.3	649	7.9	8.6	45.4
Quartile 3		22.1	1038	8.2	10.2	651

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F6: 541STC030 – Grayson Road Drain at Grayson continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
10/24/2000	27	4.1		
11/29/2000	NA	2.1		
12/27/2000	400	4.9		
2/21/2001	6	NA		
3/28/2001	<5	NA		
4/25/2001	240	2.8		
5/30/2001	1400	8.9		
6/27/2001	970	8.6		
7/25/2001		8.7		
8/29/2001	NA	9.1		
9/26/2001	NA	11		
3/27/2002		NA		
4/30/2002		NA		
5/29/2002		9.7		
6/19/2002		NA		
7/31/2002			>2419.6	36
9/25/2002		NA		
10/15/2002			>2419.6	115
10/30/2002		3.5		
11/20/2002		3.1		
1/14/2003			>2419.6	131
3/25/2003		4.0		
4/24/2003		NA	>2419.6	1733
5/29/2003		7.8		
6/26/2003		4.1		
7/31/2003			>2419.6	1046
8/28/2003			>2419.6	74
9/25/2003			DRY	DRY
10/30/2003			DRY	DRY
11/20/2003			1120	7
1/29/2004			DRY	DRY
2/26/2004			>2419.6	>2419.6
3/24/2004			>2419.6	1203
4/29/2004			>2419.6	150
5/27/2004			>2419.6	238
6/24/2004	4200		>2419.6	161
7/29/2004			>2419.6	260
8/26/2004			>2419.6	317
9/29/2004			>2419.6	93
10/28/2004		4.5	>2419.6	20
11/3/2004	77	7.7	>2419.6	1414
11/17/2004	DRY	DRY	DRY	DRY
12/8/2004	90	21	>2419.6	>2419.6

F6: 541STC030 – Grayson Road Drain at Grayson continued…

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	*E. coli* MPN
12/21/2004	DRY	DRY	DRY	DRY
1/5/2005	18	5.4	>2419.6	20
1/19/2005	DRY	DRY	DRY	DRY
2/2/2005	DRY	DRY	DRY	DRY
2/16/2005	200	NA	>2419.6	1553
3/9/2005	DRY	DRY	DRY	DRY
3/22/2005	25	7.2	>2419.6	>2419.6
4/6/2005	DRY	DRY	DRY	DRY
4/20/2005	DRY	DRY	DRY	DRY
5/4/2005	120	9.6	>2419.6	1553
5/18/2005	770	4.3	>2419.6	115
6/8/2005	180	NA	>2419.6	>2419.6
6/22/2005	48	NA	>2419.6	1120
7/6/2005	70	4.9	>2419.6	152
7/20/2005	3500	3.8	>2419.6	231
8/3/2005	28000	10	>2419.6	2420
8/17/2005	510	5.8	>2419.6	1120
9/7/2005	140	4.0	>2419.6	194
9/21/2005	880	NA	>2419.6	727
Count	23	27	31	31
Min	2.5	2.1	1120	7
Max	28000	21	2420	2420
Mean	1821	6.7	NA	NA
Geo Mean	195	5.9	2361	337
Median	180	5.4	2420	260
Quartile 1	59	4.1	2420	123
Quartile 3	825	8.8	2420	1484

NOTE: For values reported as < (less than), half the detection limit was used
For values reported as > (greater than), 2420 was used

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F6: 541STC030 – Grayson Road Drain at Grayson continued…

