

APPENDIX E
GRASSLANDS BASIN

APPENDIX E: GRASSLANDS BASIN

E1: 541MER531 – Salt Slough @ Lander Avenue03-19

E2: 541MER536 – Mud Slough Upstream of SLD Terminus.....20-38

E3: 541MER535 – San Luis Drain @ Terminus.....39-64

E4: 541MER542 – Mud Slough @ San Luis Drain.....66-83

E1: 541MER531 – Salt Slough @ Lander Avenue

Station Code: 541MER531

Location: Latitude 37.24861, Longitude -120.85111

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/5/2000	10:12 AM	19.1	1330	7.2		
10/12/2000	10:05 AM	16.1	905	8.0		
10/19/2000	9:47 AM	17.2	1390	7.8		
10/26/2000	2:05 PM	14.7	1600	7.2		
11/2/2000	9:52 AM	14.3	1300	6.3		
11/9/2000	9:35 AM	12.5	1390	7.7		
11/16/2000	10:15 AM	10.9	1570	6.9		
11/21/2000	7:45 AM	9.3	1590	7.9		
11/30/2000	9:20 AM	9.6	1660	7.1		
12/7/2000	9:10 AM	9.8	1480	7.6		
12/12/2000	9:10 AM	11.2	1460	7.4		
12/21/2000	11:10 AM	9.4	1650	7.7		
12/28/2000	10:50 AM	7.9	1810	7.2		
1/4/2001	9:06 AM	7.6	1920	7.8		
1/11/2001	10:56 AM	9.2	1310	7.7		
1/18/2001	9:15 AM	6.7	1830	7.3		
1/25/2001	11:45 AM	10.5	1790	6.6		
2/1/2001	10:30 AM	8.5	1920	6.8		
2/8/2001	10:00 AM	8.6	1670	7.8		
2/15/2001	11:00 AM	10.5	1560	7.5		
2/22/2001	12:15 PM	17.0	1600	7.6		
3/1/2001	8:55 AM	11.3	1560	7.3		
3/8/2001	9:40 AM	14.9	1340	7.0		
3/15/2001	11:15 AM	16.6	1610	7.4		
3/22/2001	11:36 AM	19.2	1910	7.6		
3/29/2001	11:10 AM	19.4	1540	8.1		
4/5/2001	12:00 PM	15.8	1740	7.7		
4/12/2001	9:42 AM	13.2	1610	7.2		
4/19/2001	11:50 AM	16.8	1890	7.8		
4/26/2001	10:51 AM	22.8	1400	6.8		
5/3/2001	10:20 AM	15.4	1900	7.8		
5/10/2001	8:26 AM	22.9	1240	7.8		
5/17/2001	11:52 AM	23.1	990	7.8		
5/24/2001	9:05 AM	23.5	1300	6.6		
5/31/2001	9:30 AM	24.7	1310	7.8		
6/7/2001	11:15 AM	25.1	1280	7.8	7.5	
6/14/2001	10:08 AM	20.8	1240	7.8	6.8	

E1: 541MER531 – Salt Slough @ Lander Avenue continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
6/21/2001	11:38 AM	26.8	1090	7.3	7.1	
6/28/2001	12:45 PM	24.0	1040	7.8	6.1	
7/5/2001	8:47 AM	24.5	1340	7.8	6.1	
7/11/2001	11:05 AM	23.9	975	7.8	7.3	
7/19/2001	11:14 AM	24.2	1100	7.9	8.4	
7/26/2001	1:37 PM	27.6	1000	7.1	NA	
8/2/2001	9:19 AM	23.9	999	7.9	5.9	
8/9/2001	8:54 AM	25.9	1210	7.6	5.8	
8/16/2001	10:03 AM	24.1	1080	7.5	NA	
8/23/2001	9:00 AM	22.1	1030	7.7	6.8	
8/30/2001	1:14 PM	25.8	1430	8.3	NA	
9/6/2001	8:26 AM	20.8	1560	7.8	6.6	
9/13/2001	8:48 AM	20.1	1530	7.7	6.6	
9/20/2001	10:37 AM	21.5	1690	7.9	3.0	
9/27/2001	12:03 PM	22.5	1480	8.0	9.0	
10/4/2001	8:34 AM	19.9	1460	7.8	7.6	
10/11/2001	9:14 AM	17.8	1200	7.9	7.1	
10/18/2001	9:09 AM	18.3	1170	7.8	7.6	
10/25/2001	11:36 AM	15.8	1700	7.2	11.4	
11/1/2001	9:30 AM	16.0	1680	7.7	8.3	
11/8/2001	9:11 AM	14.6	1440	8.6	9.8	
11/15/2001	9:11 AM	18.3	1280	7.7	7.3	
11/20/2001	11:14 AM	14.4	1570	7.6	9.3	
11/29/2001	10:20 AM	9.9	1710	7.7	9.9	
12/6/2001	8:50 AM	9.9	1480	7.7	11.0	
12/13/2001	9:13 AM	9.4	2020	7.7	10.1	
12/20/2001	10:14 AM	10.8	2420	7.8	11.0	
12/27/2001	10:04 AM	10.7	2470	7.7	9.0	
1/3/2002	9:09 AM	12.9	2020	7.6	9.0	
1/10/2002	9:06 AM	12.2	2010	7.5	9.1	
1/17/2002	8:20 AM	7.8	2200	7.6	10.5	
1/24/2002	12:15 PM	8.8	2010	7.5	10.4	
1/31/2002	11:48 AM	8.2	1870	7.8	9.8	
2/7/2002	8:44 AM	10.5	1550	7.8	10.1	
2/14/2002	8:40 AM	11.3	1670	7.5	8.8	
2/21/2002	10:27 AM	14.6	1330	7.7	8.9	
2/28/2002	2:08 PM	17.1	1550	7.9	11.9	

E1: 541MER531 – Salt Slough @ Lander Avenue continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
3/7/2002	8:40 AM	14.4	1620	7.7	7.2	
3/14/2002	11:33 AM	13.3	1820	7.9	9.8	
3/21/2002	11:31 AM	15.5	1830	7.6	8.2	
3/28/2002	1:14 PM	18.6	2030	7.8	10.4	
4/4/2002	8:38 AM	17.9	1780	7.7	6.8	
4/11/2002	9:11 AM	18.4	1660	7.7	6.7	
4/18/2002	7:14 AM	14.6	1640	7.8	7.6	
4/24/2002	11:33 AM	20.0	1790	7.7	6.3	
5/2/2002	8:07 AM	16.4	1560	8.1	9.8	
5/9/2002	9:13 AM	18.3	1670	7.7	7.7	
5/16/2002	9:15 AM	20.5	1570	7.7	6.3	54.0
5/23/2002	6:55 AM	17.5	1120	7.6	NA	
5/30/2002	11:12 AM	25.9	1340	7.6	6.6	
6/6/2002	7:50 AM	24.4	1220	7.7	NA	
6/13/2002	11:01 AM	23.1	1230	8.0	NA	
6/20/2002	11:29 AM	24.7	1240	7.7	5.2	NA
6/27/2002	9:36 AM	23.5	1020	7.7	5.9	
7/3/2002	9:55 AM	24.9	1100	8.2	NA	
7/11/2002	11:51 AM	27.4	1340	7.7	NA	
7/18/2002	8:55 AM	23.8	1100	7.6	3.1	148
7/25/2002	8:25 AM	23.4	960	7.6	6.5	
7/30/2002	11:10 AM	24.2	784	7.7	6.4	140
8/1/2002	8:39 AM	24.1	923	7.8	6.3	
8/8/2002	9:56 AM	22.3	896	7.8	6.5	
8/15/2002	8:23 AM	24.1	948	7.7	6.4	
8/22/2002	8:46 AM	21.1	1110	7.7	7.3	
8/29/2002	11:41 AM	23.2	1270	7.7	8.4	68.0
9/5/2002	8:27 AM	21.5	1110	7.8	7.2	
9/12/2002	8:12 AM	21.4	1280	7.9	7.1	
9/19/2002	8:51 AM	20.5	1320	7.6	7.4	84.0
9/26/2002	11:34 AM	22.4	1260	8.0	8.8	
10/3/2002	9:05 AM	14.0	1260	8.0	9.5	
10/10/2002	11:14 AM	20.1	1360	7.8	5.9	
10/17/2002	11:58 AM	16.8	958	7.8	9.1	79.6
10/24/2002	9:48 AM	14.7	1110	7.9	9.0	
10/31/2002	12:05 PM	14.5	1390	7.7	8.8	71.2
11/7/2002	9:02 AM	13.3	1260	7.9	9.7	
11/14/2002	9:39 AM	14.2	1300	7.5	8.4	
11/21/2002	8:47 AM	12.4	1440	7.3	8.5	62.1
11/26/2002	11:22 AM	12.3	1590	7.9	10.3	

E1: 541MER531 – Salt Slough @ Lander Avenue continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
12/5/2002	8:57 AM	10.6	1510	7.7	10.8	NA
12/12/2002	8:59 AM	11.5	1590	7.6	10.7	
12/19/2002	11:48 AM	9.5	1360	7.4	8.9	55.0
12/24/2002	9:59 AM	8.0	1460	7.3	10.5	
1/2/2003	11:17 AM	9.9	1630	7.6	13.7	
1/9/2003	10:04 AM	10.2	1850	7.6	11.5	
1/16/2003	10:41 AM	11.7	1730	7.6	9.3	56.4
1/23/2003	8:28 AM	11.2	1700	7.0	11.4	
1/30/2003	9:20 AM	12.8	1910	7.6	9.0	49.8
2/6/2003	9:54 AM	9.7	2230	7.7	11.9	
2/13/2003	11:08 AM	13.0	2080	7.7	9.7	35.7
2/20/2003	10:57 AM	11.3	1340	7.8	10.9	89.2
2/27/2003	8:25 AM	12.6	1440	7.6	8.3	
3/6/2003	8:53 AM	13.4	1590	7.9	9.0	NA
3/13/2003	8:48 AM	17.4	1620	7.7	7.9	44.2
3/20/2003	8:24 AM	14.6	1820	7.7	8.7	51.5
3/27/2003	1:35 PM	17.5	1540	7.9	12.4	150
4/3/2003	12:30 PM	18.7	1780	7.3	8.3	61.4
4/10/2003	8:29 AM	18.2	1840	7.8	7.7	83.6
4/17/2003	8:41 AM	16.0	1590	7.7	7.4	82.8
4/24/2003	9:19 AM	16.5	1850	7.6	7.3	64.3
5/1/2003	8:53 AM	17.2	1650	7.7	8.1	NA
5/8/2003	8:18 AM	15.8	1770	7.7	8.5	64.3
5/15/2003	8:35 AM	17.1	1820	7.7	9.6	
5/22/2003	9:05 AM	22.6	1270	7.7	6.5	61.2
5/29/2003	9:00 AM	24.8	1250	7.6	5.0	
6/5/2003	8:48 AM	23.4	1140	7.6	6.0	118
6/12/2003	9:35 AM	19.8	1240	8.0	8.0	170
6/19/2003	8:46 AM	21.1	1220	7.7	6.4	137
6/26/2003	9:04 AM	23.8	1050	7.7	6.1	100
7/3/2003	8:37 AM	23.4	921	7.7	7.2	
7/10/2003	9:03 AM	24.3	990	7.7	7.2	
7/17/2003	8:58 AM	25.6	906	7.8	5.5	
7/24/2003	8:49 AM	26.2	1080	7.8	6.7	129
7/31/2003	8:49 AM	25.9	936	7.6	5.0	123
8/7/2003	8:45 AM	23.0	824	7.7	6.3	146
8/14/2003	8:33 AM	22.8	1030	7.8	6.8	

E1: 541MER531 – Salt Slough @ Lander Avenue continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
8/21/2003	8:44 AM	23.9	839	7.7	6.3	133
8/28/2003	8:48 AM	23.3	772	7.7	NA	135
9/4/2003	8:45 AM	24.2	1060	7.9	6.6	103
9/11/2003	9:36 AM	20.8	1180	8.0	8.5	75.6
9/18/2003	8:45 AM	18.3	1290	7.8	1.2	330
9/25/2003	8:59 AM	19.9	1260	8.0	7.6	66.4
10/2/2003	9:14 AM	19.2	1070	7.8	7.9	113
10/9/2003	8:32 AM	19.3	1040	7.8	5.5	209
10/16/2003	10:58 AM	17.1	1250	7.8	10.2	70.0
10/23/2003	9:10 AM	18.4	1240	7.7	7.6	104
10/30/2003	8:50 AM	14.4	1240	7.8	8.9	73.6
11/6/2003	8:41 AM	12.8	1200	7.7	9.6	73.0
11/13/2003	8:19 AM	12.8	1390	7.7	9.1	51.6
11/20/2003	8:40 AM	12.6	1380	7.6	8.9	56.2
11/26/2003	8:21 AM	8.2	1540	7.7	11.0	50.9
12/4/2003	8:27 AM	12.2	1670	7.9	10.0	
12/11/2003	8:24 AM	11.2	2020	7.5	10.2	NA
12/18/2003	8:50 AM	8.6	1920	7.6	11.2	NA
12/23/2003	8:36 AM	11.4	1740	7.4	10.3	NA
12/30/2003	8:38 AM	8.3	1600	7.7	12.0	NA
1/8/2004	8:07 AM	8.5	1560	7.7	10.0	NA
1/15/2004	8:44 AM	9.8	1690	7.7	9.8	NA
1/22/2004	8:47 AM	9.4	1680	7.7	14.9	44.4
1/29/2004	8:54 AM	10.3	1630	7.6	11.5	49.0
2/5/2004	8:41 AM	10.1	1510	7.7	11.3	76.1
2/12/2004	8:30 AM	10.6	1860	7.4	10.8	NA
2/19/2004	8:38 AM	12.1	1400	7.5	9.6	NA
2/26/2004	8:37 AM	11.9	1500	7.5	8.0	NA
3/4/2004	8:40 AM	12.2	1420	7.6	8.8	125
3/11/2004	8:46 AM	17.1	1720	7.6	6.6	NA
3/18/2004	8:04 AM	19.0	1950	7.9	8.1	
3/25/2004	8:45 AM	17.4	1670	7.7	7.1	62.0
4/1/2004	8:43 AM	15.7	1980	7.6	8.8	
4/8/2004	8:40 AM	17.2	1700	7.8	7.3	85.1
4/15/2004	8:57 AM	17.5	1690	7.9	7.8	91.3
4/22/2004	8:50 AM	16.2	1480	7.8	9.1	120
4/29/2004	10:02 AM	17.2	1800	7.9	NA	79.4
5/6/2004	8:54 AM	21.2	1360	7.8	10.8	84.5
5/13/2004	9:20 AM	18.8	1330	7.8	12.9	106
5/20/2004	8:49 AM	19.9	1320	7.6	7.4	96.7
5/27/2004	8:35 AM	21.1	1460	7.8	NA	NA
6/3/2004	9:25 AM	23.0	1190	8.0	6.9	113
6/10/2004	9:18 AM	19.4	1010	7.8	7.8	159
6/17/2004	9:10 AM	22.9	1100	7.7	6.3	116
6/24/2004	9:01 AM	22.4	1130	7.8	6.6	18.8

E1: 541MER531 – Salt Slough @ Lander Avenue continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
7/1/2004	8:53 AM	21.4	1220	7.9	7.5	NA
7/8/2004	8:51 AM	22.0	1110	7.8	6.9	NA
7/15/2004	9:04 AM	23.7	1090	7.9	6.2	NA
7/22/2004	10:43 AM	26.1	966	8.1	8.3	NA
7/29/2004	8:32 AM	23.4	1150	7.8	6.6	NA
8/5/2004	8:18 AM	23.2	1000	7.4	6.7	NA
8/12/2004	8:36 AM	24.9	1100	7.9	5.6	NA
8/19/2004	10:49 AM	25.3	955	7.9	7.3	NA
8/26/2004	8:43 AM	22.7	1160	8.1	6.8	NA
9/2/2004	8:26 AM	23.1	1480	7.8	6.3	NA
9/9/2004	9:50 AM	23.5	1130	7.9	7.7	NA
9/16/2004	10:27 AM	21.5	1170	8.0	7.8	NA
9/23/2004	8:57 AM	18.4	1110	8.1	8.6	NA
9/30/2004	8:37 AM	17.3	1190	7.7	4.6	NA
10/7/2004	8:09 AM	18.8	1280	8.0	12.1	
10/14/2004	8:28 AM	17.6	1210	8.0	8.6	
10/21/2004	9:20 AM	14.8	957	NA	9.5	
10/28/2004	8:29 AM	12.8	1060	7.6	10.9	
11/4/2004	9:08 AM	12.3	1340	7.8	9.3	
11/11/2004	8:17 AM	14.0	1400	7.0	8.9	
11/18/2004	8:28 AM	13.5	1250	7.5	9.4	
11/23/2004	11:10 AM	9.5	1330	7.5	10.2	
12/2/2004	8:43 AM	7.2	1590	7.9	11.7	
12/9/2004	8:25 AM	11.2	1660	7.9	10.5	
12/16/2004	8:17 AM	11.1	1770	7.8	10.7	
12/22/2004	11:23 AM	9.1	1750	7.7	13.6	
12/29/2004	9:43 AM	10.1	1720	7.7	9.2	
1/6/2005	7:53 AM	9.7	1500	7.8	11.4	
1/13/2005	8:40 AM	9.4	1590	7.7	11.2	
1/20/2005	8:45 AM	9.4	2040	7.4	9.4	
1/27/2005	8:20 AM	11.6	2340	7.6	7.8	
2/3/2005	8:39 AM	10.9	2060	7.6	9.1	
2/10/2005	8:08 AM	12.1	2040	7.7	10.0	
2/17/2005	8:54 AM	14.0	1350	7.6	7.5	
2/24/2005	8:20 AM	14.5	1670	7.6	6.0	
3/3/2005	8:25 AM	15.0	1550	7.6	8.5	
3/10/2005	9:11 AM	18.2	1690	7.6	10.3	
3/17/2005	8:20 AM	16.1	1860	7.8	11.1	
3/24/2005	8:26 AM	14.3	1500	7.4	7.4	
3/31/2005	8:29 AM	14.3	1840	7.6	8.1	
4/7/2005	8:34 AM	17.5	1997	7.6	7.6	
4/14/2005	8:27 AM	14.7	1580	7.8	9.5	
4/21/2005	8:24 AM	16.8	1430	7.9	7.7	
4/28/2005	8:23 AM	17.6	1220	7.8	9.1	
5/5/2005	8:47 AM	19.6	1400	7.5	6.8	
5/12/2005	8:23 AM	18.8	1400	7.5	7.9	
5/19/2005	8:48 AM	20.0	1610	7.4	7.1	
5/26/2005	8:53 AM	24.5	1180	7.1	5.0	
6/2/2005	8:35 AM	21.6	769	7.5	7.3	
6/9/2005	8:07 AM	19.9	808	7.4	5.8	
6/16/2005	8:23 AM	22.2	807	7.5	7.0	

