

Table C-8: Rose Creek Drainage Water Quality Cross Valley Pond Seepage and Discharge 2010 - Bioassay Results Summary

Station	Date	Percent Mortality				Temp. (°C)		pH		D.O. (mg/L)		Conductivity	LC ₅₀ Final Result
		24 hr	48 hr	72 hr	96 hr	Initial	Final	Initial	Final	Initial	Final	(µS/cm)	(%v/v)
X13	3/2/2010	0	0	0	0	14.7	14.6	7.2	8.1	9.3	9.3	2260	Pass: 100%
X13	6/13/2010	0	0	0	0	14.9	15.2	7.0	7.9	8.7	9.9	2211	Pass: 100%
X13	9/7/2010	0	0	0	0	14.0	15.1	7.0	8.1	9.0	9.9	2342	Pass: 100%
X13	12/2/2010	0	0	0	0	14.3	15.1	7.1	8.0	10.3	9.7	2414	Pass: 100%
X5P	3/2/2010	0	0	0	0	14.9	14.7	7.5	8.3	9.7	9.7	1760	Pass: 100%
X5	6/15/2010	0	0	0	0	15.8	14.8	7.5	8.0	9.6	9.9	1836	Pass: 100%
X5	9/7/2010	0	0	0	0	14.3	15.1	7.6	7.8	9.5	9.8	1884	Pass: 100%
X5	12/2/2010	0	0	0	0	14.3	15.2	6.9	8.0	10.6	9.8	2656	Pass: 100%

Table C-9: 2010 FMC Lab Analysis - Zinc (Total and Dissolved) at X5

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Method of Analysis	Comments
22-Mar-10	5:51 PM	0.9	7.11	1580	0.317	0.325	0.321	0.334	0.338	0.336	ICP	
23-Mar-10	1:21 PM	1.2	7.30	1740	0.314	0.325	0.320	0.316	0.320	0.318	ICP	
24-Mar-10	9:11 AM	2.2	7.05	1820	0.358	0.375	0.367	0.375	0.382	0.379	ICP	
25-Mar-10	7:04 AM	1.5	7.22	1690	0.299	0.302	0.301	0.296	0.298	0.297	ICP	
25-Mar-10	2:46 PM	2.5	7.10	1730	0.319	0.319	0.319	0.315	0.317	0.316	ICP	
26-Mar-10	8:00 AM	2.0	7.05	1700	0.311	0.321	0.316	0.311	0.312	0.312	ICP	
27-Mar-10	7:20 AM	2.5	7.03	1710	0.285	0.286	0.286	0.276	0.279	0.278	ICP	
28-Mar-10	7:25 AM	2.6	7.00	2600	0.310	0.312	0.311	0.303	0.307	0.305	ICP	
29-Mar-10	8:42 AM	1.1	7.17	1680	0.291	0.303	0.297	0.292	0.295	0.294	ICP	
30-Mar-10	8:13 AM	1.6	7.11	1480	0.286	0.294	0.290	0.287	0.288	0.288	ICP	
30-Mar-10	10:41 AM	1.7	7.02	1030	0.291	-	0.291	-	-		ICP	