Date	Nitrate (mg/L)	Nitrate-N (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Phosphorus (mg/L)	Ortho-phosphate-P (mg/L)	Potassium (mg/L)	BOD 5-Day (mg/L)	BOD 10-Day (mg/L)
10/24/2000	8.7		<2		0.2	<1	4.5	0.7	1.2
11/29/2000	10		NA		0.2	<1	6.4	0.8	1.1
12/27/2000	7.4		<2		0.6	1	9	5.2	7.3
2/21/2001	30		<2		0.1	<1	4.4	0.8	2.5
3/28/2001	6.3		<2		0.2	<1	5.2	1.4	2.5
4/25/2001	13		<2		0.3	<1	6.8	2	3.6
5/30/2001	14		3.5		0.5	<1	14	3.5	5.8
6/27/2001	20		3.2		0.5	<1	14	3.1	7.6
8/29/2001	6.1		<2		1.9	<1	NA		
9/26/2001	5.1		<2		0.3	<1	6.8		
10/24/2001	<2		<2		0.4	<1	5.5	1.9	3.7
11/28/2001	NA		0.2		NA	<0.03	2.9		
12/26/2001	NA		0.4		<0.05	<0.03	4.5		
1/30/2002	NA		13		2.9	2.5	15	7.5	16
2/27/2002	NA		0.5		0.1	0.1	NA	0.6	1
3/27/2002	NA		0.9		NA	NA	2.8	0.8	1.5
4/30/2002	NA		NA		2.2	0.9	NA	8.5	16.8
5/29/2002	NA		2		NA	0.4	8.2	8.4	15.4
6/19/2002	NA		0.7		0.3	NA	3.3	1.1	1.6
8/28/2002	NA		2		0.7	0.2	6.1	3.4	6.7
9/25/2002	NA		NA		0.4	0.4	14	8.4	16.9
10/30/2002	NA		NA		0.2	0.1	2.7	1.2	1.9
11/20/2002	NA		0.8		0.2	0.1	3.6		

F6: 541STC030 – Grayson Road Drain at Grayson continued…

Date	Nitrate (mg/L)	Nitrate-N (mg/L)	TKN (mg/L)	Ammonia-N (mg/L)	Phosphorus (mg/L)	Ortho-phosphate-P (mg/L)	Potassium (mg/L)	BOD 5-Day (mg/L)	BOD 10-Day (mg/L)
Count	11	NA	19	NA	20	21	20	18	18
Min	1.0	NA	0.2	NA	0.03	0.02	2.7	0.6	1.0
Max	30.0	NA	13.0	NA	2.9	2.5	15.0	8.5	16.9
Mean	11.1	NA	1.9	NA	0.6	0.5	7.0	3.3	6.3
Geo Mean	8.4	NA	1.1	NA	0.3	0.3	6.0	2.2	4.0
Median	8.7	NA	1.0	NA	0.3	0.5	5.8	2.0	3.7
Quartile 1	6.2	NA	0.9	NA	0.2	0.2	4.2	0.9	1.7
Quartile 3	13.5	NA	1.5	NA	0.5	0.5	8.4	4.8	7.5

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F6: 541STC030 – Grayson Road Drain at Grayson continued…

Date	Hardness (mg/L)	Total Arsenic (ug/L)	Total Cadmium (ug/L)	Total Chromium (ug/L)	Total Copper (ug/L)	Total Lead (ug/L)	Total Nickel (ug/L)	Total Zinc (ug/L)	Total Mercury (ug/L)
10/24/2000	170			1.5	2.4	<5	<5	3	
11/29/2000	260			<1	1.5	<5	<5	<2	
12/27/2000	160			21	52	11	31	70	
2/21/2001	400			16	1.1	<5	<5	<2	
3/28/2001	190			<1	3.6	<5	5.1	<2	
4/25/2001	190			13	13	<5	20	29	
5/30/2001	310			54	50	24	88	130	
7/25/2001	310			61	52	26	91	150	
8/29/2001	NA	11	<1	86	93	46	180	240	
9/26/2001	200	<4	<0.1	<1	2.4	<5	<5	<2	<0.2
10/24/2001	220	5.3	<0.1	NA	1.5	<5.0	<5.0	<2.0	<0.2
1/30/2002	90	4.3	0.2	1.4	8.1	<5	6.9	28	<0.2
3/27/2002	370	<4.0	<0.1	14	2.5	<5.0	<5.0	5.4	<0.2
4/30/2002	310	<4.0	<0.1	2.7	9.3	<5.0	8.8	8.5	<0.2
5/29/2002	280	11	<0.1	56	NA	39	130	180	<0.2
6/19/2002	110	4.1	<0.1	10	12	<5.0	18	26	<0.2
9/25/2002	390	5.4	<0.1	12	NA	<5.0	25	24	<0.2
10/30/2002	210	<4.0	<0.1	<1.0	NA	<5.0	<5.0	<2.0	<0.2
11/20/2002	140	<4.0	<0.1	<1.0	1.6	<5.0	NA	NA	<0.2
3/25/2003	170	12	<0.1	<1.0	4.3	<5.0	<5.0	<2.0	<0.2
4/24/2003	190	<4.0	<0.1	<1.0	2.1	<5.0	<5.0	<2.0	<0.2
5/29/2003	360	7.8	<0.1	41	30	12	70	63	<0.2
6/26/2003	180	<4.0	<0.1	10	14	5.5	24	24	NA