E1: 541MER531 – Salt Slough @ Lander Avenue continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
6/23/2005	9:10 AM	22.6	1070	NA	7.6	
6/30/2005	8:36 AM	24.5	886	7.5	6.0	
7/7/2005	8:39 AM	24.1	801	7.6	7.1	
7/13/2005	11:46 AM	28.1	779	7.2	8.6	
7/21/2005	8:24 AM	26.7	911	7.9	5.7	
7/28/2005	8:39 AM	25.8	1010	7.8	6.8	
8/4/2005	8:35 AM	25.6	945	7.7	6.0	
8/11/2005	8:57 AM	24.8	866	7.6	7.1	
8/18/2005	9:04 AM	23.8	940	7.4	6.3	
8/25/2005	8:38 AM	23.3	970	7.7	5.9	
9/1/2005	8:35 AM	22.8	962	7.7	9.1	
9/8/2005	8:42 AM	21.3	1020	7.9	8.7	
9/15/2005	8:25 AM	19.1	925	7.9	8.9	
9/22/2005	9:04 AM	21.3	833	7.8	8.3	
9/29/2005	8:28 AM	19.9	1100	7.7	7.5	

Count	262	262	260	216	60
Min	6.7	769	6.3	1.2	18.8
Max	28.1	2470	8.6	14.9	330
Mean	17.3	1420	7.7	8.3	94
Geo Mean	16.4	1370	7.7	8.0	84.3
Median	17.5	1400	7.7	8.1	83.2
Quartile 1	12.4	1130	7.6	6.8	61.9
Quartile 3	22.6	1670	7.8	9.6	119

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

E1: 541MER531 – Salt Slough @ Lander Avenue continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
10/26/2000	60	4.0		
11/30/2000	34	1.4		
12/21/2000	NA			
12/28/2000	NA	4.9		
1/25/2001	73	6.4		
2/22/2001	75	7.9		
3/29/2001	NA	<1		
4/26/2001		6.6		
5/31/2001	94	7.7		
6/7/2001	120	11		
6/14/2001	170	10		
6/21/2001	NA	11		
6/28/2001	160	8.0		
7/26/2001		6.1		
8/30/2001	60	14		
9/20/2001		21		
9/27/2001	39			
<hr/>				
10/25/2001		21		
11/29/2001		<1		
1/31/2002		3.4		
3/28/2002		NA		
4/24/2002		11		
5/30/2002		4.3		
6/20/2002		5.8		
7/30/2002			>2419.6	488
9/26/2002		4.7		
<hr/>				
10/17/2002			>2419.6	411
10/31/2002		NA		
11/21/2002		6.4		
12/19/2002		7.0		
1/16/2003			613	84
3/27/2003		4.8		
4/24/2003		8.6	>2419.6	152
5/29/2003		7.1		
6/26/2003		7.2		
7/31/2003			>2419.6	47
8/28/2003			>2419.6	84
9/25/2003			>2419.6	56
<hr/>				
10/30/2003			>2419.6	140
11/20/2003			>2419.6	204
1/29/2004			1414	63
2/26/2004			>2419.6	152

E1: 541MER531 – Salt Slough @ Lander Avenue continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
3/25/2004			>2419.6	62
4/29/2004			>2419.6	111
5/27/2004			>2419.6	122
6/24/2004			>2419.6	42
7/29/2004			>2419.6	49
8/26/2004			>2419.6	68
9/30/2004			>2419.6	161
10/28/2004			>2419.6	613
11/23/2004		8.3	>2419.6	172
12/29/2004		7.5	>2419.6	921
1/27/2005		9.1	2420	145
2/24/2005		10	>2419.6	108
3/31/2005		8.9	>2419.6	59
4/28/2005		NA	>2419.6	78
5/26/2005		6.8	>2419.6	866
6/30/2005		4.8	>2419.6	86
7/28/2005		5.8	>2419.6	58
8/25/2005		4.6	>2419.6	93
9/29/2005		5.2	>2419.6	86
Count	10	38	30	30
Min	34	0.5	613	42
Max	170	21	2420	921
Mean	89	7.5	NA	NA
Geo Mean	78	6	2271	124
Median	74	6.9	2420	101
Quartile 1	60	4.8	2420	64
Quartile 3	114	8.8	2420	159

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

E1: 541MER531 – Salt Slough @ Lander 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)
Count	14	NA	13	NA	13	16	15	27	27
Min	1.0	NA	0.5	NA	0.2	0.1	8.2	1.0	2.0
Max	15.0	NA	1.0	NA	0.4	0.5	10.0	4.2	7.1
Mean	6.0	NA	1.0	NA	0.3	0.5	8.9	2.1	3.6
Geo Mean	4.3	NA	0.9	NA	0.3	0.5	8.9	2.0	3.5
Median	5.4	NA	1.0	NA	0.3	0.5	9.0	2.0	3.3
Quartile 1	2.4	NA	1.0	NA	0.2	0.5	8.6	1.6	2.8
Quartile 3	7.9	NA	1.0	NA	0.4	0.5	9.2	2.5	4.3

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

E1: 541MER531 – Salt Slough @ Lander 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)
10/26/2000	300			2.5	2.5	<5	<5		
11/30/2000	320			1.3	1.6	<5	<5	27	
12/28/2000	340			1.7	2.3	<5	<5	4.7	
1/25/2001	360			2.8	4	<5	5.5	6.2	
2/22/2001	350			2.1	5.4	<5	5.6	10	
3/29/2001	340			3.1	4.9	<5	6.5	11	
4/26/2001	300			2.6	4.4	<5	5.6	9.6	
5/31/2001	270			3.8	4.6	<5	6.6	12	
6/7/2001	290	6.3	<1	3.7	6	<5	6.9	14	<0.2
6/14/2001	290	7.2	<1	5.4	6.9	<5	8.9	18	<0.2
6/21/2001	NA	6.6	<1	4.7	5.3	<5	8.1	15	<0.2
6/28/2001	NA	6.8	<1	5.5	6.5	<5	8.5	18	<0.2
7/26/2001		NA	NA	5.5	5.4	<5	7.6	NA	NA
8/30/2001	280	5.6	<1	1.7	2.2	<5	<5	5.7	
9/27/2001	280	6.2	<0.1	2.7	4.6	<5	5.1	8.7	<0.2
10/25/2001	310	4.4	<0.1	<1	1.9	<5	<5	<2	NA
11/29/2001	320	4.9	<0.1	<1	<1	<5	<5	4.6	<0.2
12/27/2001		4.9	<0.1	3.1	2.7	<5	5.4	7.5	<0.2
2/28/2002		5.6	<0.1	3.5	5.3	<5.0	6.2	14	<0.2
3/28/2002		<4.0	<0.1	2.9	2.5	<5.0	NA	7.2	<0.2
4/24/2002		6.9	<0.1	2.6	3.9	<5.0	6.3	12	<0.2
5/30/2002		6.3	<0.1	4.2	4.2	<5.0	6.4	9.6	<0.2
6/20/2002	270	8.4	<0.1	5.6	5.5	<5.0	7.6	15	<0.2
9/26/2002	240	4.4	<0.1	2.3	2.7	<5.0	<5.0	6.5	<0.2
10/31/2002	280	6.7	<0.1	3.3	3.4	<5.0	5.6	7.3	<0.2
11/21/2002	300	4.2	<0.1	4.2	3.9	<5.0	6.8	11	<0.2
3/27/2003	360	6.4	<0.1	2.8	3.2	<5.0	<5.0	5.8	<0.2
4/24/2003	380	5.3	NA	NA	NA	<5.0	5.6	12	<0.2
5/29/2003	270	7.3	<0.1	1.8	5.5	<5.0	<5.0	7.2	<0.2
6/26/2003	240	8.2	<0.1	6.2	6.6	<5.0	8.7	16	<0.2

E1: 541MER531 – Salt Slough @ Lander 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)
Count	22	21	20	29	29	30	29	28	19
Min	240.0	2.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Max	380.0	8.4	0.5	6.2	6.9	2.5	8.9	27.0	0.1
Mean	304.1	5.9	0.2	3.2	4.1	2.5	5.4	10.6	0.1
Geo Mean	301.8	5.7	0.1	2.8	3.6	2.5	4.9	9.2	0.1
Median	300.0	6.3	0.1	2.9	4.2	2.5	5.6	9.8	0.1
Quartile 1	280.0	4.9	0.1	2.3	2.7	2.5	2.5	7.0	0.1
Quartile 3	335.0	6.8	0.2	4.2	5.4	2.5	6.8	14.0	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

E1: 541MER531 – Salt Slough @ Lander 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)
10/26/2000	300			<1	<1	<5	<5	<2	
11/30/2000	320			<1	<1	<5	<5	<2	
12/28/2000	340			<1	<1	<5	<5	<2	
1/25/2001	360			<1	<1	<5	<5	<2	
2/22/2001	350			<1	1.3	<5	<5	<2	
3/29/2001	340			<1	2.4	<5	<5	<2	
4/26/2001	300			<1	<1	<5	<5	<2	
5/31/2001	270			<1	1.1	<5	<5	2.4	
6/7/2001	290	3.4	<1	<1	1.9	<5	<5	<2	<0.2
6/14/2001	290	4.3	<1	<1	1.9	<5	<5	<2	<0.2
6/21/2001	NA	4.4	<1	<1	<1	<5	<5	<2	<0.2
6/28/2001	NA	4.4	<1	<1	<1	<5	<5	<2	<0.2
7/26/2001		NA	NA	NA	NA	NA	NA	NA	NA
8/30/2001	280	4.6	<1	<1	2.2	<5	<5	<2	
9/27/2001	280	<4	<0.1	<1	1.7	<5	<5	<2	<0.2
10/25/2001	310	<4	<0.1	<1	1.4	<5	<5	<2	NA
11/29/2001	320	<4	<0.1	<1	<1	<5	<5	7	<0.2
12/27/2001		<4	<0.1	<1	<1	<5	<5	<2	<2
2/28/2002		<4.0	<0.1	<1.0	2.1	<5.0	<5.0	4.1	<0.2
3/28/2002		<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	2.5	<0.2
4/24/2002		4.2	<0.1	<1.0	2.3	<5.0	<5.0	5.1	<0.2
5/30/2002		4	<0.1	<1.0	1.4	<5.0	<5.0	<2.0	<0.2
6/20/2002	270	4.9	<0.1	<1.0	2.1	<5.0	<5.0	<2.0	<0.2
9/26/2002	240	4.6	<0.1	<1.0	1.9	<5.0	<5.0	<2.0	<0.2
10/31/2002	280	<4.0	<0.1	<1.0	1.2	<5.0	<5.0	<2.0	<0.2
11/21/2002	300	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
3/27/2003	360								
4/24/2003	380								
5/29/2003	270								
6/26/2003	240								

E1: 541MER531 – Salt Slough @ Lander 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)
Count	22	17	17	25	25	25	25	25	15
Min	240.0	2.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Max	380.0	4.9	0.5	0.5	2.4	2.5	2.5	7.0	1.0
Mean	304.1	3.2	0.2	0.5	1.2	2.5	2.5	1.6	0.2
Geo Mean	301.8	3.0	0.1	0.5	1.0	2.5	2.5	1.3	0.1
Median	300.0	3.4	0.1	0.5	1.2	2.5	2.5	1.0	0.1
Quartile 1	280.0	2.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Quartile 3	335.0	4.4	0.5	0.5	1.9	2.5	2.5	1.0	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

E1: 541MER531 – Salt Slough @ Lander 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)
10/26/2000	240	210	62	36	950	<1	250	200	210
11/30/2000	NA	210	64	38	1000	<1	240	200	220
12/28/2000	270	250	68	42	1100	<1	250	210	250
1/25/2001	260	290	73	42	1100	<1	240	200	240
2/22/2001	250	250	75	39	1000	<1	230	190	210
3/29/2001	210	240	73	39	960	<1	220	180	200
4/26/2001	210	200	66	34	850	<1	170	170	170
5/31/2001	200	150	56	31	760	<1	150	150	160
6/7/2001	200	170	61	33	730	<1	180	150	160
6/14/2001	180	160	64	33	740	<1	190	160	160
6/21/2001	150	140	54	28	670	<1	170	140	130
6/28/2001	170	150	NA	NA	550	<1.0	160	130	NA
8/30/2001	220	160	59	32	850	<1	220	180	180
9/27/2001	240	170	56	34	880	<1	210	170	210
10/25/2001	280	220	62	39	NA	<1	240	200	240
11/29/2001	260	240	65	39	1000	<1	250	200	230
3/27/2003			79	41					
4/24/2003	310	260	79	44					
5/29/2003	190	150	58	30					
6/26/2003	270	260	55	25					
Count	18	19	19	19	15	16	16	16	15
Min	150	140	54	25	550	0.5	150	130	130
Max	310	290	79	44	1100	0.5	250	210	250
Mean	230	200	65	36	880	0.5	210	180	200
Geo Mean	220	200	64	35	860	0.5	210	180	200
Median	230	210	64	36	880	0.5	220	180	210
Quartile 1	200	160	59	33	750	0.5	180	160	170
Quartile 3	260	250	71	39	1000	0.5	240	200	230

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

E1: 541MER531 – Salt Slough @ Lander Avenue 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(%)
10/26/2000	100	100	NA	NA			
6/18/2001	100	100	100	90			
10/25/2001	100	100	100	100			
11/29/2001	NA	NA	100	100			
12/27/2001	100	100	100	100			
1/31/2002	100	100	100	100			
2/28/2002	85	100	100	100			
4/24/2002	100	100	100	90			
5/30/2002	100	100	100	100			
6/20/2002	100	100	100	100			
8/29/2002	100	100	100	100			
9/26/2002	100	95	100	100			
9/26/2002	100	95	100	100			
10/31/2002	100	100	100	100			
11/21/2002	100	100	100	100			
12/19/2002	100	100	100	100	2.39*	2.93	N/A
3/31/2003	100	100	100	100	4.36**	1.73	N/A
5/29/2003	100	100	100	100	4.23**	2.03	1.0
Count	17	17	17	17	3	3	1

* 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

E2: 541MER536 – Mud Slough Upstream of SLD Terminus

Station Code: 541MER536

Location: Latitude 37.25417, Longitude -120.90694

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/5/2000	11:01 AM	20.9	738	7.7		
10/12/2000	12:45 PM	17.9	718	7.8		
10/19/2000	9:30 AM	17.9	796	7.7		
10/26/2000	4:10 PM	14.5	901	7.5		
11/2/2000	10:35 AM	15.0	978	7.6		
11/9/2000	11:35 AM	13.3	1110	7.7		
11/16/2000	10:55 AM	10.7	1290	7.5		
11/21/2000	8:50 AM	9.9	1340	7.9		
11/30/2000	12:35 PM	11.6	1320	7.8		
12/7/2000	10:50 AM	9.6	1430	7.9		
12/12/2000	10:15 AM	11.6	1440	7.6		
12/21/2000	12:25 PM	10.3	1490	7.8		
12/28/2000	10:27 AM	7.8	1590	7.7		
1/4/2001	10:30 AM	8.0	1750	7.9		
1/11/2001	12:01 PM	8.9	1640	6.9		
1/18/2001	11:40 AM	7.6	1630	7.6		
1/25/2001	11:47 AM	9.7	1690	7.9		
2/1/2001	12:04 PM	8.6	1750	7.3		
2/8/2001	11:35 AM	8.4	1890	8.0		
2/15/2001	12:25 PM	11.6	1840	8.2		
2/22/2001	1:20 PM	12.7	1960	7.9		
3/1/2001	10:15 AM	12.1	1940	7.8		
3/8/2001	10:55 AM	16.6	1750	7.7		
3/15/2001	12:40 PM	17.5	1960	7.9		
3/22/2001	12:55 PM	20.8	2140	7.9		
3/29/2001	11:48 AM	20.4	2700	8.1		
4/5/2001	1:00 PM	18.0	2330	8.5		
4/12/2001	11:07 AM	14.8	1890	8.0		
4/19/2001	12:40 PM	18.3	2460	8.3		
4/26/2001	11:20 AM	23.8	3400	8.0		
5/3/2001	11:10 AM	16.6	1880	8.0		
5/10/2001	10:03 AM	23.3	1460	7.8		
5/17/2001	1:07 PM	26.5	1450	7.4		
5/24/2001	11:37 AM	26.6	1910	7.6		
5/31/2001	11:30 AM	29.1	1580	8.1		
6/6/2001	NA	25.0	2590	8.0	9.4	
6/7/2001	1:32 PM	28.1	1710	8.3	6.8	
6/13/2001	8:34 AM	18.0	2960	6.5	7.7	

E2: 541MER536 – Mud Slough Upstream of SLD Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
6/14/2001	11:21 AM	23.1	3240	8.1	13.1	
6/20/2001	11:08 AM	27.5	2290	8.1	13.1	
6/21/2001	2:35 PM	32.8	2660	8.4	15.7	
6/28/2001	1:58 PM	29.3	2570	8.5	16.6	
7/5/2001	10:18 AM	25.7	1670	7.8	NA	
7/11/2001	1:05 PM	28.1	2350	8.2	17.0	
7/19/2001	1:40 PM	29.2	2790	8.3	13.2	
7/26/2001	9:18 AM	23.1	2200	7.9	10.7	
8/2/2001	11:00 AM	24.4	2000	8.3	11.3	
8/9/2001	9:51 AM	23.2	3170	7.9	8.0	
8/16/2001	11:32 AM	25.6	1390	8.0	7.8	
8/23/2001	9:54 AM	22.7	812	8.1	8.2	
8/30/2001	10:56 AM	23.3	1430	7.7	6.4	
9/6/2001	9:31 AM	21.9	1200	7.8	4.9	
9/13/2001	10:53 AM	23.4	1230	7.8	7.7	
9/20/2001	9:56 AM	22.4	1120	7.8	5.3	
9/27/2001	10:30 AM	21.5	1020	7.6	4.3	
10/4/2001	9:17 AM	22.0	1130	7.5	2.1	
10/11/2001	10:41 AM	18.3	1130	7.6	4.2	
10/18/2001	10:30 AM	18.7	1230	7.5	4.4	
10/25/2001	11:19 AM	15.8	1420	7.7	6.3	
11/1/2001	11:17 AM	17.1	1330	7.8	7.0	
11/8/2001	11:19 AM	15.4	1450	8.1	7.3	
11/15/2001	9:51 AM	15.5	1250	7.8	6.0	
11/20/2001	1:52 PM	15.0	1420	7.9	8.7	
11/29/2001	9:55 AM	10.9	1540	NA	NA	
12/6/2001	10:29 AM	9.9	1590	7.9	9.9	
12/13/2001	10:13 AM	8.8	2110	8.0	10.6	
12/20/2001	11:37 AM	9.7	1960	8.1	12.1	
12/27/2001	2:10 PM	10.3	1920	7.9	11.7	
1/3/2002	10:57 AM	12.9	1700	7.7	8.4	
1/10/2002	10:14 AM	11.7	1880	7.9	9.5	
1/17/2002	10:05 AM	6.6	2090	7.9	11.1	
1/24/2002	12:41 PM	8.2	2300	7.9	12.1	
1/31/2002	12:20 PM	7.0	2240	8.2	13.5	
2/7/2002	9:48 AM	10.6	2080	8.1	10.8	
2/14/2002	10:08 AM	11.5	2250	7.9	8.4	
2/21/2002	11:12 AM	14.7	2240	7.8	9.0	
2/28/2002	10:46 AM	15.9	2160	7.9	7.4	
3/7/2002	9:17 AM	14.6	2290	8.1	9.1	