31-Mar-10	9:10 AM	1.2	7.29	1424	0.275	0.271	0.273	0.274	0.279	0.277	ICP	
1-Apr-10	7:51 AM	2.3	7.35	1410	0.286	0.284	0.285	0.279	0.281	0.280	ICP	Siphon shut down at 6:30 PM.
5-Apr-10	10:54 AM	1.0	7.13	1640	0.268	0.272	0.270	0.272	-	0.272	ICP	Siphon opened at 10:10 AM (1/2 open).
6-Apr-10	8:36 AM	0.8	7.00	1100	0.297	0.315	0.306	0.295	0.296	0.296	ICP	
7-Apr-10	8:57 AM	0.8	6.88	1514	0.286	0.284	0.285	0.284	0.284	0.284	ICP	
8-Apr-10	10:34 AM	2.4	7.33	1776	0.290	0.279	0.285	0.288	0.297	0.293	ICP	
9-Apr-10	8:07 AM	1.6	7.41	1750	0.291	0.293	0.292	0.286	0.289	0.288	ICP	
9-Apr-10	2:16 PM	3.9	7.14	1760	0.280	0.286	0.283	0.280	0.287	0.284	ICP	Began discharging from mill to CVP at 11 am.
10-Apr-10	7:40 AM	2.2	7.11	1504	0.285	0.278	0.282	0.288	-	0.288	ICP	
11-Apr-10	7:40 AM	2.7	7.31	1770	0.195	0.193	0.194	0.201	-	0.201	ICP	
12-Apr-10	8:30 AM	0.6	7.32	1830	0.181	0.190	0.186	0.174	0.177	0.176	ICP	
13-Apr-10	9:10 AM	1.6	7.41	1561	0.247	0.226	0.237	0.233	-	0.233	ICP	sample 1 may be slightly high due to evaporative concentration.
14-Apr-10	8:26 AM	1.6	7.41	1578	0.192	0.184	0.188	0.177	-	0.177	ICP	
15-Apr-10	8:12 AM	1.8	6.98	1900	0.202	0.212	0.207	0.193	0.190	0.192	ICP	
16-Apr-10	7:40 AM	1.2	7.43	1890	0.177	0.172	0.175	0.165	0.164	0.165	ICP	
17-Apr-10	7:40 AM	3.4	6.82	1870	0.154	0.154	0.154	0.151	-	0.151	ICP	pH retested at 1pm: 7.07
18-Apr-10	8:20 AM	3.5	6.88	1870	0.136	0.137	0.137	0.123	-	0.123	ICP	
19-Apr-10	8:21 AM	3.4	7.22	1880	0.174	0.199	0.187	0.153	-	0.153	ICP	Began treatment of Faro pit water @ 2pm. New ICP standards prepared.
20-Apr-10	2:36 PM	4.3	6.85	1947	0.256	0.290	0.273	0.199	-	0.199	ICP	
21-Apr-10	8:52 AM	4.0	6.74	1908	0.262	0.277	0.270	0.266	-	0.266	ICP	
22-Apr-10	8:30 AM	2.4		1774	0.239	0.248	0.244	-	-		ICP	pH meter malfunctioning, no pH reading obtained.