F6: 541STC030 – Grayson Road Drain at Grayson continued…

Date	Hardness (mg/L)	Total Arsenic (ug/L)	Total Cadmium (ug/L)	Total Chromium (ug/L)	Total Copper (ug/L)	Total Lead (ug/L)	Total Nickel (ug/L)	Total Zinc (ug/L)	Total Mercury (ug/L)
Count	22	15	15	22	20	23	22	22	13
Min	90	2.0	0.1	0.5	1.1	2.5	2.5	1.0	0.1
Max	400	12	1	86	93	46	180	240	0.1
Mean	237	5.0	0.1	18	18	8.8	33	45	0.1
Geo Mean	220	3.9	0.1	5.0	7.1	4.6	11.1	9.8	0.1
Median	205	4.1	0.1	10.0	6.2	2.5	7.9	16.3	0.1
Quartile 1	173	2.0	0.1	0.5	2.3	2.5	2.5	1.0	0.1
Quartile 3	310	6.6	0.1	19.8	18	8.3	30	55	0.1

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F6: 541STC030 – Grayson Road Drain at Grayson continued…

Date	Hardness (mg/L)	Dissolved Arsenic (ug/L)	Dissolved Cadmium (ug/L)	Dissolved Chromium (ug/L)	Dissolved Copper (ug/L)	Dissolved Lead (ug/L)	Dissolved Nickel (ug/L)	Dissolved Zinc (ug/L)	Dissolved Mercury (ug/L)
11/29/2000	260			<1	1.2	<5	<5	<2	
12/27/2000	160			<1	5.1	<5	<5	<2	
2/21/2001	400			15	<1	<5	<5	<2	
3/28/2001	190			<1	2.6	<5	<5	<2	
4/25/2001	190			<1	1.8	<5	<5	<2	
5/30/2001	310			<1	2.2	<5	<5	<2	
8/29/2001	NA	2.4	<1	<1	1.5	<5	6.2	6.6	
9/26/2001	200	<4	<0.1	<1	2.4	<5	<5	6	<0.2
10/24/2001	220	6.5	<0.1	NA	1.7	<5.0	<5.0	<2.0	<0.2
1/30/2002	90	<4	0.2	<1	4.9	<5	<5	17	<0.2
3/27/2002	370	<4	<0.1	12	2.9	<5.0	<5.0	2.5	<0.2
4/30/2002	310	<4.0	<0.1	<1.0	7	<5.0	5.2	5.9	<0.2
5/29/2002	280	<4.0	<0.1	<1.0	4.5	<5.0	<5.0	<2.0	<0.2
6/19/2002	110	<4.0	<0.1	6.1	7.4	<5.0	11	17	<0.2
9/25/2002	390	<4.0	<0.1	1.3	NA	<5.0	6	<2.0	<0.2
10/30/2002	210	<4.0	<0.1	<1.0	3	<5.0	<5.0	<2.0	<0.2
11/20/2002	140	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
Count	16	11	11	16	16	17	17	17	10
Min	90	2.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Max	400	6.5	0.5	15	7.4	2.5	11	17	0.1
Mean	239	2.4	0.1	2.5	3.1	2.5	3.6	3.9	0.1
Geo Mean	220	2.3	0.1	0.9	2.4	2.5	3.2	2.0	0.1
Median	215	2.0	0.1	0.5	2.5	2.5	2.5	1.0	0.1
Quartile 1	183	2.0	0.1	0.5	1.7	2.5	2.5	1.0	0.1
Quartile 3	310	2.0	0.1	0.7	4.6	2.5	2.5	5.9	0.1