E2: 541MER536 – Mud Slough Upstream of SLD Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
3/14/2002	10:31 AM	11.8	2820	7.9	11.0	
3/21/2002	10:27 AM	15.6	2870	8.4	8.7	
3/28/2002	12:30 PM	19.1	3200	8.4	9.5	
4/4/2002	9:28 AM	17.8	3290	8.1	7.9	
4/11/2002	10:17 AM	18.9	3820	8.1	10.4	
4/18/2002	8:56 AM	14.9	2080	8.0	9.1	
4/25/2002	10:39 AM	20.5	1410	7.8	8.0	
5/2/2002	9:07 AM	15.6	3050	8.2	12.3	
5/9/2002	10:59 AM	20.5	1260	8.2	11.2	
5/16/2002	10:30 AM	21.7	1530	7.1	NA	NA
5/23/2002	8:10 AM	16.6	1660	8.0	NA	
5/30/2002	1:24 PM	31.4	2580	8.3	14.0	
6/6/2002	9:14 AM	23.9	1590	8.0	NA	
6/13/2002	11:49 AM	25.2	1940	8.3	NA	
6/20/2002	9:20 AM	23.8	1190	8.5	NA	
6/27/2002	10:37 AM	24.6	2890	8.2	11.0	
7/3/2002	11:25 AM	26.4	2420	8.6	NA	
7/11/2002	12:58 PM	29.8	1620	8.3	NA	
7/18/2002	10:42 AM	25.3	1710	8.3	10.9	68.9
7/25/2002	9:12 AM	24.0	853	7.9	7.8	
8/1/2002	10:17 AM	26.3	1150	8.3	9.4	
8/8/2002	10:45 AM	23.8	1250	8.7	11.2	
8/15/2002	9:30 AM	23.3	1350	8.1	9.5	
8/22/2002	9:28 AM	21.9	785	7.8	7.5	
8/29/2002	9:22 AM	21.4	1310	8.3	NA	
9/5/2002	9:10 AM	21.2	1270	8.0	7.8	
9/12/2002	9:37 AM	21.8	1290	8.0	8.9	
9/19/2002	9:43 AM	21.7	1120	8.1	9.1	NA
9/26/2002	12:22 PM	25.0	972	7.8	9.3	
10/3/2002	9:58 AM	15.1	1190	7.9	12.0	
10/10/2002	1:10 PM	23.4	1360	8.3	9.8	
10/17/2002	9:30 AM	16.6	937	8.1	8.7	68.2
10/24/2002	10:57 AM	15.9	989	7.7	7.2	
10/31/2002	10:30 AM	14.3	1200	7.7	4.8	15.3
11/7/2002	10:13 AM	14.0	1330	7.7	5.7	
11/14/2002	10:18 AM	14.2	1300	7.7	7.0	
11/21/2002	12:56 PM	13.4	1510	7.6	7.1	18.0
11/26/2002	12:15 PM	12.4	1800	7.9	8.8	
12/5/2002	10:15 AM	10.9	1830	7.8	9.4	35.0
12/12/2002	9:33 AM	11.2	1640	7.7	9.7	
12/19/2002	8:39 AM	8.8	1560	7.8	9.0	23.7

E2: 541MER536 – Mud Slough Upstream of SLD Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
12/24/2002	INA	INA	INA	INA	INA	
1/2/2003	1:02 PM	10.4	1310	7.8	14.3	
1/9/2003	10:43 AM	9.6	1990	7.7	11.4	
1/16/2003	12:17 PM	11.6	1570	7.8	9.0	64.6
1/23/2003	9:05 AM	10.6	1960	7.5	13.1	
1/30/2003	10:58 AM	12.7	2030	7.7	8.1	37.1
2/6/2003	10:31 AM	9.1	2310	7.9	12.5	
2/13/2003	12:25 PM	13.1	1890	7.9	9.8	31.6
2/20/2003	11:38 AM	12.1	1960	8.0	11.4	44.6
2/27/2003	9:20 AM	12.6	1930	7.9	7.8	
3/6/2003	11:12 AM	14.9	2150	7.8	11.6	NA
3/13/2003	10:36 AM	18.4	1970	8.0	8.1	142.0
3/20/2003	9:05 AM	14.7	2180	8.0	8.8	113.0
3/27/2003	9:57 AM	15.7	1940	8.3	9.2	123.0
4/3/2003	1:22 PM	17.5	2180	7.7	10.8	82.8
4/10/2003	10:32 AM	19.7	2790	8.2	10.6	52.8
4/17/2003	9:27 AM	16.5	3300	8.0	9.7	34.2
4/24/2003	10:27 AM	16.5	1880	8.4	10.2	66.0
5/1/2003	9:46 AM	17.4	2020	8.2	9.8	NA
5/8/2003	9:13 AM	16.0	2820	7.9	NA	25.9
5/15/2003	9:26 AM	18.3	2220	7.9	10.7	
5/22/2003	10:30 AM	23.9	2190	8.1	10.6	43.6
5/29/2003	10:05 AM	25.4	1650	7.9	8.3	
6/5/2003	10:18 AM	25.0	1130	8.1	7.6	110.0
6/12/2003	10:35 AM	21.6	1210	8.2	9.3	126.0
6/19/2003	10:30 AM	23.9	1650	8.4	7.8	78.2
6/26/2003	9:51 AM	24.5	1210	8.1	9.2	114.0
7/3/2003	9:57 AM	24.7	1260	8.2	13.6	
7/10/2003	9:49 AM	24.5	1560	8.4	11.9	
7/17/2003	10:03 AM	26.1	711	8.0	6.6	
7/24/2003	9:36 AM	26.0	1260	8.4	9.8	92.9
7/31/2003	10:05 AM	24.7	1360	8.5	7.7	41.0
8/7/2003	9:29 AM	23.6	1010	8.2	9.0	102.0
8/14/2003	9:45 AM	21.8	930	8.4	NA	
8/21/2003	9:20 AM	22.5	1260	8.1	8.8	65.0
8/28/2003	9:45 AM	22.9	795	7.7	NA	33.2
9/4/2003	9:25 AM	24.6	783	7.7	5.5	22.0
9/11/2003	11:50 AM	INA	INA	INA	INA	INA
9/18/2003	9:46 AM	20.1	679	7.8	7.7	12.3
9/25/2003	10:33 AM	21.9	722	7.5	4.2	49.5
10/2/2003	10:15 AM	20.8	774	7.4	4.4	28.8

E2: 541MER536 – Mud Slough Upstream of SLD Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/9/2003	9:43 AM	20.6	808	7.4	3.9	24.3
10/16/2003	11:49 AM	18.2	989	7.5	6.1	23.7
10/23/2003	10:58 AM	19.4	986	7.5	4.9	33.1
10/30/2003	9:17 AM	15.3	1150	7.7	6.2	15.9
11/6/2003	10:08 AM	13.8	1130	7.7	8.3	32.0
11/13/2003	8:57 AM	13.1	1190	7.7	7.8	19.2
11/20/2003	9:41 AM	13.3	1230	7.7	7.9	NA
11/26/2003	8:56 AM	7.9	1410	7.9	10.1	12.2
12/4/2003	9:36 AM	12.0	1500	7.8	9.6	
12/11/2003	9:07 AM	10.7	1500	7.9	10.8	NA
12/18/2003	9:58 AM	8.6	1560	8.0	12.6	NA
12/23/2003	9:28 AM	10.8	1640	7.7	13.5	NA
12/30/2003	10:05 AM	8.1	1530	7.9	12.2	NA
1/8/2004	8:42 AM	8.9	1740	7.8	9.8	NA
1/15/2004	10:00 AM	9.6	1980	7.8	9.3	NA
1/22/2004	9:27 AM	8.6	2010	7.8	14.3	24.2
1/29/2004	10:20 AM	10.5	2140	7.9	9.8	NA
2/5/2004	9:20 AM	9.6	2150	8.0	11.4	35.6
2/12/2004	9:35 AM	10.5	2350	8.0	11.4	NA
2/19/2004	9:14 AM	12.0	2230	7.9	11.0	NA
2/26/2004	9:54 AM	11.2	1970	7.9	8.8	NA
3/4/2004	9:26 AM	11.8	1780	8.1	10.3	100.0
3/11/2004	10:06 AM	17.1	2180	7.9	8.3	NA
3/18/2004	8:41 AM	19.2	2370	8.0	8.3	
3/25/2004	10:19 AM	18.1	2390	8.1	7.4	85.6
4/1/2004	9:41 AM	15.5	2360	8.3	10.2	
4/8/2004	9:58 AM	17.8	3720	8.2	9.9	40.0
4/15/2004	9:52 AM	17.6	2420	8.2	10.5	57.5
4/22/2004	10:09 AM	16.0	3210	8.4	13.7	54.9
4/29/2004	11:16 AM	19.4	1720	8.2	NA	58.0
5/6/2004	10:44 AM	22.6	2090	8.0	18.9	39.4
5/13/2004	10:26 AM	20.1	1110	8.1	19.0	92.2
5/20/2004	10:12 AM	21.4	NA	8.0	8.9	46.6
5/27/2004	9:36 AM	22.4	1550	7.9	NA	NA
6/3/2004	10:34 AM	24.0	2290	8.3	12.1	51.5
6/10/2004	10:17 AM	21.4	2300	8.5	11.6	26.9
6/17/2004	10:55 AM	25.2	1630	8.1	11.3	30.8
6/24/2004	10:01 AM	22.9	1730	8.0	8.9	51.3
7/1/2004	10:08 AM	22.5	1530	8.1	10.8	NA
7/8/2004	9:46 AM	24.7	1250	7.9	7.9	NA
7/15/2004	10:17 AM	25.5	1150	7.9	10.8	NA

E2: 541MER536 – Mud Slough Upstream of SLD Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
7/22/2004	11:45 AM	29.1	1280	8.2	12.5	NA
7/29/2004	9:45 AM	25.8	1200	8.0	10.6	NA
8/5/2004	9:14 AM	22.9	979	8.0	9.3	NA
8/12/2004	9:55 AM	INA	INA	INA	INA	INA
8/19/2004	11:30 AM	27.7	2460	8.2	11.4	NA
8/26/2004	10:15 AM	23.1	1520	8.0	6.2	NA
9/2/2004	9:31 AM	23.2	755	7.8	5.5	NA
9/9/2004	11:35 AM	25.9	807	7.7	7.4	NA
9/16/2004	11:15 AM	22.7	847	7.7	5.5	NA
9/23/2004	12:58 PM	22.3	981	7.7	8.0	NA
9/30/2004	9:46 AM	18.2	899	7.8	5.9	NA
10/7/2004	9:33 AM	20.1	829	7.6	4.3	
10/14/2004	9:09 AM	18.9	789	7.5	6.8	
10/21/2004	10:43 AM	15.1	830	NA	8.9	
10/28/2004	9:29 AM	INA	INA	INA	INA	
11/4/2004	11:09 AM	12.8	1230	8.0	9.7	
11/11/2004	9:06 AM	14.5	1170	7.6	6.8	
11/18/2004	9:28 AM	13.3	1210	7.7	7.3	
11/23/2004	12:31 PM	10.0	1330	7.8	9.4	
12/2/2004	10:34 AM	7.4	1580	8.0	11.7	
12/9/2004	9:15 AM	10.6	1370	8.0	10.3	
12/16/2004	10:14 AM	10.9	1440	7.8	9.7	
12/22/2004	12:09 PM	8.6	1480	7.9	14.0	
12/29/2004	10:55 AM	9.5	1390	7.8	9.6	
1/6/2005	8:31 AM	9.5	1430	7.7	11.8	
1/13/2005	10:24 AM	9.0	1280	7.8	9.7	
1/20/2005	9:40 AM	9.0	1280	7.7	11.4	
1/27/2005	9:39 AM	10.7	1950	7.9	11.5	
2/3/2005	9:43 AM	10.8	1930	7.8	9.9	
2/10/2005	9:40 AM	12.3	2110	7.9	9.6	
2/17/2005	9:56 AM	14.0	1660	7.8	10.9	
2/24/2005	9:59 AM	14.1	1360	7.9	8.6	
3/3/2005	9:04 AM	14.7	1660	7.9	9.5	
3/10/2005	11:08 AM	19.2	1740	8.0	11.0	
3/17/2005	9:04 AM	16.2	2250	7.9	12.0	
3/24/2005	9:50 AM	14.4	1870	8.0	9.8	
3/31/2005	9:29 AM	14.2	2270	8.1	9.3	
4/7/2005	10:08 AM	17.5	1410	8.3	8.6	
4/14/2005	9:09 AM	14.0	2500	8.5	10.6	
4/21/2005	9:56 AM	17.6	2540	8.2	8.6	
4/28/2005	9:21 AM	18.2	1490	8.0	12.2	

E2: 541MER536 – Mud Slough Upstream of SLD Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
5/5/2005	10:16 AM	20.2	1070	8.1	9.7	
5/12/2005	9:21 AM	19.2	1690	8.5	9.4	
5/19/2005	10:06 AM	21.6	2590	8.1	8.6	
5/26/2005	10:20 AM	24.2	981	7.9	5.3	
6/2/2005	10:13 AM	21.0	1340	8.1	8.7	
6/9/2005	8:50 AM	20.2	1080	8.0	7.4	
6/16/2005	9:48 AM	23.0	1230	8.0	8.7	
6/23/2005	10:39 AM	23.5	949	NA	8.6	
6/30/2005	10:53 AM	26.5	1110	8.2	10.3	
7/7/2005	9:29 AM	25.9	1070	8.0	11.5	
7/13/2005	10:05 AM	28.1	970	7.3	11.2	
7/21/2005	9:14 AM	27.0	1140	8.2	8.0	
7/28/2005	11:09 AM	29.3	1270	8.7	13.1	
8/4/2005	9:27 AM	25.7	1130	8.5	9.8	
8/11/2005	11:08 AM	27.3	1110	8.4	11.3	
8/18/2005	9:57 AM	23.2	1170	8.3	10.7	
8/25/2005	10:05 AM	22.2	1110	8.0	7.7	
9/1/2005	9:24 AM	21.9	874	8.0	9.7	
9/8/2005	10:00 AM	21.8	784	8.1	10.3	
9/15/2005	9:34 AM	19.3	652	7.9	8.2	
9/22/2005	10:33 AM	22.4	854	8.0	9.6	
9/29/2005	9:35 AM	20.1	872	7.8	9.2	
Count		260	259	257	210	54
Min		6.6	652	6.5	2.1	12.2
Max		32.8	3820	8.7	19.0	142.0
Mean		18.0	1660	7.9	9.5	54.1
Geo Mean		16.8	1540	7.9	9.1	44.8
Median		18.1	1550	7.9	9.4	44.1
Quartile 1		12.7	1200	7.8	7.9	29.3
Quartile 3		23.1	2030	8.1	11.0	68.7

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

E2: 541MER536 – Mud Slough Upstream of SLD Terminus continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
10/26/2000	20	14		
11/30/2000	14	6.9		
12/28/2000	11	13		
1/25/2001	22	9.9		
2/22/2001	NA	2.5		
3/29/2001	150	<1		
4/26/2001		11		
5/31/2001	31	11		
6/7/2001	35	13		
6/14/2001	14	17		
6/21/2001	NA	19		
6/28/2001	12	12		
7/26/2001		8.4		
8/30/2001	27	27		
9/20/2001		15		
9/27/2001	28	24		
<hr/>				
10/25/2001		25		
11/29/2001		NA		
1/31/2002		NA		
2/28/2002		9.6		
3/28/2002		9.6		
4/25/2002		NA		
5/30/2002		9.5		
6/20/2002		5.6		
8/1/2002			>2419.6	199
9/26/2002		NA		
<hr/>				
10/17/2002			>2419.6	197
10/31/2002		2.1		
11/21/2002		11		
12/19/2002		9.0		
1/16/2003			1733	96
3/27/2003		8.9		
4/24/2003		7.7	>2419.6	2420
5/29/2003		10		
6/26/2003		5.8		
7/31/2003			>2419.6	461
8/28/2003			>2419.6	285
9/25/2003			>2419.6	173
<hr/>				
10/30/2003			>2419.6	48
11/20/2003			>2419.6	55
1/29/2004			727	152
2/26/2004			>2419.6	326

E2: 541MER536 – Mud Slough Upstream of SLD Terminus continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
3/25/2004			>2419.6	148
4/29/2004			>2419.6	517
5/27/2004			>2419.6	261
6/24/2004			>2419.6	921
7/29/2004			>2419.6	345
8/26/2004			>2419.6	101
9/30/2004			>2419.6	38
11/23/2004		14	>2419.6	33
12/29/2004		10	>2419.6	517
1/27/2005		13	>2419.6	91
2/24/2005		13	>2419.6	114
3/31/2005		16	>2419.6	93
4/28/2005		NA	>2419.6	135
5/26/2005		9.8	>2419.6	1300
6/30/2005		5.1	>2419.6	107
7/28/2005		6.0	>2419.6	49
8/25/2005		8.3	>2419.6	196
9/22/2005		NA		
9/29/2005		13	>2419.6	107
Count	11	38	29	29
Min	11	0.5	727	33
Max	150	27	2420	2420
Mean	33	11	NA	NA
Geo Mean	24	9	2295	179
Median	22	10	2420	152
Quartile 1	14	8.3	2420	96
Quartile 3	30	13	2420	326