Table C-9: 2010 FMC Lab Analysis - Zinc (Total and Dissolved) at X5

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Method of Analysis	Comments
22-Apr-10	12:15 PM	3.8	6.9	1750	0.366	-	0.366	0.235	-	0.235	ICP	10" siphon shut down @ 9am. Water collected following installation of 16" siphon (started ~11:30am). pH measured using litmus paper b/c pH meter malfunctioning.
23-Apr-10	13:55 PM	2.1	7.35	1390	0.701		0.701	0.120		0.120	ICP	Siphon turned on at 13:05 PM.
23-Apr-10	13:55 PM	2.1	7.35	1390	0.143	0.190	0.167	0.125	0.119	0.122	ICP	Rerun of X5 13:55 PM sample to verify results.
23-Apr-10	16:52 PM	2.9	7.51	1420	0.126	0.131	0.129	0.113	0.115	0.114	ICP	Siphon closed at 16:54 PM due to 1st run of 13:55 PM sample.
23-Apr-10	13:55 PM	2.1	7.35	1390	0.132	0.141	0.137	-	-		ICP	Rerun of X5 13:55 PM sample by KR and JL on Apr 24.
25-Apr-10	7:54 AM	2.1	7.47	1639	0.164	0.149	0.157	0.118	0.112	0.115	ICP	Siphon turned on at 7:10 AM.
26-Apr-10	8:32 AM	2.5	8.08	1430	0.105	0.107	0.106	0.095	0.095	0.095	ICP	
27-Apr-10	1:56 PM	2.7	7.19	1399	0.195	0.196	0.196	0.176	-	0.176	ICP	
28-Apr-10	9:00 AM	3.0	8.39	1320	0.137	0.139	0.138	0.126	-	0.126	ICP	
29-Apr-10	3:36 PM	3.7	7.12	1280	0.161	0.161	0.161	0.139	-	0.139	ICP	
30-Apr-10	8:00 AM	4.7	7.71	1370	0.181	0.181	0.181	0.160	-	0.160	ICP	
1-May-10	9:00 AM	4.9	7.76	1410	0.250	0.260	0.255	0.208	-	0.208	ICP	
2-May-10	7:50 AM	5.3	6.99	1380	0.201	0.190	0.196	0.164	-	0.164	ICP	
3-May-10	8:35 AM	4.2	7.69	1400	0.221	0.224	0.223	0.222	-	0.222	ICP	
4-May-10	8:49 AM	3.6	7.06	1490	0.290	0.286	0.288	0.269	-	0.269	ICP	
5-May-10	8:48 AM	4.7	7.29	1384	0.249	0.242	0.246	0.240	-	0.240	ICP	
6-May-10	8:56 AM	5.1	7.15	1380	0.264	0.290	0.277	0.239	-	0.239	ICP	
7-May-10	6:43 AM	3.8	7.33	1362	0.223	0.216	0.220	0.201	-	0.201	ICP	
8-May-10	7:55 AM	4.9	7.22	1409	0.254	0.256	0.255	0.251	-	0.251	ICP	
9-May-10	8:07 AM	5.4	7.21	1392	0.245	0.245	0.245	0.224	-	0.224	ICP	
10-May-10	8:25 AM	5.7	7.33	1542	0.280	0.285	0.283	0.280	-	0.280	ICP	
11-May-10	8:05 AM	5.0	7.45	1390	0.197	0.190	0.194	0.177	-	0.177	ICP	
12-May-10	8:31 AM	5.9	7.43	1425	0.241	0.241	0.241	0.238	-	0.238	ICP	
13-May-10	7:32 AM	6.5	7.12	1424	0.237	0.238	0.238	0.219	0.217	0.218	ICP	
14-May-10	7:37 AM	5.7	7.09	1374	0.251	0.259	0.255	0.235	0.232	0.234	ICP	
15-May-10	7:34 AM	5.5	7.39	1365	0.210	0.210	0.210	0.196	0.188	0.192	ICP	
16-May-10	7:55 AM	6.3	7.26	1388	0.235	0.244	0.240	0.217	0.218	0.218	ICP	
17-May-10	8:23 AM	6.1	7.26	1494	0.217	0.217	0.217	0.213	0.210	0.212	ICP	
18-May-10	8:29 AM	6.9	7.06	1404	0.237	0.241	0.239	0.230	0.225	0.228	ICP	
19-May-10	8:22 AM	7.5	7.25	1303	0.178	0.184	0.181	0.179	0.177	0.178	ICP	
20-May-10	8:14 AM	6.6	7.55	1462	0.239	0.248	0.244	0.235	-	0.235	ICP	