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F6: 541STC030 – Grayson Road Drain at Grayson continued…

Date	Chloride (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	TDS (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Total Alkalinity (mg/L)	Sodium (mg/L)
10/24/2000	76	77	31	22	380	<1	140	110	72
11/29/2000	150	140	46	35	670	2	200	170	130
12/27/2000	95	64	31	20	370	<1	110	90	68
2/21/2001	210	160	82	48	800	<1	200	160	120
3/28/2001	96	110	39	22	470	<1	140	110	85
4/25/2001	82	NA	39	22	NA	<1	92	92	72
5/30/2001	130	140	54	42	NA	<1	110	110	110
6/27/2001	130	140	57	41	620	<1	160	130	110
8/29/2001	130	NA	NA	NA	440	<1.0	140	110	96
9/26/2001	NA	NA	36	26	NA	<1	170	140	110
10/24/2001	140	110	40	28	560	<1	190	150	120
1/30/2002	35	40	17	12	240	<1	44	54	24
2/27/2002	200	160	73	46	NA	<1.0	190	156	120
3/27/2002	160	130	58	41	640	<1.0	180	150	100
4/30/2002	150	170	54	35	NA	<1.0	170	140	140
5/29/2002	120	130	60	42	NA	<1.0	160	140	120
6/19/2002	36	32	22	14	NA	<1.0	85	70	34
9/25/2002	410	360	68	54	NA	<1.0	360	290	180
10/30/2002	100	98	38	27	480	<1.0	160	130	91
11/20/2002	99	57	28	17	350	<1.0	130	110	71
3/25/2003	73	83	37	19					
4/24/2003	110	130	42	22					
5/29/2003	200	230	72	44					
6/26/2003	98	120	38	21					

F6: 541STC030 – Grayson Road Drain at Grayson continued…

Date	Chloride (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	TDS (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Total Alkalinity (mg/L)	Sodium (mg/L)
Count	23	21	23	23	12	20	20	20	20
Min	35	32	17	12	240	0.5	44	54	24
Max	410	360	82	54	800	2.0	360	290	180
Mean	130	130	46	30	500	0.6	160	130	99
Geo Mean	120	110	43	28	480	0.5	150	120	91
Median	120	130	40	27	480	0.5	160	130	110
Quartile 1	96	83	37	22	380	0.5	130	110	72
Quartile 3	150	140	58	42	630	0.5	180	150	120

NOTE: For values reported as < (less than), half the detection limit was used.

NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow

F6: 541STC030 – Grayson Road Drain at Grayson continued…

	96h Acute Fathead Minnow (% Survival)		48h Acute Ceriodaphnia Dubia (% Survival)		Algae Cell Growth		
Date	Result	Control	Result	Control	Result (million/ml)	Control (million/ml)	MDD (%)
2/16/2005	100	100	100	100			
3/22/2005	92.5	100	0*	100			
5/18/2005	100	97.5	100	100			
6/22/2005	100	100	100	100			
7/20/2005	100	100	100	100			
8/17/2005	97.5	97.5	100	100			
9/21/2005	100	100	95	100			
Count	7	7	7	7	N/A	N/A	N/A

* Significantly reduced from the lab control.
** Significantly greater than the lab control.
^ Fish were from a "forced hatch," duplicate failed QA.
[1] Duplicate sample for the set was low - 77% recovery.
[2] Testing for the Fathead minnow was initiated when samples were approx. 48h old due to untimely shipping of fish by fish supplier.
[3] Samples qualified, but duplicate sample recovery for the set was high - 126% (53.8%/42.5%)
NA = Data not applicable
INA = Site was inaccessible
DRY = Site had no flow