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

E2: 541MER536 – Mud Slough Upstream of SLD Terminus 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	<2		<2		0.4	<1	11	2.9	6.1
11/30/2000	<2		<2		0.2	<1	11	1.2	2.7
12/28/2000	<2		<2		0.2	<1	11	1.2	2.4
1/25/2001	<2		<2		0.2	<1	10	2.4	4
2/22/2001	2.5		<2		0.3	<1	12	3.3	6.5
3/29/2001	2.9		2.3		0.3	<1	15	5.7	10.2
4/26/2001	<2		<2	<1	0.2	<1	12	3.3	5.4
5/31/2001	<2		<2		0.2	NA	9.4	3.8	7
6/7/2001	3.9		<1.0		0.2	<1	8.5	4	5.6
6/14/2001	<2		<2			<1	8.5	2.4	3.9
6/21/2001	<2		<2		0.3	<1	9.6	4.2	6
6/28/2001	<2		<2		0.2	<1	11	2.1	3.3
8/30/2001	<2		<2		0.4	<1	12		
9/27/2001	<2		<2		0.4	<1	11		
10/25/2001								2.5	6.5
11/29/2001	NA		NA		NA	0.2	12	1.5	3.3
12/27/2001	NA		0.8		0.2	0.1	7.2	1.2	3
1/31/2002	NA		NA		0.2	NA	NA	2.2	3.9
2/28/2002	NA		NA		NA	0.3	NA	2.5	5
4/25/2002	NA		NA		0.3	NA	8.2	3.3	5.4
5/30/2002	NA		NA		NA	0.2	NA	2.5	3.9
6/20/2002	NA		1		0.3	0.1	7.4	2.4	4.3
7/18/2002	<2.0		<2.0		NA	<1.0	8.8		
7/25/2002	4.1		<2.0		0.2	<1.0	6.3		
8/15/2002	<2.0		<2.0		0.3	<1.0	7.2		
8/29/2002	NA		1.4		0.3	0.1	9	4.7	8
9/26/2002	NA		0.8		NA	0.1	7.4	2.6	5
10/31/2002	NA		1.2		0.3	0.3	6.4	3.3	6.5

E2: 541MER536 – Mud Slough Upstream of SLD Terminus 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)
11/21/2002	NA		1.2		0.3	0.2	7	1.9	4
12/19/2002	NA		1.3		0.3	<0.03	6	2.2	3.6
1/30/2003	NA		1.3		0.3	0.3	5.9	2.3	4
2/27/2003	4		1.4		0.2	<1.0	11		
3/27/2003	NA		NA		0.5	<1.0	11		
4/10/2003	<2.0		2.6		0.5	<1.0	13		
5/15/2003	<2.0		<2.0		0.2	<1.0	10		
5/29/2003	<2.0		<2.0		NA	<1.0	10		
6/12/2003	4.7		<2.0		0.2	<1.0	7		
6/26/2003	5.1		<2.0		NA	<1.0	6.7		
7/17/2003	4.1		1.6		0.3	<1.0	6.7		
7/31/2003	2.2		NA		0.2	<1.0	5.8		
8/14/2003	2.6		<1.0		0.1	<1.0	5.7		
8/28/2003	<2.0		2.2		0.5	<1.0	10		
9/25/2003	<2.0		1.8		0.6	<1.0	8.4		
10/30/2003	<2.0		1.9		0.6	<1.0	11		
11/20/2003	<2.0		<1.0		0.2	<1.0	9.8		
1/29/2004		0.3	1.2	0.2	0.3	0.2			
2/26/2004		0.9	1.6	NA	0.4	0.3			
3/11/2004		2.9	1.4	0.1	0.4	0.4			
3/25/2004		0.9	1.9	0.3	0.8	0.6			
4/15/2004		0.8	1.2	0.1	0.4	0.2			
4/29/2004		<0.05	1.6	0.1	0.3	0.1			
5/13/2004		0.5	1	0.2	0.4	0.1			
6/10/2004		0.1	0.9	0.1	0.2	0.2			
6/24/2004		<0.05	0.8	0	0.2	0.1			

E2: 541MER536 – Mud Slough Upstream of SLD Terminus 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)
7/15/2004		0.6	0.5	0.1	NA	NA			
7/29/2004		1.6	1	NA	0.2	NA			
8/26/2004		<0.16	1.4	NA	0.4	0.3			
9/16/2004		<0.16	1.7	0.2	0.4	0.1			
9/30/2004		0.1	1.1	0.2	NA	0.1			
11/23/2004		0.1	1.3	NA	0.3	0.2			
12/29/2004		0.4	1	0.1	0.2	0.2			
1/27/2005		0.5	1.4	0.4	0.4	0.3			
2/24/2005		0.3	1.3	0.3	0.5	0.3			
3/31/2005		0.4	1.8	0.2	0.6	0.4			
4/28/2005		0.5	1.3	0.4	NA	0.2			
5/12/2005		0.1	NA	NA	0.3	NA			
5/26/2005		0.1	1.1	0.1	0.3	0.1			
6/16/2005		NA	0.8	NA	NA	NA			
6/30/2005		1.4	1	0.1	0.3	0.1			
7/13/2005		0.5	0.8	NA	NA	NA			
9/29/2005		<0.05	1.2	NA	NA	0.1			
Count	30	25	62	18	56	62	41	26	26
Min	1.0	0.03	0.5	0.1	0.1	0.02	5.7	1.2	2.4
Max	5.1	2.9	2.6	0.5	0.8	0.6	15.0	5.7	10.2
Mean	1.9	0.5	1.2	0.2	0.3	0.3	9.2	2.8	5.0
Geo Mean	1.5	0.3	1.1	0.2	0.3	0.3	8.9	2.6	4.7
Median	1.0	0.4	1.0	0.2	0.3	0.5	9.4	2.5	4.7
Quartile 1	1.0	0.1	1.0	0.1	0.2	0.2	7.2	2.2	3.9
Quartile 3	2.6	0.6	1.4	0.3	0.4	0.5	11.0	3.3	6.1

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

E2: 541MER536 – Mud Slough Upstream of SLD Terminus 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	200			3.7	2.1	<5	5.8		
11/30/2000	260			<1	1.2	<5	<5	<2	
12/28/2000	310			1.1	1.8	<5	<5	<2	
1/25/2001	320			1.9	2.2	<5	5	<2	
2/22/2001	370			3.4	3.3	<5	8.5	4.2	
3/29/2001	500			11	7	<5	20	14	
4/26/2001	580			1.4	2.1	<5	5.2	<2	
5/31/2001	310			2.7	2.8	<5	6.5	6.1	
6/7/2001	350	3.6	<1	2.3	2.9	<5	5.5	3.8	<0.2
6/14/2001	590	3.5	<1	<1	1.2	<5	<5	<2	<0.2
6/21/2001	NA	4.9	<1	<1	1.3	<5	<5	<2	<0.2
6/28/2001	470	3.4	<1	<1	1.1	<5	<5	<2	<0.2
7/26/2001		NA	NA	1.1	1.2	<5	<5	<2	NA
8/30/2001	260	4.7	<1	1.4	1.3	<5	5.2	<2	
9/27/2001	200	5.5	<1	<1	1.6	<5	5	2	<0.2
10/25/2001	270	4	<0.1	<1	1.3	<5	<5	<2	<0.2
11/29/2001	280	4.6	<0.1	2	<1	<5	<5	3	<0.2
12/27/2001	320	<4	<0.1	1.4	2.2	<5	<5	2.1	<0.2
1/31/2002		<4.0	<0.1	<1.0	NA	<5.0	<5.0	<2.0	<0.2
2/28/2002	410	6.5	<0.1	2.8	3.2	<5.0	7.8	4.3	<0.2
3/28/2002	740	6	<0.1	6.7	3.9	<5.0	12	6.2	<0.2
4/25/2002	300	6	<0.1	<1.0	2.5	<5.0	<5.0	<2.0	<0.2
5/30/2002	460	7.6	<0.1	2.3	2.6	<5.0	6.2	<2.0	<0.2
6/20/2002	240	5.2	<0.1	5.4	3.7	<5.0	8.8	5.2	<0.2
9/26/2002	200	6.1	<0.1	2.1	NA	<5.0	<5.0	2.2	<0.2
10/31/2002	240	<4.0	<0.1	1	1.5	<5.0	<5.0	<2.0	<0.2
11/21/2002	300	<4.0	<0.1	1.1	1.2	<5.0	<5.0	<2.0	<0.2

E2: 541MER536 – Mud Slough Upstream of SLD Terminus 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)
3/27/2003	370	7.5	NA	7.9	6	<5.0	12	9.5	<0.2
4/24/2003	370	5.7	<0.1	NA	NA	NA	8.9	5.1	<0.2
5/29/2003	330	5.5	<0.1	6.2	4.9	<5.0	8.2	8.3	<0.2
6/26/2003	250	4.3	<0.1	14	5.4	<5.0	12	9.2	<0.2
Count	28	22	21	30	28	30	31	30	21
Min	200.0	2.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Max	740.0	7.6	0.5	14.0	7.0	2.5	20.0	14.0	0.1
Mean	350.0	4.7	0.2	2.9	2.6	2.5	5.7	3.3	0.1
Geo Mean	330.4	4.3	0.1	1.7	2.2	2.5	4.6	2.2	0.1
Median	315.0	4.8	0.1	1.7	2.2	2.5	5.0	1.5	0.1
Quartile 1	260.0	3.5	0.1	0.6	1.3	2.5	2.5	1.0	0.1
Quartile 3	380.0	5.9	0.5	3.3	3.2	2.5	8.0	4.9	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

E2: 541MER536 – Mud Slough Upstream of SLD Terminus 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	200			<1	<1	<5	<5	<2	
11/30/2000	260			<1	1.5	<5	<5	<2	
12/28/2000	310			<1	<1	<5	<5	<2	
1/25/2001	320			<1	<1	<5	<5	<2	
2/22/2001	370			<1	<1	<5	<5	<2	
3/29/2001	500			<1	2.6	<5	<5	<2	
4/26/2001	580			<1	<1	<5	<5	<2	
5/31/2001	310			<1	<1	<5	<5	4.1	
6/7/2001	350	3	<1	<1	1.5	<5	<5	<2	<0.2
6/14/2001	590	2.9	<1	<1	<1	<5	<5	<2	<0.2
6/21/2001	NA	4.2	<1	<1	<1	<5	<5	<2	<0.2
6/28/2001	470	3.5	<1	<1	<1	<5	<5	<2	<0.2
7/26/2001		NA	NA	NA	NA	NA	NA	NA	NA
8/30/2001	260	4.2	<1	<1	<1	<5	<5	<2	
9/27/2001	200	4.8	<1	<1	<1	<5	<5	<2	<0.2
10/25/2001	270	4.4	<0.1	<1	1.3	<5	<5	<2	<0.2
11/29/2001	280	4.2	<0.1	<1	1.6	<5	<5	4.7	<0.2
12/27/2001	320	<4	<0.1	<1	1.1	<5	<5	<2	<0.2
1/31/2002		<4.0	<0.1	<1.0	NA	<5.0	<5.0	<2.0	<0.2
2/28/2002	410	5.5	<0.1	<1.0	1.3	<5.0	<5.0	2.1	<0.2
3/28/2002	740	5.3	<0.1	2.4	2.1	<5.0	6.0	2.1	<0.2
4/25/2002	300	6.2	<0.1	<1.0	1.9	<5.0	<5.0	NA	<0.2
5/30/2002	460	5.6	<0.1	<1.0	1.4	<5.0	<5.0	<2.0	<0.2
6/20/2002	240	4.2	<0.1	<1.0	2.2	<5.0	<5.0	2.2	<0.2
9/26/2002	200	5.3	<0.1	<1.0	1.8	<5.0	<5.0	<2.0	<0.2
10/31/2002	240	<4.0	<0.1	<1.0	1.2	<5.0	<5.0	<2.0	<0.2
11/21/2002	300	4.7	<0.1	1.3	1.6	<5.0	<5.0	<2.0	<0.2

E2: 541MER536 – Mud Slough Upstream of SLD Terminus 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	24	18	18	26	25	26	26	25	17
Min	200.0	2.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Max	740.0	6.2	0.5	2.4	2.6	2.5	6.0	4.7	0.1
Mean	353.3	4.1	0.2	0.6	1.1	2.5	2.6	1.4	0.1
Geo Mean	331.2	3.9	0.1	0.6	1.0	2.5	2.6	1.2	0.1
Median	310.0	4.2	0.1	0.5	1.2	2.5	2.5	1.0	0.1
Quartile 1	260.0	3.1	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Quartile 3	422.5	5.2	0.5	0.5	1.6	2.5	2.5	1.0	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

E2: 541MER536 – Mud Slough Upstream of SLD Terminus 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	53	40	39	25	530	<1	240	200	100
11/30/2000	170	170	48	34	810	<1	250	200	180
12/28/2000	210	240	56	42	980	<1	280	230	230
1/25/2001	220	270	58	42	1000	<1	280	230	240
2/22/2001	250	310	66	50	1200	<1	330	270	290
3/29/2001	350	480	81	72	1700	<1	400	330	430
4/26/2001		670	90	87	160	8	318	326	530
5/31/2001	190	260	54	43	1000	<1	180	180	220
6/7/2001	210	440	65	46	1100	<1	200	170	240
6/14/2001	470	660	86	90	2200	<1	350	280	520
6/21/2001	360	580	70	70	1700	<1	370	260	410
6/28/2001	360	550	71	72	1700	10	280	250	420
8/30/2001	190	180	45	36	880	<1	250	200	190
9/27/2001	NA	88	36	28	610	<1	NA	NA	140
10/25/2001	230	130	48	37	860	<1	280	NA	200
11/29/2001	230	200	50	38	930	<1	270	230	220
12/27/2001	270	270	55	45	1100	<1.0	300	250	260
2/28/2002	NA	360	71	56	1300	<1.0	345	283	340
3/28/2002	490	910	160	84	2700	<1.0	370	300	630
4/25/2002	190	330	55	41	870	<1.0	200	160	200
5/30/2002	330	500	76	65	1700	<1.0	310	260	410
6/20/2002	150	180	43	31	NA	<1.0	180	150	160
9/26/2002	150	79	39	26	430	<1.0	190	160	130
10/31/2002	190	97	45	31	700	<1.0	250	200	160
11/21/2002	220	170	53	40	930	<1.0	280	230	210
3/27/2003	250	320	65	50					
4/24/2003	260	370	63	51					
5/29/2003	200	300	64	43					
6/26/2003	150	240	48	33					

E2: 541MER536 – Mud Slough Upstream of SLD Terminus 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	29	29	29	24	25	24	23	25
Min	53	40	36	25	160	0.5	180	150	100
Max	490	910	160	90	2700	10	400	330	630
Mean	240	320	62	49	1100	1.2	280	230	280
Geo Mean	220	260	59	46	980	0.6	270	230	250
Median	220	270	56	43	990	0.5	280	230	230
Quartile 1	190	180	48	36	850	0.5	250	200	190
Quartile 3	270	440	70	56	1400	0.5	320	265	410

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

E2: 541MER536 – Mud Slough Upstream of SLD Terminus 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(%)
6/18/2001	100	100	100	90			
Count	1	1	1	1	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

E3: 541MER535 – San Luis Drain @ Terminus

Station Code: 541MER535

Location: Latitude 37.25944, Longitude -120.90389

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/5/2000	10:30 AM	21.1	4600	7.1		
10/12/2000	11:30 AM	17.5	3340	8.0		
10/19/2000	9:05 AM	18.2	3390	7.8		
10/26/2000	3:00 PM	14.6	4320	6.8		
11/2/2000	10:10 AM	15.6	3990	6.9		
11/9/2000	10:00 AM	13.1	4520	8.2		
11/16/2000	10:40 AM	10.9	4530	6.7		
11/21/2000	8:10 AM	9.5	4450	7.7		
11/30/2000	11:30 AM	11.9	4240	7.5		
12/7/2000	9:35 AM	9.7	3840	7.4		
12/12/2000	9:35 AM	12.1	4280	7.2		
12/21/2000	11:40 AM	11.2	3890	7.9		
12/28/2000	11:16 AM	9.7	4330	7.8		
1/4/2001	9:40 AM	7.8	4510	7.1		
1/11/2001	11:30 AM	8.9	4080	5.5		
1/18/2001	9:45 AM	7.7	4420	5.9		
1/25/2001	11:12 AM	9.9	4390	7.8		
2/1/2001	10:53 AM	8.4	4380	7.3		
2/8/2001	10:50 AM	12.2	4170	8.1		
2/15/2001	11:30 AM	10.8	4360	8.1		
2/22/2001	12:33 PM	12.9	4710	7.8		
3/1/2001	9:25 AM	12.1	4710	7.4		
3/8/2001	10:20 AM	16.1	4520	7.1		
3/15/2001	11:45 AM	17.2	5430	8.3		
3/22/2001	12:18 PM	20.4	5730	8.5		
3/29/2001	10:21 AM	20.3	5250	8.3		
4/5/2001	12:30 PM	17.0	5680	8.1		
4/12/2001	10:03 AM	14.0	4890	7.4		
4/19/2001	12:10 PM	17.5	5710	8.3		
4/26/2001	9:00 AM	21.3	5230	8.3		
5/3/2001	10:45 AM	18.1	5190	7.7		
5/10/2001	9:25 AM	24.3	4460	8.1		
5/17/2001	12:14 PM	25.1	4280	7.8		
5/24/2001	10:03 AM	26.5	4130	7.8		
5/31/2001	10:40 AM	26.1	4470	7.6		
6/6/2001	11:25 AM	22.8	4550	7.6	3.2	
6/7/2001	12:15 PM	27.8	4810	8.5	11.1	

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
6/13/2001	9:05 AM	21.1	4540	8.6	10.1	
6/14/2001	10:32 AM	21.1	4440	8.4	11.9	
6/20/2001	10:32 AM	27.2	4520	8.3	11.8	
6/21/2001	12:42 PM	28.0	4680	8.4	13.5	
6/28/2001	12:43 PM	24.1	4280	8.4	11.9	
7/5/2001	9:17 AM	26.4	4200	8.2	9.2	
7/11/2001	11:32 AM	25.4	3770	8.3	15.1	
7/19/2001	1:04 PM	24.7	4420	8.4	13.0	
7/26/2001	8:45 AM	24.9	4440	8.2	11.5	
8/2/2001	10:31 AM	24.8	3830	8.3	13.3	
8/9/2001	9:22 AM	26.7	3550	8.3	12.2	
8/16/2001	10:57 AM	24.8	3770	8.4	12.7	
8/23/2001	9:19 AM	22.7	3650	8.4	11.9	
8/30/2001	9:29 AM	24.0	4260	8.4	12.5	
9/6/2001	8:57 AM	24.2	3810	8.0	9.7	
9/13/2001	9:27 AM	22.5	4260	8.6	12.5	
9/20/2001	10:16 AM	23.7	4570	8.4	10.9	
9/27/2001	11:24 AM	23.2	5100	8.2	8.8	
10/4/2001	8:51 AM	22.9	4090	8.1	10.3	
10/11/2001	9:43 AM	18.9	4340	8.6	12.8	
10/18/2001	9:40 AM	19.4	3940	8.2	16.1	
10/25/2001	9:39 AM	16.4	4250	8.3	13.4	
11/1/2001	10:50 AM	17.6	4000	8.2	13.3	
11/8/2001	9:35 AM	15.7	4090	8.8	14.1	
11/15/2001	9:25 AM	16.0	3610	7.9	10.4	
11/20/2001	11:41 AM	14.9	3510	7.5	8.9	
11/29/2001	8:30 AM	9.3	4350	NA	NA	
12/6/2001	9:15 AM	10.2	4320	7.8	12.4	
12/13/2001	9:34 AM	9.3	4710	8.1	12.9	
12/20/2001	10:53 AM	9.1	4590	8.1	12.5	
12/27/2001	1:15 PM	10.1	4170	7.9	13.8	
1/3/2002	10:16 AM	12.9	4210	7.9	12.1	
1/10/2002	9:45 AM	12.0	4260	7.7	11.8	
1/17/2002	8:44 AM	8.3	4550	8.0	13.0	
1/24/2002	1:05 PM	8.2	4970	8.1	13.5	
1/31/2002	11:26 AM	7.7	4680	8.1	14.1	
2/7/2002	9:02 AM	10.3	4290	8.1	13.3	
2/14/2002	9:30 AM	12.0	4580	8.3	11.9	