Table C-9: 2010 FMC Lab Analysis - Zinc (Total and Dissolved) at X5

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Method of Analysis	Comments
21-May-10	8:25 AM	6.1	7.13	1338	0.180	0.178	0.179	0.174	-	0.174	ICP	
22-May-10	7:59 AM	6.1	7.64	1395	0.193	0.187	0.190	0.186	-	0.186	ICP	
23-May-10	8:10 AM	7.4	7.80	1339	0.176	0.177	0.177	0.158	-	0.158	ICP	
24-May-10	7:27 AM	7.9	6.99	1509	0.232	0.232	0.232	0.234	-	0.234	ICP	
25-May-10	8:30 AM	9.0	7.51	1441	0.181	0.182	0.182	0.174	-	0.174	ICP	
26-May-10	8:15 AM	10.2	6.88	1429	0.255	0.254	0.255	0.250	-	0.250	ICP	
27-May-10	9:03 AM	10.5	7.60	1472	0.219	0.209	0.214	0.199	-	0.199	ICP	
28-May-10	7:48 AM	10.7	8.11	1501	0.222	0.219	0.221	0.214	-	0.214	ICP	
29-May-10	7:44 AM	11.5	8.11	1540	0.237	0.233	0.235	0.223	-	0.223	ICP	
30-May-10	7:50 AM	11.9	8.02	1588	0.218	0.223	0.221	0.215	-	0.215	ICP	
31-May-10	8:15 AM	11.9	7.65	1573	0.226	0.227	0.227	0.216	-	0.216	ICP	
1-Jun-10	8:25 AM	12.6	7.51	1740	0.259	0.249	0.254	0.239	-	0.239	ICP	
2-Jun-10	8:37 AM	12.1	8.03	1660	0.214	0.216	0.215	0.223	-	0.223	ICP	
3-Jun-10	8:24 AM	12.4	7.47	1824	0.310	0.296	0.303	0.312	-	0.312	ICP	
4-Jun-10	7:50 AM	12.0	7.31	1712	0.300	0.302	0.301	0.288	-	0.288	ICP	
5-Jun-10	6:55 AM	11.4	7.25	1705	0.296	0.290	0.293	0.294	-	0.294	ICP	
6-Jun-10	6:51 AM	11.0	7.42	1811	0.287	0.285	0.286	0.288	-	0.288	ICP	
7-Jun-10	8:10 AM	11.2	7.43	1534	0.293	0.293	0.293	0.288	-	0.288	ICP	
8-Jun-10	8:26 AM	11.6	7.49	1664	0.284	0.281	0.283	0.270	-	0.270	ICP	
9-Jun-10	8:25 AM	11.6	7.65	1345	0.282	0.282	0.282	0.270	-	0.270	ICP	
10-Jun-10	8:12 AM	12.1	7.21	1644	0.312	0.314	0.313	0.304	-	0.304	ICP	
11-Jun-10	7:55 AM	11.6	7.89	1636	0.256	0.265	0.261	0.254	-	0.254	ICP	
12-Jun-10	7:45 AM	12.1	8.21	1646	0.261	0.260	0.261	0.240	-	0.240	ICP	
13-Jun-10	8:10 AM	11.1	7.75	1737	0.336	0.326	0.331	0.256	0.259	0.258	AA	
14-Jun-10	8:21 AM	11.0	7.70	1749	0.334	0.329	0.332	0.275	-	0.275	AA	10" Siphon brought online at 10:35 AM.
15-Jun-10	8:28 AM	11.1	7.48	1670	0.278	0.281	0.280	0.266	-	0.266	ICP	
16-Jun-10	8:17 AM	12.0	8.00	1565	0.268	0.270	0.269	0.261	-	0.261	ICP	
17-Jun-10	8:10 AM	11.9	8.11	1557	0.341	0.316	0.329	0.273	-	0.273	AA	
18-Jun-10	7:24 AM	12.3	7.67	1675	0.326	0.331	0.329	0.282	-	0.282	AA	
19-Jun-10	7:57 AM	12.3	7.77	1610	0.283	0.304	0.294	0.247	-	0.247	AA	
20-Jun-10	7:30 AM	12.6	7.73	1620	0.289	0.284	0.287	0.248	-	0.248	AA	
21-Jun-10	8:07 AM	13.6	7.93	1520	0.322	0.340	0.331	0.254	-	0.254	AA	
22-Jun-10	9:43 AM	13.8	7.63	1605	0.329	0.310	0.320	0.278	-	0.278	AA	
23-Jun-10	9:05 AM	14.3	7.97	1633	0.316	0.343	0.330	0.229	-	0.229	AA	
24-Jun-10	9:07 AM	13.6	7.24	1659	0.269	0.271	0.270	0.270	-	0.270	ICP	
25-Jun-10	8:17 AM	13.5	8.03	1577	0.217	0.206	0.212	0.197	-	0.197	ICP	
26-Jun-10	9:28 AM	14.4	7.68	1251	0.215	0.218	0.217	0.217	-	0.217	ICP	
27-Jun-10	8:27 AM	14.5	7.56	1828	0.235	0.235	0.235	0.224	-	0.224	ICP	