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
2/21/2002	10:52 AM	14.4	4950	7.8	10.6	
2/28/2002	8:40 AM	15.6	5090	8.3	12.8	
3/7/2002	8:58 AM	14.9	4500	8.4	13.4	
3/14/2002	9:51 AM	13.6	4770	8.6	12.9	
3/21/2002	10:01 AM	14.2	4140	7.8	12.1	
3/28/2002	11:12 AM	17.6	5350	8.5	14.8	
4/4/2002	9:03 AM	19.7	5530	8.7	13.8	
4/11/2002	10:50 AM	19.6	5540	8.8	12.6	
4/18/2002	7:28 AM	16.4	5210	8.7	12.6	
4/25/2002	11:21 AM	20.6	5250	8.5	13.1	
5/2/2002	8:28 AM	17.1	4960	8.4	15.7	
5/9/2002	9:52 AM	19.6	4920	8.5	14.5	
5/16/2002	9:41 AM	21.5	5100	8.5	11.1	15.6
5/23/2002	7:20 AM	18.0	3860	8.4	NA	
5/30/2002	2:19 PM	27.2	4060	8.2	12.5	
6/6/2002	8:22 AM	24.9	4500	8.3	NA	
6/13/2002	11:25 AM	24.1	4430	8.2	NA	
6/20/2002	8:30 AM	25.1	4010	8.5	NA	
6/27/2002	9:55 AM	24.7	4340	8.4	15.9	
7/3/2002	10:15 AM	26.7	4310	8.1	NA	
7/11/2002	12:19 PM	27.3	4370	8.7	NA	
7/18/2002	9:26 AM	24.9	4260	8.6	15.3	16.5
7/25/2002	8:42 AM	24.3	3730	8.4	13.7	
8/1/2002	9:32 AM	25.1	3610	8.6	13.1	
8/8/2002	10:17 AM	23.2	3960	8.4	8.4	
8/15/2002	8:47 AM	25.3	3600	8.3	10.5	
8/22/2002	9:08 AM	22.3	3660	8.3	11.5	
8/29/2002	8:45 AM	22.4	3420	7.3	NA	
9/5/2002	8:48 AM	23.6	3570	8.3	11.5	
9/12/2002	8:37 AM	23.0	3620	8.1	11.8	
9/19/2002	9:08 AM	22.4	4940	8.5	9.8	NA
9/26/2002	11:42 AM	23.4	4460	7.8	10.3	
10/3/2002	9:30 AM	15.5	4970	8.4	10.6	
10/10/2002	11:47 AM	21.2	5010	8.4	10.8	
10/17/2002	8:54 AM	17.7	3860	8.3	12.0	29.2
10/24/2002	10:11 AM	16.5	3990	8.1	14.1	
10/31/2002	9:50 AM	15.0	4820	8.1	14.3	23.1

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
11/7/2002	9:36 AM	14.1	4720	8.3	12.2	
11/14/2002	9:57 AM	14.9	4510	8.0	10.8	
11/21/2002	11:27 AM	13.8	4390	8.3	17.3	31.2
11/26/2002	11:48 AM	13.3	4240	8.3	17.5	
12/5/2002	9:35 AM	11.2	4880	8.1	13.6	40.1
12/12/2002	9:15 AM	11.5	4830	7.7	13.7	
12/19/2002	8:40 AM	9.8	4540	7.8	11.9	35.5
12/24/2002	10:17 AM	8.6	4240	7.1	18.7	
1/2/2003	11:40 AM	10.4	4510	7.3	15.0	
1/9/2003	10:26 AM	10.2	4830	7.8	12.4	
1/16/2003	11:08 AM	11.5	4850	7.8	11.5	37.8
1/23/2003	8:45 AM	11.0	4510	7.3	11.9	
1/30/2003	10:19 AM	12.9	4520	7.9	11.8	44.8
2/6/2003	10:12 AM	10.4	4610	7.9	13.0	
2/13/2003	11:39 AM	11.8	4510	8.0	11.7	45.6
2/20/2003	11:17 AM	12.4	4280	8.1	14.3	62.5
2/27/2003	8:57 AM	13.4	4920	8.0	11.2	
3/6/2003	10:50 AM	15.0	5080	7.7	14.7	NA
3/13/2003	10:01 AM	18.1	5520	8.3	13.1	26.5
3/20/2003	8:44 AM	14.9	5580	8.1	12.3	20.9
3/27/2003	9:23 AM	16.6	5590	8.4	13.8	22.2
4/3/2003	12:47 PM	16.6	5430	8.3	17.6	28.4
4/10/2003	9:01 AM	18.7	5190	8.2	14.1	45.0
4/17/2003	9:04 AM	16.4	5250	8.1	13.3	44.4
4/24/2003	9:54 AM	17.1	5130	8.3	12.0	48.2
5/1/2003	9:21 AM	18.5	5110	8.1	12.4	NA
5/8/2003	8:40 AM	17.5	4300	8.3	10.9	65.0
5/15/2003	8:57 AM	19.8	5190	8.7	15.5	
5/22/2003	9:50 AM	22.8	4810	8.2	15.7	46.8
5/29/2003	9:35 AM	25.3	4740	8.2	12.8	
6/5/2003	9:22 AM	25.1	4660	8.3	11.2	22.9
6/12/2003	10:00 AM	21.5	4330	8.3	12.9	35.7
6/19/2003	9:15 AM	22.7	4510	8.5	6.9	38.2
6/26/2003	9:25 AM	24.2	4400	8.6	15.2	26.4
7/3/2003	9:24 AM	24.9	4630	8.5	30.0	
7/10/2003	9:21 AM	24.9	4500	8.5	18.2	
7/17/2003	9:24 AM	26.6	4260	8.9	12.6	
7/24/2003	9:06 AM	27.8	4020	8.4	10.2	22.8
7/31/2003	9:28 AM	26.7	3610	8.2	11.1	26.3

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
8/7/2003	9:00 AM	24.5	3700	8.4	11.9	25.8
8/14/2003	8:49 AM	24.4	3950	8.5	12.3	
8/21/2003	9:01 AM	25.6	4400	8.9	9.4	18.4
8/28/2003	9:10 AM	25.0	3570	8.4	NA	24.0
9/4/2003	9:04 AM	25.8	3610	8.3	9.0	20.6
9/11/2003	10:00 AM	22.7	4020	8.4	10.8	12.7
9/18/2003	9:19 AM	21.2	4480	8.5	8.3	26.3
9/25/2003	10:01 AM	22.7	4690	8.7	10.8	28.6
10/2/2003	9:40 AM	21.8	3990	8.4	14.4	17.3
10/9/2003	9:22 AM	21.3	4140	8.3	19.9	19.4
10/16/2003	11:22 AM	18.5	4640	8.5	17.3	14.6
10/23/2003	9:41 AM	20.1	4140	8.3	10.6	15.1
10/30/2003	8:35 AM	16.7	4410	8.1	9.7	21.9
11/6/2003	9:07 AM	14.1	4460	8.4	14.5	22.2
11/13/2003	8:36 AM	13.7	4380	8.3	10.0	44.5
11/20/2003	8:50 AM	13.8	3900	8.2	12.0	NA
11/26/2003	8:36 AM	8.9	3970	8.3	13.5	23.4
12/4/2003	9:02 AM	11.9	4350	7.7	12.2	
12/11/2003	8:45 AM	11.1	4030	8.0	14.0	NA
12/18/2003	9:17 AM	9.5	4430	8.1	14.3	NA
12/23/2003	8:58 AM	10.9	4460	7.9	12.7	NA
12/30/2003	9:36 AM	8.5	4020	7.8	13.8	NA
1/8/2004	8:21 AM	9.0	4450	7.9	11.0	NA
1/15/2004	9:11 AM	10.1	4560	8.0	12.1	NA
1/22/2004	9:02 AM	9.5	4410	8.0	20.3	23.4
1/29/2004	9:04 AM	10.2	4550	7.9	13.4	NA
2/5/2004	9:01 AM	10.2	4550	8.1	12.3	25.6
2/12/2004	8:58 AM	11.1	4290	8.2	14.1	NA
2/19/2004	8:58 AM	13.0	3660	7.9	12.0	NA
2/26/2004	9:14 AM	12.5	4580	8.0	11.5	NA
3/4/2004	9:05 AM	12.7	4810	8.2	11.8	41.2
3/11/2004	9:27 AM	18.2	5150	8.3	11.7	NA
3/18/2004	8:22 AM	20.2	5190	8.0	13.2	
3/25/2004	9:14 AM	18.8	5480	8.5	13.7	21.7
4/1/2004	9:02 AM	16.8	4660	8.5	12.6	
4/8/2004	8:58 AM	17.9	5470	8.4	11.6	43.0
4/15/2004	9:17 AM	19.0	5150	8.3	11.5	33.9
4/22/2004	9:25 AM	17.0	5350	8.5	12.2	70.6

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
4/29/2004	10:30 AM	19.3	4640	8.6	NA	23.6
5/6/2004	9:20 AM	23.1	4740	8.2	26.2	30.8
5/13/2004	9:50 AM	19.5	4160	8.4	25.7	38.9
5/20/2004	9:20 AM	20.9	4560	8.2	12.0	36.8
5/27/2004	8:57 AM	21.6	3870	8.2	NA	NA
6/3/2004	10:00 AM	24.4	4680	8.3	13.9	61.9
6/10/2004	9:42 AM	20.8	4340	8.6	14.0	52.4
6/17/2004	9:50 AM	24.0	3620	8.5	13.9	25.6
6/24/2004	9:30 AM	23.4	4080	8.3	12.9	NA
7/1/2004	9:27 AM	22.8	3750	8.0	13.5	NA
7/8/2004	9:17 AM	24.9	4380	7.8	12.7	NA
7/15/2004	9:25 AM	25.2	4160	7.9	11.2	NA
7/22/2004	11:24 AM	27.4	3980	8.3	16.9	NA
7/29/2004	9:15 AM	23.4	3490	8.4	12.1	NA
8/5/2004	8:46 AM	24.1	3900	8.3	10.6	NA
8/12/2004	9:11 AM	26.4	3510	8.4	10.2	NA
8/19/2004	11:08 AM	26.4	3250	8.2	13.5	NA
8/26/2004	9:48 AM	23.9	3800	8.5	11.8	NA
9/2/2004	8:55 AM	25.0	4570	8.1	10.5	NA
9/9/2004	10:17 AM	24.7	3870	7.8	11.8	NA
9/16/2004	10:48 AM	21.7	4690	8.2	12.1	NA
9/23/2004	11:22 AM	20.0	3580	8.4	14.2	NA
9/30/2004	9:00 AM	19.7	3760	8.1	10.1	NA
10/7/2004	8:37 AM	20.6	3480	7.7	18.5	
10/14/2004	8:48 AM	18.8	3630	7.5	13.1	
10/21/2004	10:25 AM	15.9	3510	NA	11.6	
10/28/2004	8:54 AM	13.8	3700	7.7	15.1	
11/4/2004	9:35 AM	13.2	4100	8.4	14.8	
11/11/2004	8:41 AM	14.3	4310	7.3	10.4	
11/18/2004	9:01 AM	14.0	4410	7.6	10.1	
11/23/2004	11:36 AM	9.9	4510	7.7	11.8	
12/2/2004	9:12 AM	7.6	4390	8.0	13.5	
12/9/2004	8:47 AM	10.3	4400	8.0	11.7	
12/16/2004	8:41 AM	11.7	4170	7.4	11.3	
12/22/2004	11:46 AM	9.1	4610	8.0	14.3	
12/29/2004	10:21 AM	9.2	4070	7.6	12.0	
1/6/2005	8:14 AM	10.1	4150	7.3	12.5	
1/13/2005	10:01 AM	10.1	3390	7.6	6.2	

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
1/20/2005	9:07 AM	9.3	4860	7.5	11.7	
1/27/2005	9:09 AM	10.9	4690	7.9	12.2	
2/3/2005	9:03 AM	11.7	4710	8.1	11.7	
2/10/2005	8:38 AM	13.2	4950	7.9	12.3	
2/17/2005	9:25 AM	14.6	4570	7.4	10.8	
2/24/2005	9:03 AM	15.3	4620	7.8	11.3	
3/3/2005	8:44 AM	15.9	5230	7.8	12.2	
3/10/2005	9:42 AM	18.9	5540	8.0	16.8	
3/17/2005	8:41 AM	16.9	5960	7.8	17.8	
3/24/2005	8:48 AM	14.8	5060	7.8	14.0	
3/31/2005	8:49 AM	14.5	5570	7.9	14.6	
4/7/2005	9:03 AM	18.1	5720	8.4	12.9	
4/14/2005	8:49 AM	15.2	5770	8.3	12.9	
4/21/2005	8:54 AM	18.2	5610	8.3	13.0	
4/28/2005	8:46 AM	18.6	4730	7.7	15.3	
5/5/2005	9:17 AM	20.8	4620	7.5	11.8	
5/12/2005	8:41 AM	20.1	5350	7.9	12.0	
5/19/2005	9:16 AM	21.7	5410	8.0	12.6	
5/26/2005	9:41 AM	25.1	4080	8.2	11.5	
6/2/2005	9:08 AM	21.4	4670	8.4	10.5	
6/9/2005	8:26 AM	20.5	3970	7.9	13.9	
6/16/2005	8:34 AM	24.1	4310	8.1	13.7	
6/23/2005	9:34 AM	23.9	4430	NA	14.1	
6/30/2005	9:18 AM	25.7	3930	8.5	14.9	
7/7/2005	8:56 AM	25.5	4980	8.5	15.5	
7/13/2005	10:40 AM	28.7	4530	8.7	16.5	
7/21/2005	8:50 AM	27.7	4210	8.1	10.6	
7/28/2005	9:16 AM	27.3	4130	8.5	10.9	
8/4/2005	8:58 AM	27.0	3940	8.2	10.8	
8/11/2005	9:20 AM	26.7	4670	8.4	11.8	
8/18/2005	9:27 AM	24.4	3790	8.0	12.8	
8/25/2005	9:08 AM	25.0	3490	8.4	12.1	
9/1/2005	8:56 AM	24.0	4600	7.6	14.7	
9/8/2005	9:12 AM	23.1	4910	8.4	11.8	
9/15/2005	8:54 AM	20.5	3850	7.6	13.4	
9/22/2005	9:39 AM	22.6	4130	8.3	13.9	
9/29/2005	8:53 AM	21.2	4250	7.9	13.1	

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
Count		264	264	261	218	55
Min		7.6	3250	5.5	3.2	12.7
Max		28.7	5960	8.9	30.0	70.6
Mean		18.2	4450	8.1	12.9	32.1
Geo Mean		17.2	4410	8.1	12.6	29.5
Median		18.5	4430	8.2	12.5	26.5
Quartile 1		13.1	4080	7.9	11.5	22.5
Quartile 3		23.6	4720	8.4	13.9	40.7

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

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
10/5/2000	55			
10/12/2000	49			
10/19/2000	49			
10/26/2000	NA			
11/2/2000	50			
11/9/2000	52			
11/16/2000	48			
11/21/2000	32			
11/30/2000	36	1.8		
12/7/2000	51			
12/12/2000	55			
12/21/2000	38			
12/28/2000	38	4.1		
1/4/2001	22			
1/11/2001	53			
1/18/2001	32			
1/25/2001	52			
2/1/2001	43			
2/8/2001	26			
2/15/2001	32			
2/22/2001	31	1.9		
3/1/2001	37			
3/8/2001	35			
3/15/2001	33			
3/22/2001	54			
3/29/2001	47	<1		
4/5/2001	33			
4/12/2001	38			
4/19/2001	56			
5/3/2001	38			
5/10/2001	49			
5/17/2001	55			
5/24/2001	42			
5/31/2001	44	9.9		
6/7/2001	40	10		
6/14/2001	51	14		
6/21/2001	NA	13		
6/28/2001	35	13		
7/5/2001	34			
7/11/2001	41			
7/19/2001	44			
7/26/2001	44	9.4		

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
8/2/2001	50			
8/9/2001	41			
8/16/2001	39			
8/23/2001	32			
8/30/2001	58	13		
9/6/2001	33			
9/13/2001	30			
9/20/2001	NA			
9/27/2001	14	16		
10/4/2001	NA			
10/11/2001	42			
10/18/2001	36			
10/25/2001	39	15		
11/1/2001	41			
11/8/2001	35			
11/15/2001	38			
11/20/2001	33			
11/29/2001	39	NA		
12/6/2001	37			
12/13/2001	50			
12/20/2001	43			
12/27/2001	36			
1/3/2002	50			
1/10/2002	52			
1/17/2002	38			
1/24/2002	26			
1/31/2002	22	NA		
2/7/2002	45			
2/14/2002	35			
2/21/2002	23			
2/28/2002	39	6.4		
3/7/2002	NA			
3/14/2002	42			
3/21/2002	NA			
3/28/2002	41	5.5		
4/4/2002	39	NA		
4/11/2002	22			
4/18/2002	26			
4/25/2002	34	NA		
5/2/2002	70			
5/9/2002	NA			
5/16/2002	NA			

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
5/23/2002	72			
5/30/2002		6.3		
6/6/2002	NA			
6/13/2002	38			
6/20/2002	54	5.9		
6/27/2002	74			
7/3/2002	53			
7/11/2002	NA			
7/18/2002	49			
7/25/2002	NA			
8/1/2002	59		>2419.6	6
8/8/2002	44			
8/15/2002	42			
8/22/2002	NA			
8/29/2002	NA			
9/5/2002	50			
9/12/2002	NA			
9/19/2002	59			
9/26/2002				
10/3/2002	40			
10/10/2002	59			
10/17/2002	47		>2419.6	<1
10/24/2002	NA			
10/31/2002	NA	5.6		
11/7/2002	42			
11/14/2002	35			
11/21/2002	58	5.5		
11/26/2002	43			
12/5/2002	42			
12/12/2002	37			
12/19/2002	42			
12/24/2002	33			
1/2/2003	35			
1/9/2003	36			
1/16/2003	40		308	6
1/23/2003	40			
1/30/2003	40			
2/6/2003	44			
2/13/2003	46			
2/20/2003	54			
2/27/2003	54			
3/6/2003	39			

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
3/13/2003	NA			
3/20/2003	NA			
3/27/2003	54	4.7		
4/3/2003	41			
4/10/2003	NA			
4/17/2003	53			
4/24/2003	60	9.5	921	105
5/1/2003	53			
5/8/2003	64			
5/15/2003	46			
5/22/2003	37			
5/29/2003	40	10		
6/5/2003	37			
6/12/2003	54			
6/19/2003	57			
6/26/2003	85	7.9		
7/3/2003	53			
7/10/2003	48			
7/17/2003	54			
7/24/2003	44			
7/31/2003	47		>2419.6	<1
8/7/2003	51			
8/14/2003	63			
8/21/2003	39			
8/28/2003	NA		>2419.6	<1
9/4/2003	27			
9/11/2003	32			
9/18/2003	33			
9/25/2003	39		>2419.6	<1
10/2/2003	34			
10/9/2003	33			
10/16/2003	33			
10/23/2003	28			
10/30/2003	22		>2419.6	1
11/6/2003	32			
11/13/2003	31			
11/20/2003	30		>2419.6	36
11/26/2003	28			
12/4/2003	38			
12/11/2003	NA			
12/18/2003	26			

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
12/23/2003	24			
12/30/2003	21			
1/8/2004	27			
1/15/2004	24			
1/22/2004	24			
1/29/2004	NA		1733	7
2/5/2004	24			
2/12/2004	26			
2/19/2004	36			
2/26/2004	45		>2419.6	14
3/4/2004	45			
3/11/2004	49			
3/18/2004	50			
3/25/2004	40		1414	10
4/1/2004	62			
4/8/2004	51			
4/15/2004	44			
4/22/2004	96			
4/29/2004	35		>2419.6	44
5/6/2004	49			
5/13/2004	48			
5/20/2004	66			
5/27/2004	56		>2419.6	4
6/3/2004	67			
6/10/2004	64			
6/17/2004	51			
6/24/2004	48		>2419.6	9
7/1/2004	43			
7/8/2004	54			
7/15/2004	42			
7/22/2004	53			
7/29/2004	56		>2419.6	1
8/5/2004	37			
8/12/2004	46			
8/19/2004	53			
8/26/2004	60		>2419.6	1
9/2/2004	46			
9/9/2004	39			
9/16/2004	46			

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
9/23/2004	45			
9/30/2004	46		>2419.6	<1
10/7/2004	54			
10/14/2004	50			
10/21/2004	46			
10/28/2004	43		>2419.6	770
11/4/2004	48			
11/11/2004	35			
11/18/2004	52			
11/23/2004	24	6.5	>2419.6	12
12/2/2004	27			
12/9/2004	40			
12/16/2004	NA			
12/22/2004	35			
12/29/2004	38	5.9	387	5
1/6/2005	63			
1/13/2005	90			
1/20/2005	NA			
1/27/2005	57	6.4	>2419.6	9
2/3/2005	66			
2/10/2005	62			
2/17/2005	83			
2/24/2005	50	13	1300	8
3/3/2005	64			
3/10/2005	48			
3/17/2005	46			
3/24/2005	39			
3/31/2005	38	7.5	272	16
4/7/2005	70			
4/14/2005	41			
4/21/2005	40			
4/28/2005	54	NA	1733	77
5/5/2005	62			
5/12/2005	58			
5/19/2005	54			
5/26/2005	34	8.8	>2419.6	23
6/2/2005	76			
6/9/2005	66			
6/16/2005	44			
6/23/2005	64			
6/30/2005	58	9.3	>2419.6	<1
7/7/2005	61			

E3: 541MER535 – San Luis Drain @ Terminus continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
7/13/2005	49			
7/21/2005	44			
7/28/2005	39	12	>2419.6	<1
8/4/2005	42			
8/11/2005	46			
8/18/2005	42			
8/25/2005	33	10	>2419.6	<1
9/1/2005	34			
9/8/2005	43			
9/15/2005	47			
9/22/2005	39			
9/29/2005	40	11	>2419.6	<1
Count	234	33	30	21
Min	14	0.5	272	1
Max	96	16	2420	770
Mean	45	8.5	NA	NA
Geo Mean	43	7	1800	12
Median	43	8.8	2420	9
Quartile 1	36	5.9	1905	6
Quartile 3	52	11	2420	23

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

E3: 541MER535 – San Luis Drain @ Terminus 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	44		<2		<0.1	<1	13		
11/30/2000	79		<2		<0.1	<1	12	1.3	2.3
12/28/2000	87		<2		<0.1	<1	8.6	0.9	1.6
1/25/2001	95		<2		<0.1	<1	8		
2/22/2001	110		<2		<0.1	<1	8.5	1.7	3.1
3/29/2001	91		<2		<0.1	<1	8.6	5.1	9.6
4/26/2001	97		<2	<1	<0.02	<1	8.3		
5/31/2001	81		<1.0		0.4	NA	8.9	2.2	4.1
6/7/2001	88		<1.0		0.1	<1	8	3.3	4.9
6/14/2001	91		<2			<1	8.2	3.3	5.7
6/21/2001	73		<2		<0.1	<1	8.2	5.8	10.9
6/28/2001	58		<2		<0.1	<1	8	3.6	5.7
8/16/2001	11		<2		0.4	<1	5.4		
8/30/2001	56		<2		<0.1	<1	8.4		
9/27/2001	45		<2		<0.1	<1	11		
10/25/2001								4.2	8.3
11/29/2001	NA		NA		NA	<0.03	11	1.3	2.5
12/27/2001								1.3	2.4
1/31/2002								1.5	2.3
2/28/2002								2.6	4.2
4/25/2002								5.8	9.8
5/30/2002								3.2	5
6/20/2002								5.6	10.1
8/29/2002								4.5	8
10/31/2002								5.6	8.6
11/21/2002								4.4	8.4
12/19/2002								1.6	2.2

E3: 541MER535 – San Luis Drain @ Terminus 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)
1/30/2003								1.9	2.9
8/28/2003	22		2.2		<0.1	<1.0	11		
9/25/2003	27		2.1		0.1	<1.0	10		
10/30/2003	46		1.5		<0.1	<1.0	9.7		
11/20/2003	58		<1.0		<0.1	<1.0	9.1		
1/29/2004		29	0.7	0.1	0.1	NA			
2/26/2004		22	0.8	NA	0.1	NA			
3/11/2004		19	1.2	0.1	0.1	<0.01			
3/25/2004		22	1.2	0	0.1	<0.01			
4/15/2004		19	1.2	0.1	0.1	NA			
4/29/2004		18	1.6	0.1	0.1	NA			
5/13/2004		14	1.7	0.1	0.1	<0.01			
6/10/2004		16	1.7	0.1	0.1	<0.01			
6/24/2004		11	2	0.1	0.1	<0.01			
7/15/2004		14	1.6	0.1	<0.02	<0.01			
7/29/2004		7.1	2.1	NA	0.1	<0.03			
8/12/2004		6.3	1.8	0.1	0.1	<0.03			
8/26/2004		6.9	2	NA	0.1	NA			
9/16/2004		8.4	1.9	0.1	0.1	<0.03			
9/30/2004		5.3	1.8	0.2	NA	<0.03			
10/28/2004		8.9	1.4	NA	0.1	0.1			
11/23/2004		8.3	1.2	NA	0.1	NA			
12/29/2004		9.7	0.8	0.1	0.1	NA			
1/27/2005		24	0.8	0.1	0.2	NA			
2/24/2005		29	2.3	1	0.3	0.1			
3/31/2005		33	1	0.1	0.1	NA			
4/28/2005		16	2.1	0.1	NA	NA			
5/12/2005		23	NA	NA	0.1	<0.03			
5/26/2005		15	1.6	0.1	0.1	<0.03			
6/16/2005		NA	1.3	NA	NA	NA			
6/30/2005		12	2	0.1	0.1	NA			
7/13/2005		12	2	NA	NA	<0.03			
9/29/2005		7.3	2.5	NA	NA	<0.03			

E3: 541MER535 – San Luis Drain @ Terminus 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	19	27	46	19	41	35	20	22	22
Min	11.0	5.3	0.5	0.1	0.01	0.01	5.4	0.9	1.6
Max	110.0	33.0	2.5	1.0	0.4	0.5	13.0	5.8	10.9
Mean	66.3	15.4	1.4	0.2	0.1	0.3	9.2	3.2	5.6
Geo Mean	58.2	13.6	1.3	0.1	0.1	0.1	9.0	2.8	4.7
Median	73.0	14.0	1.2	0.1	0.1	0.5	8.6	3.3	5.0
Quartile 1	45.5	8.7	1.0	0.1	0.1	0.02	8.2	1.6	2.6
Quartile 3	89.5	20.5	1.8	0.1	0.1	0.5	10.3	4.5	8.4

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

E3: 541MER535 – San Luis Drain @ Terminus 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)
11/30/2000				7.2	2.8	<5	5.8		
12/28/2000				9.8	2.7	<5	6.8	<2	
1/25/2001	1100			14	2.8	<5	5.9	<2	
2/22/2001	1100			11	2.9	<5	5.8	<2	
3/29/2001	1300			7.2	2.5	<5	<5	<2	
4/26/2001	1300			6	3	<5	<5	<2	
5/31/2001	1000			3.2	1.8	<5	5	<2	
6/7/2001	1200	2.3	<1	6.1	2.6	<5	5.5	<2	<0.2
6/14/2001	1000	<2.0	<1	5.3	2.1	<5	<5	<2	<0.2
6/21/2001	NA	<2.0	<1	2.1	1.3	<5	<5	<2	<0.2
6/28/2001	1000	2.1	<1	2.7	1.7	<5	<5	<2	<0.2
7/26/2001		NA	NA	4.3	2.1	<5	<5	<2	NA
8/30/2001	930	<2	<1	2	1.9	<5	<5	<2	
9/27/2001	1200	7.9	<1	<1	<1	<5	<5	<2	<0.2
10/25/2001	1100	<4	<0.1	<1	1	<5	<5	<2	<0.2
11/29/2001	1100	<4	<0.1	2.3	1.6	<5	<5	<2	<0.2
12/27/2001		<4	<0.1	7.8	2.1	<5	5.3	2.4	<0.2
1/31/2002		<4.0	<0.1	7.6	NA	<5.0	<5.0	<2.0	<0.2
2/28/2002		<4.0	<0.1	12	3.1	<5.0	<5.0	<2.0	<0.2
3/28/2002		<4.0	<0.1	8.3	1.4	<5.0	<5.0	<2.0	<0.2
4/25/2002		<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
5/30/2002		<4.0	<0.1	2.1	1.9	<5.0	<5.0	2.8	<0.2
6/20/2002	950	4.2	<0.1	2.9	1.8	<5.0	5.1	<2.0	<0.2
10/31/2002	1100	<4.0	<0.1	2.1	<1.0	<5.0	<5.0	<2.0	<0.2
11/21/2002	1200	<4.0	<0.1	3.3	1.1	<5.0	<5.0	4.1	<0.2
3/27/2003	1300	7.8	NA	6.6	1.3	<5.0	<5.0	<2.0	<0.2

E3: 541MER535 – San Luis Drain @ Terminus 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)
4/24/2003	1300	<4.0	<0.1	NA	NA	NA	6.2	<2.0	<0.2
5/22/2003		<4.0	0.1	2.3	<1.0	<5.0	<5.0	<2.0	0.2
5/29/2003	1100	<4.0	<0.1	1.9	3.2	<5.0	<5.0	<2.0	<0.2
6/26/2003	970	<4.0	<0.1	4.2	2.2	<5.0	<5.0	<2.0	<0.2
Count	19	22	21	29	28	29	30	29	21
Min	930.0	1.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Max	1300.0	7.9	0.5	14.0	3.2	2.5	6.8	4.1	0.2
Mean	1118.4	2.5	0.2	5.0	1.9	2.5	3.5	1.2	0.1
Geo Mean	1111.8	2.1	0.1	3.7	1.7	2.5	3.2	1.1	0.1
Median	1100.0	2.0	0.1	4.2	1.9	2.5	2.5	1.0	0.1
Quartile 1	1000.0	2.0	0.1	2.1	1.3	2.5	2.5	1.0	0.1
Quartile 3	1200.0	2.0	0.5	7.2	2.6	2.5	5.1	1.0	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

E3: 541MER535 – San Luis Drain @ Terminus 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)
11/30/2000				4	1.9	<5	<5	<2	
12/28/2000				6.1	<1	<5	<5	<2	
1/25/2001	1100			8.8	<1	<5	<5	<2	
2/22/2001	1100			8.3	1.3	<5	<5	<2	
3/29/2001	1300			6.2	2.1	<5	<5	<2	
4/26/2001	1300			4.9	2	<5	<5	<2	
5/31/2001	1000			1.5	1.1	<5	<5	<2	
6/7/2001	1200	<2	<1	3.5	1.3	<5	<5	<2	<0.2
6/14/2001	1000	<2.0	<1	3.5	1.2	<5	<5	<2	<0.2
6/21/2001	NA	<2.0	<1	1.2	<1	<5	<5	<2	<0.2
6/28/2001	1000	2.3	<1	<1	<1	<5	<5	<2	<0.2
7/26/2001		NA	NA	NA	NA	NA	NA	NA	NA
8/30/2001	930	<2	<1	<1	1.1	<5	<5	<2	
9/27/2001	1200	7.7	<1	<1	<1	<5	<5	<2	<0.2
10/25/2001	1100	<4	<0.1	<1	<1	<5	<5	<2	<0.2
11/29/2001	1100	<4	<0.1	1.5	<1	<5	<5	<2	<0.2
12/27/2001		<4	<0.1	4.2	<1	<5	<5	<2	<0.2
1/31/2002		<4.0	<0.1	5	NA	<5.0	<5.0	<2.0	<0.2
2/28/2002		<4.0	<0.1	9.7	1.6	<5.0	<5.0	<2.0	<0.2
3/28/2002		<4.0	<0.1	6.4	<1.0	<5.0	5	<2.0	<0.2
4/25/2002		5	<0.1	1.7	<1.0	<5.0	<5.0	NA	<0.2
5/30/2002		<4.0	<0.1	<1.0	1.6	<5.0	<5.0	<2.0	<0.2
6/20/2002	950	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2
10/31/2002	1100	<4.0	<0.1	1.8	<1.0	<5.0	<5.0	<2.0	<0.2
11/21/2002	1200	<4.0	<0.1	<1.0	<1.0	<5.0	<5.0	<2.0	<0.2

E3: 541MER535 – San Luis Drain @ Terminus 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	15	17	17	24	23	24	24	23	16
Min	930.0	1.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Max	1300.0	7.7	0.5	9.7	2.1	2.5	5.0	1.0	0.1
Mean	1105.3	2.3	0.2	3.4	0.9	2.5	2.6	1.0	0.1
Geo Mean	1099.6	2.0	0.1	2.1	0.8	2.5	2.6	1.0	0.1
Median	1100.0	2.0	0.1	2.7	0.5	2.5	2.5	1.0	0.1
Quartile 1	1000.0	2.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Quartile 3	1200.0	2.0	0.5	5.3	1.3	2.5	2.5	1.0	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

E3: 541MER535 – San Luis Drain @ Terminus 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)
10/5/2000					3400				
10/12/2000					2500				
10/19/2000					2500				
10/26/2000	450	1400	270	85	3300	<1	200	170	560
11/2/2000					2900				
11/9/2000					3300				
11/16/2000					3700				
11/21/2000					3300				
11/30/2000	430	1300	280	83	3200	<1	260	210	620
12/7/2000					2800				
12/12/2000					3200				
12/21/2000					2800				
12/28/2000	490	1300	320	86	3200	<1	260	210	580
1/4/2001					3400				
1/11/2001					3000				
1/18/2001					3200				
1/25/2001	470	1300	310	82	3300	<1	240	200	590
2/1/2001					3200				
2/8/2001					3000				
2/15/2001					3300				
2/22/2001	520	1500	300	91	3600	<1	220	180	690
3/1/2001					3500				
3/8/2001					3400				
3/15/2001					4200				
3/22/2001					4400				
3/29/2001	570	1600	320	110	3900	10	140	130	800
4/5/2001					4300				

E3: 541MER535 – San Luis Drain @ Terminus 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)
4/12/2001					3600				
4/19/2001					4300				
4/26/2001		1800	330	110	4000	20	76	96	730
5/3/2001					4000				
5/10/2001					3600				
5/17/2001					3200				
5/24/2001					3100				
5/31/2001	490	1400	260	88	3300	<1	130	130	670
6/7/2001	560	1500	300	100	3500	<1	190	160	730
6/14/2001	520	1300	270	89	3300	7	160	140	660
6/21/2001	540	1600	260	95	3500	<1	150	120	680
6/28/2001	510	1300	260	94	3000	<1	180	160	700
8/16/2001					2700				
8/23/2001					2600				
8/30/2001	480	1400	230	87	3100	<1	130	110	600
9/6/2001					2800				
9/13/2001					3200				
9/20/2001					3400				
9/27/2001	NA	1700	310	110	3900	<1	NA	NA	740
10/4/2001					3000				
10/11/2001					3300				
10/18/2001					2800				
10/25/2001	470	1400	290	85	3200	<1	190	NA	600
11/1/2001					3100				
11/8/2001					3000				
11/15/2001					2700				

E3: 541MER535 – San Luis Drain @ Terminus 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)
11/20/2001					2600				
11/29/2001	460	1400	290	84	3300	<1	260	210	600
12/6/2001					3300				
12/13/2001					3300				
12/20/2001					3400				
1/3/2002					3100				
1/10/2002					3200				
1/17/2002					3400				
1/24/2002					3700				
1/31/2002					3800				
2/7/2002					3100				
2/14/2002					3500				
2/21/2002					3700				
3/7/2002					3400				
3/14/2002					3500				
3/21/2002					3100				
4/4/2002					4100				
4/11/2002					4100				
4/18/2002					3900				
4/25/2002					3900				
5/2/2002					3600				
5/9/2002					NA				
5/23/2002					2800				
5/30/2002					3000				
6/6/2002					3300				
6/13/2002					3300				