Table C-9: 2010 FMC Lab Analysis - Zinc (Total and Dissolved) at X5

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Method of Analysis	Comments
28-Jun-10	8:20 AM	14.1	7.78	1594	0.212	0.201	0.207	0.191	-	0.191	ICP	
29-Jun-10	9:42 AM	14.9	6.80	1725	0.230	0.229	0.230	0.226	-	0.226	ICP	
30-Jun-10	9:25 AM	14.8	7.94	1693	0.221	0.216	0.219	0.211	-	0.211	ICP	
1-Jul-10	8:10 AM	13.6	7.69	1689	0.247	-	0.247	0.245	-	0.245	ICP	
2-Jul-10	8:28 AM	14.1	7.70	1579	0.218	-	0.218	0.175	-	0.175	ICP	
3-Jul-10	8:30 AM	14.6	7.57	1593	0.188	0.196	0.192	0.183	-	0.183	ICP	
4-Jul-10	8:29 AM	14.2	7.96	1810	0.161	0.155	0.158	0.151	-	0.151	ICP	
5-Jul-10	8:11 AM	13.9	7.65	1840	0.155	0.160	0.158	0.120	-	0.120	ICP	
6-Jul-10	9:43 AM	13.9	7.57	1705	0.223	0.231	0.227	0.165	-	0.165	ICP	
7-Jul-10	8:15 AM	14.0	8.06	1591	0.174	0.172	0.173	0.147	-	0.147	ICP	
8-Jul-10	8:24 AM	14.6	8.56	1651	0.148	-	0.148	0.135	-	0.135	ICP	
9-Jul-10	7:40 AM	14.8	7.62	1725	0.159	0.163	0.161	0.130	-	0.130	ICP	
10-Jul-10	7:38 AM	15.6	7.82	1702	0.145	0.144	0.145	0.131	-	0.131	ICP	
11-Jul-10	7:51 AM	14.1	7.68	1697	0.192	-	0.192	0.168	-	0.168	ICP	
12-Jul-10	8:52 AM	13.9	7.13	1903	0.244	0.250	0.247	0.243	-	0.243	ICP	
13-Jul-10	8:32 AM	14.6	7.85	1567	0.179	0.178	0.179	0.167	-	0.167	ICP	
14-Jul-10	8:35 AM	14.3	7.63	1674	0.193	-	0.193	0.180	-	0.180	ICP	
15-Jul-10	8:33 AM	14.4	7.96	1591	0.207	0.208	0.208	0.197	-	0.197	ICP	
16-Jul-10	7:43 AM	13.7	7.58	1890	0.199	0.198	0.199	0.188	-	0.188	ICP	
17-Jul-10	7:30 AM	13.1	7.98	1671	0.211	0.210	0.211	0.197	-	0.197	ICP	
18-Jul-10	7:24 AM	13.2	7.62	1950	0.234	-	0.234	0.231	-	0.231	ICP	
19-Jul-10	8:30 AM	14.2	7.79	1899	0.243	0.241	0.242	0.239	-	0.239	ICP	
20-Jul-10	9:51 AM	15.8	7.69	1674	0.219	0.215	0.217	0.204	-	0.204	ICP	
21-Jul-10	8:36 AM	15.0	7.74	1880	0.219	0.219	0.219	0.214	-	0.214	ICP	
22-Jul-10	9:03 AM	14.9	7.59	1553	0.244	0.230	0.237	0.232	-	0.232	ICP	
23-Jul-10	8:03 AM	14.4	7.92	1635	0.215	0.218	0.217	0.208	-	0.208	ICP	
24-Jul-10	8:01 AM	13.9	7.82	1842	0.211	0.212	0.212	0.202	-	0.202	ICP	
25-Jul-10	7:58 AM	13.7	7.78	1860	0.235	0.231	0.233	0.216	-	0.216	ICP	
26-Jul-10	8:10 AM	13.9	7.60	1632	0.253	0.254	0.254	0.233	-	0.233	ICP	
27-Jul-10	8:35 AM	15.0	7.83	1589	0.240	0.242	0.241	0.228	-	0.228	ICP	
28-Jul-10	8:38 AM	14.7	7.88	1535	0.253	0.255	0.254	0.241	-	0.241	ICP	
29-Jul-10	8:32 AM	15.6	7.76	1653	0.287	-	0.287	0.274	-	0.274	AA	
30-Jul-10	8:12 AM	15.5	7.72	1621	0.311	0.319	0.315	0.276	-	0.276	AA	
31-Jul-10	8:05 AM	16.0	7.95	1565	0.354	0.347	0.351	0.258	-	0.258	AA	
1-Aug-10	8:09 AM	15.7	7.15	1566	0.425	0.443	0.434	0.382	-	0.382	AA	Siphon shut down at 10:30am.
1-Aug-10	8:09 AM	15.7	7.15	1566	0.410	0.410	0.410	-	-		AA	Reanalysis of morning sample to verify previous result.
9-Aug-10	10:22 AM	15.4	7.55	1880	0.234	0.235	0.235	0.195	-	0.195	ICP	