E3: 541MER535 – San Luis Drain @ Terminus 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)
6/20/2002					3000				
6/27/2002					3200				
9/19/2002					3500				
10/3/2002					3700				
10/10/2002					3800				
10/17/2002					2800				
10/24/2002					3000				
10/31/2002					3600				
11/7/2002					3500				
11/14/2002					3500				
11/26/2002					3200				
3/27/2003	690	1900	340	110					
4/24/2003	640	1700	350	100					
5/29/2003	550	1500	280	94					
6/26/2003	540	1500	250	86					
Count	18	20	20	20	89	16	15	14	16
Min	430	1300	230	82	2500	0.5	76	96	560
Max	690	1900	350	110	4400	20	260	210	800
Mean	520	1490	290	93	3300	2.7	190	160	660
Geo Mean	520	1480	290	93	3300	0.9	180	150	660
Median	520	1450	290	90	3300	0.5	190	160	670
Quartile 1	470	1380	270	86	3100	0.5	150	130	600
Quartile 3	550	1600	310	100	3600	0.5	230	200	708

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

E4: 541MER542 – Mud Slough @ San Luis Drain

Station Code: 541MER542

Location: Latitude 37.26389, Longitude -120.90611

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/5/2000	10:45 AM	20.9	1610	7.6		
10/12/2000	12:35 PM	19.0	1240	7.9		
10/19/2000	9:20 AM	17.9	1200	8.0		
10/26/2000	3:50 PM	14.6	1270	7.3		
11/2/2000	10:24 AM	14.9	1370	7.5		
11/9/2000	11:30 AM	13.1	1640	7.8		
11/16/2000	10:45 AM	10.6	1890	7.3		
11/21/2000	8:40 AM	9.6	1960	8.1		
11/30/2000	12:05 PM	12.2	1920	7.8		
12/7/2000	10:40 AM	9.6	2010	7.9		
12/12/2000	10:00 AM	11.8	2020	7.5		
12/21/2000	12:10 PM	10.5	1960	7.9		
12/28/2000	10:47 AM	7.6	2220	6.9		
1/4/2001	10:13 AM	8.2	2370	7.7		
1/11/2001	11:49 AM	8.7	2080	6.6		
1/18/2001	11:20 AM	8.2	2100	7.5		
1/25/2001	11:30 AM	9.6	2240	7.9		
2/1/2001	11:52 AM	8.5	2310	7.8		
2/8/2001	11:20 AM	9.1	2660	8.1		
2/15/2001	12:15 PM	11.8	2660	8.2		
2/22/2001	12:55 PM	12.3	2870	8.0		
3/1/2001	10:05 AM	12.4	2930	7.3		
3/8/2001	10:40 AM	16.5	2370	7.6		
3/15/2001	12:30 PM	17.1	2740	7.9		
3/22/2001	12:40 PM	20.6	3580	8.1		
3/29/2001	11:25 AM	20.0	4140	8.3		
4/5/2001	12:50 PM	17.5	3740	8.4		
4/12/2001	10:50 AM	15.8	3340	8.0		
4/19/2001	12:25 PM	17.8	4460	8.3		
4/26/2001	10:45 AM	23.4	4910	8.2		
5/3/2001	11:00 AM	17.0	3940	8.1		
5/10/2001	9:45 AM	23.2	3080	7.8		
5/17/2001	12:51 PM	24.4	3110	7.1		
5/24/2001	11:25 AM	28.3	3410	6.9		
5/31/2001	11:00 AM	26.0	3390	8.0		
6/6/2001	11:47 AM	22.7	4400	8.2	7.0	
6/7/2001	1:20 PM	27.0	3860	8.4	11.0	

E4: 541MER542 – Mud Slough @ San Luis Drain continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
6/13/2001	8:50 AM	21.1	4470	8.4	9.6	
6/14/2001	10:55 AM	21.6	4520	8.3	10.8	
6/20/2001	10:52 AM	26.9	4310	8.3	9.3	
6/21/2001	2:05 PM	29.3	4450	8.3	9.5	
6/28/2001	1:23 PM	24.8	4190	8.4	9.5	
7/5/2001	9:48 AM	26.0	3550	8.0	8.2	
7/11/2001	11:52 AM	25.6	3750	8.3	13.1	
7/19/2001	1:28 PM	25.7	4190	8.3	10.6	
7/26/2001	9:06 AM	24.7	4160	8.2	10.4	
8/2/2001	10:48 AM	25.0	2170	8.4	10.2	
8/9/2001	9:40 AM	26.5	3370	8.4	10.1	
8/16/2001	11:25 AM	25.0	3420	8.4	9.7	
8/23/2001	9:42 AM	22.5	3100	8.3	10.1	
8/30/2001	10:35 AM	24.3	3820	8.3	10.1	
9/6/2001	9:20 AM	22.9	2970	8.0	7.6	
9/13/2001	10:42 AM	22.3	2470	8.0	7.3	
9/20/2001	10:06 AM	22.5	2540	7.7	6.1	
9/27/2001	10:47 AM	21.7	1870	7.5	5.1	
10/4/2001	9:11 AM	22.1	1610	7.4	2.6	
10/11/2001	10:24 AM	18.2	1870	7.6	5.1	
10/18/2001	10:14 AM	18.8	1680	7.6	5.5	
10/25/2001	10:47 AM	15.5	1950	7.7	6.8	
11/1/2001	11:10 AM	17.0	1800	7.8	7.0	
11/8/2001	11:06 AM	15.4	1850	8.1	8.8	
11/15/2001	9:45 AM	15.5	1540	7.8	6.5	
11/20/2001	1:43 PM	14.9	1720	7.8	7.6	
11/29/2001	9:30 AM	10.9	2040	NA	NA	
12/6/2001	10:18 AM	9.8	1920	7.8	10.3	
12/13/2001	9:57 AM	8.9	2740	8.0	10.6	
12/20/2001	11:26 AM	9.4	2520	8.0	11.6	
12/27/2001	1:51 PM	10.3	2270	7.9	12.1	
1/3/2002	10:45 AM	12.8	2080	7.8	8.9	
1/10/2002	10:05 AM	11.7	2260	7.8	9.8	
1/17/2002	9:46 AM	6.9	2650	7.9	11.6	
1/24/2002	12:55 PM	8.2	3030	8.0	11.9	
1/31/2002	11:59 AM	6.9	2870	8.0	13.4	
2/7/2002	9:12 AM	10.5	2690	8.1	11.2	
2/14/2002	10:00 AM	11.6	3040	8.0	9.0	
2/21/2002	11:01 AM	14.6	3210	7.6	9.2	
2/28/2002	10:18 AM	15.6	3260	8.0	8.6	

E4: 541MER542 – Mud Slough @ San Luis Drain continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
3/7/2002	9:10 AM	14.8	3220	8.2	9.9	
3/14/2002	10:22 AM	12.3	3750	8.3	10.5	
3/21/2002	10:14 AM	14.8	3440	8.2	9.2	
3/28/2002	12:17 PM	18.5	3890	8.4	10.0	
4/4/2002	9:19 AM	18.7	4720	8.4	8.5	
4/11/2002	10:43 AM	19.0	5140	8.4	11.0	
4/18/2002	7:43 AM	15.7	4130	8.4	10.5	
4/25/2002	10:52 AM	20.5	3650	8.2	9.0	
5/2/2002	8:56 AM	16.6	4770	8.3	12.5	
5/9/2002	10:46 AM	19.6	4260	8.3	10.9	
5/16/2002	10:03 AM	20.9	3550	8.3	8.7	35.7
5/23/2002	7:56 AM	17.2	3390	8.1	NA	
5/30/2002	1:38 PM	27.3	3310	8.1	9.1	
6/6/2002	9:05 AM	24.2	3570	8.1	NA	
6/13/2002	11:35 AM	24.5	4030	8.4	NA	
6/20/2002	9:04 AM	23.8	1400	8.5	NA	
6/27/2002	10:25 AM	25.2	4220	8.6	11.0	
7/3/2002	11:15 AM	26.8	4220	8.6	NA	
7/11/2002	12:44 PM	27.5	3840	8.6	NA	
7/18/2002	10:23 AM	25.0	3920	8.6	10.0	23.8
7/25/2002	9:03 AM	24.2	2540	8.3	9.0	
8/1/2002	9:57 AM	25.4	2840	8.5	8.9	
8/8/2002	10:35 AM	22.3	3290	8.6	10.7	
8/15/2002	9:19 AM	25.1	3330	8.3	9.2	
8/22/2002	9:18 AM	22.2	2460	8.2	8.9	
8/29/2002	9:09 AM	22.3	3140	8.3	NA	
9/5/2002	9:00 AM	22.9	3130	8.3	9.6	
9/12/2002	9:28 AM	22.4	3400	8.1	9.2	
9/19/2002	9:31 AM	21.6	3210	8.2	7.7	NA
9/26/2002	12:05 PM	23.6	2180	7.7	7.8	
10/3/2002	9:51 AM	14.4	2510	8.0	11.3	
10/10/2002	1:02 PM	22.0	3040	8.2	7.7	
10/17/2002	9:15 AM	16.7	1430	8.1	7.9	48.8
10/24/2002	10:49 AM	16.0	1420	7.7	7.3	
10/31/2002	10:10 AM	14.3	1740	7.8	5.9	14.8
11/7/2002	10:05 AM	14.0	1900	7.7	7.6	
11/14/2002	10:10 AM	14.3	1680	7.8	8.3	
11/21/2002	12:27 PM	13.2	1900	7.8	8.7	21.3
11/26/2002	12:02 PM	12.3	2200	8.0	10.4	
12/5/2002	10:07 AM	10.9	2530	7.9	10.4	17.3
12/12/2002	9:26 AM	11.3	2220	7.7	9.6	
12/19/2002	9:17 AM	8.9	1940	7.8	10.0	24.8

E4: 541MER542 – Mud Slough @ San Luis Drain continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
12/24/2002	10:25 AM	8.3	1500	7.6	12.4	
1/2/2003	12:46 PM	10.4	1610	7.7	14.4	
1/9/2003	11:34 AM	9.7	2540	7.7	10.5	
1/16/2003	12:05 PM	11.6	2010	7.8	10.6	52.9
1/23/2003	8:57 AM	10.7	2450	7.5	13.6	
1/30/2003	10:41 AM	12.7	2500	7.7	8.5	38.6
2/6/2003	10:22 AM	9.4	2940	7.9	11.4	
2/13/2003	12:16 PM	12.6	2780	7.8	10.1	36.6
2/20/2003	11:28 AM	12.1	2640	8.0	12.4	48.2
2/27/2003	9:13 AM	13.3	3100	7.9	9.3	
3/6/2003	11:02 AM	14.8	3070	7.8	12.0	NA
3/13/2003	10:25 AM	18.2	3030	8.1	9.1	101
3/20/2003	8:55 AM	14.9	2980	8.0	9.1	90.5
3/27/2003	9:44 AM	15.8	2270	8.3	9.8	82.5
4/3/2003	1:11 PM	17.2	3640	7.8	11.3	56.4
4/10/2003	10:15 AM	18.9	4510	8.2	10.6	45.6
4/17/2003	9:15 AM	16.6	4830	8.2	10.1	33.5
4/24/2003	10:11 AM	17.7	3680	8.3	9.8	51.7
5/1/2003	9:37 AM	17.8	3930	8.2	10.6	NA
5/8/2003	9:04 AM	17.4	4350	8.1	10.4	49.6
5/15/2003	9:09 AM	18.9	4430	8.5	12.0	
5/22/2003	10:19 AM	22.9	4300	8.2	10.4	33.7
5/29/2003	9:55 AM	25.0	3360	8.1	8.4	
6/5/2003	10:10 AM	25.0	2520	8.1	8.0	81.7
6/12/2003	10:25 AM	21.4	2730	8.3	9.9	77.7
6/19/2003	10:17 AM	23.5	3710	8.5	6.3	50.0
6/26/2003	9:41 AM	23.8	3500	8.5	10.2	59.6
7/3/2003	9:50 AM	24.7	3820	8.4	27.6	
7/10/2003	9:40 AM	24.8	4370	8.4	15.8	
7/17/2003	9:55 AM	26.5	2770	8.5	10.1	
7/24/2003	9:17 AM	27.3	3740	8.4	8.9	29.5
7/31/2003	9:50 AM	26.5	3410	8.3	8.8	30.3
8/7/2003	9:17 AM	24.1	2810	8.4	9.1	56.5
8/14/2003	9:30 AM	23.9	3560	8.7	10.0	
8/21/2003	9:10 AM	25.2	4110	8.4	8.9	32.6
8/28/2003	9:37 AM	24.2	2910	8.2	NA	36.2
9/4/2003	9:15 AM	25.0	2640	8.0	6.4	21.0
9/11/2003	11:28 AM	23.5	2340	8.3	9.3	47.9
9/18/2003	9:34 AM	19.6	1750	8.0	17.7	83.4
9/25/2003	10:22 AM	21.9	1650	7.7	5.3	37.1
10/2/2003	10:03 AM	20.8	1430	7.6	6.1	25.3
10/9/2003	9:34 AM	20.7	1650	7.5	7.2	218
10/16/2003	11:39 AM	18.0	1630	7.6	6.9	19.5
10/23/2003	10:50 AM	19.4	1360	7.6	7.1	21.2

E4: 541MER542 – Mud Slough @ San Luis Drain continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
10/30/2003	9:04 AM	15.6	1650	7.7	6.7	16.5
11/6/2003	10:02 AM	13.8	1550	7.8	8.3	20.0
11/13/2003	8:51 AM	13.2	1710	7.7	7.9	18.9
11/20/2003	9:26 AM	13.3	1590	7.8	8.1	NA
11/26/2003	8:48 AM	8.0	1850	8.0	10.5	13.3
12/4/2003	9:28 AM	12.0	2040	7.7	9.6	
12/11/2003	8:59 AM	10.8	1900	7.8	11.0	NA
12/18/2003	9:51 AM	8.6	2020	7.9	12.8	NA
12/23/2003	9:18 AM	10.9	2010	7.6	13.6	NA
12/30/2003	9:51 AM	8.1	1820	7.9	12.1	NA
1/8/2004	8:35 AM	8.9	2140	7.7	10.0	NA
1/15/2004	9:49 AM	9.6	2470	7.9	9.9	NA
1/22/2004	9:18 AM	8.7	2490	7.8	16.6	19.8
1/29/2004	10:07 AM	10.5	2460	7.9	10.8	NA
2/5/2004	9:13 AM	9.8	2780	8.0	11.5	27.4
2/12/2004	9:26 AM	10.7	3070	8.1	12.2	NA
2/19/2004	9:08 AM	12.3	2750	7.9	11.8	NA
2/26/2004	9:37 AM	11.5	2140	7.9	9.8	NA
3/4/2004	9:18 AM	12.0	2420	8.0	10.4	79.1
3/11/2004	9:53 AM	17.2	2720	7.8	7.7	NA
3/18/2004	8:32 AM	19.5	3260	8.0	9.0	
3/25/2004	10:01 AM	18.1	3460	8.2	8.5	57.6
4/1/2004	9:30 AM	15.9	3370	8.3	10.6	
4/8/2004	9:45 AM	17.9	4970	8.4	10.3	26.7
4/15/2004	9:39 AM	18.5	4040	8.2	9.6	46.6
4/22/2004	10:00 AM	16.1	4570	8.3	15.4	52.5
4/29/2004	10:59 AM	18.7	3600	8.4	NA	42.0
5/6/2004	10:34 AM	23.0	4180	8.1	24.0	31.5
5/13/2004	10:10 AM	19.7	2600	8.4	18.9	60.1
5/20/2004	10:03 AM	20.9	3030	8.2	9.6	46.5
5/27/2004	9:19 AM	21.8	2800	8.2	NA	NA
6/3/2004	10:27 AM	24.6	4400	8.3	10.4	44.1
6/10/2004	10:06 AM	20.8	4170	8.6	10.9	44
6/17/2004	10:41 AM	24.3	3530	8.4	10.8	38.5
6/24/2004	9:49 AM	23.2	3800	8.3	9.5	NA
7/1/2004	9:58 AM	22.8	3400	8.4	10.3	NA

E4: 541MER542 – Mud Slough @ San Luis Drain continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
7/8/2004	9:33 AM	24.7	3480	8.1	9.5	NA
7/15/2004	10:06 AM	25.0	2940	8.0	9.5	NA
7/22/2004	11:34 AM	27.6	3120	8.3	11.2	NA
7/29/2004	9:31 AM	25.2	2830	8.2	10.1	NA
8/5/2004	9:02 AM	23.5	3280	8.3	9.6	NA
8/12/2004	9:45 AM	26.3	3580	8.3	9.5	NA
8/19/2004	11:22 AM	26.2	3140	8.4	10.7	NA
8/26/2004	9:59 AM	23.6	3660	8.5	9.6	NA
9/2/2004	9:19 AM	24.1	3520	8.1	8.1	NA
9/9/2004	11:26 AM	24.8	2820	7.5	8.2	NA
9/16/2004	11:02 AM	22.3	2960	8.1	8.4	NA
9/23/2004	12:47 PM	21.5	2220	7.9	9.8	NA
9/30/2004	9:22 AM	18.9	2170	7.8	7.5	NA
10/7/2004	9:22 AM	20.3	1500	7.4	8.3	
10/14/2004	8:56 AM	18.8	1240	7.4	7.5	
10/21/2004	10:35 AM	15.3	1480	NA	9.0	
10/28/2004	9:09 AM	13.2	1360	7.6	9.9	
11/4/2004	10:56 AM	12.8	1780	7.9	8.6	
11/11/2004	8:57 AM	14.5	1800	7.5	7.9	
11/18/2004	9:20 AM	13.5	1750	7.7	7.9	
11/23/2004	12:06 PM	9.8	1940	7.6	10.1	
12/2/2004	10:24 AM	7.4	2280	8.0	11.9	
12/9/2004	9:04 AM	10.6	1960	8.0	11.1	
12/16/2004	10:01 AM	11.0	1970	7.7	10.3	
12/22/2004	12:01 PM	8.6	2040	8.0	14.1	
12/29/2004	10:42 AM	9.4	1800	7.8	10.6	
1/6/2005	8:25 AM	9.6	1740	7.6	11.8	
1/13/2005	10:12 AM	9.2	1610	7.8	9.0	
1/20/2005	9:29 AM	9.1	1840	7.6	10.9	
1/27/2005	9:25 AM	10.7	2740	7.9	13.9	
2/3/2005	9:34 AM	10.7	2800	7.7	11.1	
2/10/2005	9:33 AM	12.6	2990	7.9	9.9	
2/17/2005	9:42 AM	14.2	2700	7.7	10.2	
2/24/2005	9:46 AM	14.3	1980	7.8	9.3	
3/3/2005	8:55 AM	15.1	2490	7.9	9.3	
3/10/2005	10:50 AM	19.2	2550	7.9	11.3	
3/17/2005	8:55 AM	16.5	3560	7.9	13.0	

E4: 541MER542 – Mud Slough @ San Luis Drain continued...

Date	Time	Temp (°C)	Field SC (umhos)	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)
3/24/2005	9:37 AM	14.5	2710	7.9	11.2	
3/31/2005	9:14 AM	14.2	3510	8.2	11.0	
4/7/2005	9:48 AM	17.7	3550	8.3	8.9	
4/14/2005	9:01 AM	14.3	3720	8.4	11.1	
4/21/2005	9:48 AM	17.6	4180	8.3	9.0	
4/28/2005	9:11 AM	18.3	3000	8.1	12.9	
5/5/2005	10:07 AM	20.5	3280	8.1	10.0	
5/12/2005	9:10 AM	19.2	3930	8.2	9.9	
5/19/2005	9:56 AM	21.5	4240	8.2	9.6	
5/26/2005	10:05 AM	24.7	2880	8.2	7.5	
6/2/2005	10:00 AM	21.8	2420	8.3	10.9	
6/9/2005	8:39 AM	20.7	2790	8.1	10.0	
6/16/2005	9:34 AM	23.4	3000	8.1	9.5	
6/23/2005	10:28 AM	23.5	2700	NA	9.6	
6/30/2005	10:39 AM	25.9	2740	8.4	10.2	
7/7/2005	9:17 AM	25.2	3410	7.9	11.1	
7/13/2005	10:16 AM	27.9	2740	7.2	9.4	
7/21/2005	9:05 AM	27.2	2930	8.3	8.9	
7/28/2005	10:51 AM	27.6	3370	8.6	10.3	
8/4/2005	9:15 AM	26.1	3190	8.5	8.6	
8/11/2005	10:53 AM	26.6	3240	8.5	10.0	
8/18/2005	9:44 AM	24.1	3470	8.2	9.7	
8/25/2005	9:54 AM	24.2	3000	7.9	9.2	
9/1/2005	9:10 AM	22.9	3050	7.9	9.9	
9/8/2005	9:59 AM	22.0	2970	8.0	8.8	
9/15/2005	9:20 AM	19.6	1930	7.9	9.2	
9/22/2005	10:19 AM	22.1	2700	8.0	10.2	
9/29/2005	9:21 AM	20.3	2160	8.0	7.5	

Count	264	264	261	218	55
Min	6.9	1200	6.6	2.6	13.3
Max	29.3	5140	8.7	27.6	218
Mean	17.9	2854	8.0	9.9	45.8
Geo Mean	16.9	2710	8.0	9.7	39.0
Median	18.2	2805	8.0	9.8	38.6
Quartile 1	12.6	2040	7.8	8.8	26.0
Quartile 3	23.4	3503	8.3	10.8	52.7

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

E4: 541MER542 – Mud Slough @ San Luis Drain continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
10/12/2000	34			
10/26/2000	25	13		
11/30/2000	15	5.3		
12/28/2000	15	8.8		
1/25/2001	28	8.9		
2/22/2001	NA	<1		
3/29/2001	72	<1		
4/26/2001		6.6		
5/31/2001	44	8.7		
6/7/2001	46	11		
6/14/2001	45	13		
6/21/2001	NA	13		
6/28/2001	37	14		
7/26/2001		10		
8/30/2001	55	17		
9/27/2001	54	22		
<hr/>				
10/4/2001		28		
10/11/2001		32		
10/25/2001		22		
11/29/2001		NA		
1/31/2002		NA		
2/28/2002		9.5		
3/28/2002		19		
4/25/2002		NA		
5/30/2002		7.2		
6/20/2002		6.1		
8/1/2002			>2419.6	31
9/26/2002		NA		
<hr/>				
10/17/2002			>2419.6	135
10/31/2002		10		
11/21/2002		11		
12/19/2002		8.4		
1/16/2003			2420	74
3/27/2003		7.8		
4/24/2003		8.0	>2419.6	2420
5/29/2003		9.9		
6/26/2003		11		
7/31/2003			>2419.6	44
8/28/2003			>2419.6	75
9/25/2003			>2419.6	86
<hr/>				
10/30/2003			>2419.6	37

E4: 541MER542 – Mud Slough @ San Luis Drain continued...

Date	TSS (mg/L)	TOC (mg/L)	Total Coli MPN	<i>E. coli</i> MPN
11/20/2003			>2419.6	59
3/25/2004			>2419.6	75
4/29/2004			>2419.6	88
5/27/2004			>2419.6	86
6/24/2004			>2419.6	101
7/29/2004			>2419.6	130
8/26/2004			>2419.6	6
9/30/2004			>2419.6	17
10/28/2004			>2419.6	166
11/23/2004		13	>2419.6	24
12/29/2004		11	>2419.6	278
1/27/2005		12	>2419.6	64
2/24/2005		13	>2419.6	93
3/31/2005		13	>2419.6	74
4/28/2005		NA	>2419.6	102
5/26/2005		9.2	>2419.6	687
6/30/2005		7.0	1011	43
7/28/2005		10	>2419.6	20
8/25/2005		11	>2419.6	50
9/29/2005		13	>2419.6	99
Count	12	39	28	28
Min	15	0.5	1011	6
Max	72	32	2420	2420
Mean	39	12	NA	NA
Geo Mean	35	10	2346	76
Median	41	11	2420	75
Quartile 1	27	8.6	2420	44
Quartile 3	48	13	2420	101

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

E4: 541MER542 – Mud Slough @ San Luis Drain 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	4.2		<2		0.4	<1	11	3.2	5.8
11/30/2000	14		2.2		0.2	<1	11	1.2	2.4
12/28/2000	17		<2		0.2	<1	11	1.3	2.3
1/25/2001	18		<2		0.2	<1	10	2.2	3.8
2/22/2001	36		<2		0.2	<1	11	3.0	5.6
3/29/2001	52		2.4	<1	0.3	<1	12	5.2	10.4
4/26/2001	72		<2	<1	0.1	<1	9.8	4.7	7.3
5/31/2001	50		<2		0.1	NA	9.5	3.2	6.2
6/7/2001	59		<1.0		0.1	<1	8.7	4.7	7.0
6/14/2001	84		<2			<1	8.7	4.3	7.4
6/21/2001	55		<2		<0.1	<1	8.3	7.3	11.8
6/28/2001	57		<2		<0.1	<1	10	3.3	5.5
8/30/2001	49		<2		0.1	<1	9.4		
9/27/2001	7.9		<2		0.4	<1	12		
10/25/2001								3.0	6.8
11/29/2001	NA		NA		NA	0.2	12	1.4	3.4
12/27/2001								1.3	2.8
1/31/2002								2.1	3.5
2/28/2002								2.8	5.3
3/28/2002	NA		2.1		0.5	0.2	9.6		
4/25/2002								4.9	7.9
5/30/2002								3.2	5.1
6/20/2002								6.2	10.9
8/29/2002								5.1	8.4
9/26/2002								3.1	5.4
10/31/2002								4.1	7.4
11/21/2002								2.3	4.6

E4: 541MER542 – Mud Slough @ San Luis Drain 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)
12/19/2002								2.1	3.4
1/30/2003								2.2	3.8
3/13/2003	35		4.5		0.5	<1.0	11		
8/28/2003	17		2.3		0.2	<1.0	11		
9/25/2003	5.9		2.1		0.5	<1.0	10		
10/30/2003	7.0		2.1		0.5	<1.0	11		
11/20/2003	6.9		<1.0		0.2	<1.0	10		
1/29/2004		3.9	1.2	0.2	0.3	0.2			
2/26/2004		6.6	1.4	NA	0.4	0.3			
3/11/2004		4.0	2.1	0.2	0.6	0.3			
3/25/2004		7.7	1.8	0.2	0.6	0.2			
4/15/2004		9.5	1.7	0.1	0.2	NA			
4/29/2004		11.0	1.9	0.1	0.2	<0.01			
5/13/2004		6.8	1.6	0.1	0.2	<0.01			
6/10/2004		13.0	1.7	0.1	0.1	<0.01			
6/24/2004		8.9	1.8	0.1	0.1	<0.01			
7/15/2004		8.2	1.2	0.1	0.1	<0.01			
7/29/2004		5.1	1.7	NA	0.1	<0.03			
8/12/2004		6.3	1.8	0.1	0.1	<0.03			
8/26/2004		6.1	2.1	NA	0.2	<0.03			
9/16/2004		4.3	1.8	0.2	0.2	<0.03			
9/30/2004		1.8	1.6	0.3	NA	<0.03			
10/28/2004		1.4	1.5	NA	0.4	0.4			
11/23/2004		1.5	1.5	NA	0.3	0.2			
12/29/2004		1.4	1.1	0.1	0.2	0.1			
1/27/2005		6.0	1.4	0.2	0.4	0.2			
2/24/2005		4.9	1.5	0.1	0.5	0.3			

E4: 541MER542 – Mud Slough @ San Luis Drain 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)
3/31/2005		10.0	1.7	0.2	0.4	0.2			
4/28/2005		7.5	1.5	0.2	NA	NA			
5/12/2005		12.0	NA	NA	0.3	<0.03			
5/26/2005		4.7	1.5	0.1	0.2	<0.03			
6/16/2005		NA	1.2	NA	NA	NA			
6/30/2005		6.8	1.8	0.1	0.2	NA			
7/13/2005		5.6	1.5	NA	NA	<0.03			
9/29/2005		2.3	1.6	NA	NA	<0.03			
Count	19	27	47	21	42	44	21	26	26
Min	4.2	1.4	0.5	0.1	0.1	0.01	8.3	1.2	2.3
Max	84.0	13.0	4.5	0.5	0.6	0.5	12.0	7.3	11.8
Mean	34.0	6.2	1.6	0.2	0.3	0.3	10.3	3.4	5.9
Geo Mean	23.6	5.2	1.4	0.2	0.2	0.1	10.3	3.0	5.4
Median	35.0	6.1	1.5	0.1	0.2	0.3	10.0	3.2	5.6
Quartile 1	11.0	4.2	1.0	0.1	0.1	0.02	9.6	2.2	3.8
Quartile 3	53.5	8.0	1.8	0.2	0.4	0.5	11.0	4.6	7.4

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

E4: 541MER542 – Mud Slough @ San Luis Drain 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	280			1.8	1.7	<5	5.4		
11/30/2000	410			1.7	1.5	<5	<5	<2	
12/28/2000	470			3.1	2.2	<5	<5	3.0	
1/25/2001	470			3.7	2.3	<5	5.3	<2	
2/22/2001	620			5.8	3.2	<5	7.6	<2	
3/29/2001	940			8.6	4.1	<5	10	5.1	
4/26/2001	1100			6.2	2.9	<5	<5	<2	
5/31/2001	760			3.3	2.8	<5	6.5	2.7	
6/7/2001	880	2.4	<1	5.0	3.1	<5	6	2.1	<0.2
6/14/2001	1000	<2.0	<1	5.1	2.0	<5	<5	4.5	<0.2
6/21/2001	NA	2.0	<1	2.8	1.8	<5	<5	<2	<0.2
6/28/2001	950	2.4	<1	2.7	1.7	<5	5.2	<2	<0.2
7/26/2001		NA	NA	3.2	1.9	<5	<5	<2	NA
8/30/2001	820	2.1	<1	2.5	1.8	<5	<5	<2	
9/27/2001	1200	5.7	<1	<1	2.2	<5	<5	70	<0.2
10/25/2001	400	4.1	<0.1	<1	1.2	<5	<5	2.1	<0.2
11/29/2001	420	4.6	<0.1	1.6	<1	<5	<5	2.1	<0.2
12/27/2001		<4	<0.1	2.3	2.2	<5	<5	<2	<0.2
1/31/2002		<4.0	<0.1	1.6	NA	<5.0	<5.0	<2.0	<0.2
2/28/2002		4.9	<0.1	7.8	4.2	<5.0	8.4	4.7	<0.2
3/28/2002		9.4	<0.1	5.3	4.9	<5.0	13	8.9	<0.2
4/25/2002		4.4	<0.1	<1.0	1.0	<5.0	<5.0	<2.0	<0.2
5/30/2002		<4.0	<0.1	2.5	2.4	<5.0	6.0	<2.0	<0.2
6/20/2002	700	4.5	<0.1	3.4	1.9	<5.0	6.1	<2.0	<0.2
9/26/2002	470	6.3	<0.1	3.6	NA	<5.0	6.8	2.5	<0.2
10/31/2002	340	4.0	<0.1	1.4	1.6	<5.0	<5.0	<2.0	<0.2
11/21/2002	360	<4.0	<0.1	2.0	7.7	<5.0	<5.0	<2.0	<0.2

E4: 541MER542 – Mud Slough @ San Luis Drain 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)
3/27/2003	550	7.7	NA	6.7	4.4	<5.0	9.1	8.5	<0.2
4/24/2003	830	4.1	<0.1	NA	NA	NA	5.4	2.7	<0.2
5/29/2003	730	<4.0	<0.1	4.5	4.7	<5.0	5.7	3.7	<0.2
6/26/2003	760	<4.0	<0.1	5.9	6.4	<5.0	8.0	3.4	<0.2
Count	23	22	21	30	28	30	31	30	21
Min	280.0	1.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Max	1200.0	9.4	0.5	8.6	7.7	2.5	13.0	70.0	0.1
Mean	672.2	3.7	0.2	3.5	2.8	2.5	4.9	4.7	0.1
Geo Mean	621.0	3.2	0.1	2.8	2.4	2.5	4.2	2.1	0.1
Median	700.0	3.2	0.1	3.2	2.2	2.5	5.2	1.6	0.1
Quartile 1	445.0	2.0	0.1	1.9	1.8	2.5	2.5	1.0	0.1
Quartile 3	855.0	4.6	0.5	5.1	3.4	2.5	6.3	3.3	0.1

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

E4: 541MER542 – Mud Slough @ San Luis Drain 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	280			<1	<1	<5	<5	<2	
11/30/2000	410			<1	1.2	<5	<5	<2	
12/28/2000	470			1.4	<1	<5	<5	<2	
1/25/2001	470			1.5	<1	<5	<5	<2	
2/22/2001	620			2.5	1.1	<5	<5	<2	
3/29/2001	940			3.1	2.1	<5	<5	<2	
4/26/2001	1100			4.3	1.8	<5	<5	<2	
5/31/2001	760			<1	<1	<5	<5	<2	
6/7/2001	880	2.0	<1	2.4	1.1	<5	<5	<2	<0.2
6/14/2001	1000	<2.0	<1	3.6	1.1	<5	<5	<2	<0.2
6/21/2001	NA	<2.0	<1	<1	<1	<5	<5	<2	<0.2
6/28/2001	950	2.5	<1	1.1	<1	<5	<5	<2	<0.2
7/26/2001		NA	NA	NA	NA	NA	NA	NA	NA
8/30/2001	820	<2	<1	1.0	1.2	<5	<5	<2	
9/27/2001	1200	5.2	<1	<1	1.3	<5	<5	52	<0.2
10/25/2001	400	4.3	<0.1	<1	1.1	<5	<5	<2	<0.2
11/29/2001	420	<4	<0.1	<1	1.3	<5	<5	<2	<0.2
12/27/2001		<4	<0.1	<1	1.2	<5	<5	<2	<0.2
1/31/2002		<4.0	<0.1	1.4	NA	<5.0	<5.0	<2.0	<0.2
2/28/2002		5.5	<0.1	2.4	1.1	<5.0	<5.0	<2.0	<0.2
3/28/2002		6.6	<0.1	<1.0	2.1	<5.0	8.1	<2.0	<0.2
4/25/2002		5.2	<0.1	1.4	<1.0	<5.0	<5.0	NA	<0.2
5/30/2002		<4.0	<0.1	<1.0	1.2	<5.0	<5.0	<2.0	<0.2
6/20/2002	700	<4.0	<0.1	<1.0	1.5	<5.0	<5.0	<2.0	<0.2
9/26/2002	470	6.4	<0.1	<1.0	3.2	<5.0	<5.0	<2.0	<0.2
10/31/2002	340	<4.0	<0.1	<1.0	1.3	<5.0	<5.0	<2.0	<0.2

E4: 541MER542 – Mud Slough @ San Luis Drain 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)
11/21/2002	360	<4.0	<0.1	<1.0	1.2	<5.0	<5.0	<2.0	<0.2
3/27/2003	550								
4/24/2003	830								
5/29/2003	730								
6/26/2003	760								
Count	23	18	18	26	25	26	26	25	17
Min	280.0	1.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Max	1200.0	6.6	0.5	4.3	3.2	2.5	8.1	52.0	0.1
Mean	672.2	3.0	0.2	1.3	1.2	2.5	2.7	3.0	0.1
Geo Mean	621.0	2.5	0.1	0.9	1.0	2.5	2.6	1.2	0.1
Median	700.0	2.0	0.1	0.5	1.2	2.5	2.5	1.0	0.1
Quartile 1	445.0	2.0	0.1	0.5	0.5	2.5	2.5	1.0	0.1
Quartile 3	855.0	5.0	0.5	1.5	1.3	2.5	2.5	1.0	0.1

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

E4: 541MER542 – Mud Slough @ San Luis Drain 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	140	200	61	31	800	<1	240	200	150
11/30/2000	230	380	89	45	1300	<1	250	200	260
12/28/2000	270	470	100	52	1400	<1	270	220	310
1/25/2001	270	480	100	51	1400	<1	270	220	320
2/22/2001	330	660	140	66	2000	<1	290	240	430
3/29/2001	490	1100	220	97	3000	2	260	220	640
4/26/2001		1500	260	110	3700	20	146	166	710
5/31/2001	410	1100	180	73	2500	<1	160	160	490
6/7/2001	470	1100	210	84	2800	2	180	160	570
6/14/2001	540	1300	250	93	3300	5	150	140	670
6/21/2001	490	1400	230	93	3300	<1	170	140	660
6/28/2001	560	1500	240	89	3200	<1	220	180	650
8/30/2001	410	1100	200	79	2800	<1	140	120	540
9/27/2001	NA	1700	310	110	3900	<1	NA	NA	740
10/25/2001	270	330	85	46	1200	<1	270	NA	270
11/29/2001	270	390	88	47	1300	<1	280	228	290
6/20/2002									
9/26/2002									
10/31/2002									
11/21/2002									
3/27/2003	360	610	120	63					
4/24/2003	450	1100	200	80					
5/29/2003	430	1500	180	70					
6/26/2003	400	1100	190	71					

E4: 541MER542 – Mud Slough @ San Luis Drain 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	18	20	20	20	16	16	15	14	16
Min	140	200	61	31	800	0.5	140	120	150
Max	560	1700	310	110	3900	20.0	290	240	740
Mean	380	950	170	73	2400	2.2	220	190	480
Geo Mean	360	810	160	69	2100	0.9	210	180	440
Median	400	1100	190	72	2700	0.5	240	190	520
Quartile 1	270	480	100	52	1400	0.5	170	160	300
Quartile 3	470	1300	220	90	3200	0.9	270	220	650

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