Table C-9: 2010 FMC Lab Analysis - Zinc (Total and Dissolved) at X5

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Method of Analysis	Comments
9-Aug-10					0.244	0.263	0.254	0.235	-	0.235	AA	Duplicate analysis on AA.
10-Aug-10	8:32 AM	15.0	8.02	1806	0.208	0.209	0.209	0.139	-	0.139	ICP	
11-Aug-10	8:10 AM	14.8	8.09	1570	0.196	0.203	0.200	0.180	-	0.180	ICP	
12-Aug-10	8:14 AM	14.60	8.13	1650	0.201	0.205	0.203	0.187	-	0.187	ICP	
13-Aug-10	8:00 AM	15.1	7.63	1706	0.193	0.190	0.192	0.162	-	0.162	ICP	
14-Aug-10	8:27 AM	15.6	7.83	1568	0.199	0.199	0.199	0.147	-	0.147	ICP	
15-Aug-10	7:45 AM	15.0	7.46	1530	0.194	0.191	0.193	0.169	-	0.169	ICP	
16-Aug-10	7:58 AM	16.3	8.24	1710	0.177	0.175	0.176	0.129	-	0.129	ICP	
17-Aug-10	8:40 AM	16.5	7.74	1594	0.175	0.182	0.179	0.140	-	0.140	ICP	
18-Aug-10	9:00 AM	15.7	7.58	1491	0.176	0.179	0.178	0.152	-	0.152	ICP	
19-Aug-10	9:45 AM	15.4	7.84	1625	0.167	0.165	0.166	0.148	-	0.148	ICP	
20-Aug-10	8:00 AM	13.6	7.69	1750	0.170	0.163	0.167	0.168	-	0.168	ICP	
21-Aug-10	6:15 AM	13.2	7.63	1594	0.167	0.164	0.166	0.150	-	0.150	ICP	
22-Aug-10	7:35 AM	12.5	7.81	1601	0.201	0.203	0.202	0.153	-	0.153	ICP	
23-Aug-10	8:30 AM	12.2	8.23	1603	0.174	0.172	0.173	0.143	-	0.143	ICP	
24-Aug-10	9:00 AM	11.9	7.98	1266	0.169	0.169	0.169	0.147	-	0.147	ICP	
25-Aug-10	8:12 AM	11.7	7.91	1511	0.153	0.152	0.153	0.141	-	0.141	ICP	
26-Aug-10	8:22 AM	11.7	8.30	1740	0.224	0.225	0.225	0.188	-	0.188	AA	
27-Aug-10	7:58 AM	11.0	8.04	1570	0.222	0.225	0.224	0.196	-	0.196	AA	
28-Aug-10	8:12 AM	10.9	7.77	1661	0.204	0.207	0.206	0.169	-	0.169	AA	
29-Aug-10	8:00 AM	11.8	8.07	1625	0.238	-	0.238	0.197	-	0.197	AA	
30-Aug-10	8:23 AM	11.5	7.42	1673	0.251	0.233	0.242	0.170	-	0.170	AA	
30-Aug-10	8:23 AM	11.5	7.69	1717	0.277	-	0.277	0.169	-	0.169	AA	Reanalysis of morning sample to verify previous results. pH and conductivity measured on lab meter.
30-Aug-10	2:30 PM	13.6	7.57	1900	0.258	0.269	0.264	0.160	-	0.160	AA	Afternoon sample. Siphon shutdown at ~5 pm.
30-Aug-10	2:30 PM	13.6	7.81	1710								pH and conductivity measured on lab meter.
31-Aug-10	2:45 PM	13.4	7.64	1860	0.236	-	0.236				AA	
1-Sep-10	7:57 AM	11.8	7.33	1595	0.242	0.241	0.242	0.191	-	0.191	AA	
2-Sep-10	8:18 AM	10.2	7.68	1623	0.210	0.206	0.208	0.187	-	0.187	AA	
3-Sep-10	7:35 AM	10.7	7.22	1672	0.251	0.245	0.248	0.208	-	0.208	AA	
4-Sep-10	8:16 AM	10.8	7.38	1744	0.192	0.206	0.199	0.177	-	0.177	AA	
5-Sep-10	9:33 AM	11.0	7.68	1860	0.237	0.218	0.228	0.200	-	0.200	AA	
6-Sep-10	9:58 AM	10.7	7.00	1730	0.223	0.248	0.236	0.208	-	0.208	AA	
7-Sep-10	9:45 AM	8.0	7.65	1708	0.254	0.257	0.256	0.219	-	0.219	AA	
8-Sep-10	8:20 AM	10.2	7.50	1512	0.222	0.231	0.227	0.191	-	0.191	AA	

Table C-9: 2010 FMC Lab Analysis - Zinc (Total and Dissolved) at X5

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Method of Analysis	Comments
9-Sep-10	8:05 AM	11.0	8.34	1575	0.236	0.253	0.245	0.186	-	0.186	AA	
9-Sep-10	8:05 AM		7.51									Lab result for pH.
17-Nov-10	12:22 PM	1.1	7.35	1190	0.296	0.298	0.297	0.293	-	0.293	ICP	
18-Nov-10	10:40 AM	1.6	7.30	2219	0.304	0.306	0.305	0.283	-	0.283	ICP	
19-Nov-10	11:15 AM	1.4	6.94	2347	0.323	0.328	0.326	0.272	-	0.272	ICP	
20-Nov-10	10:05 AM	1.9	7.00	2371	0.311	0.314	0.313	0.306	-	0.306	ICP	
21-Nov-10	10:10 AM	2.0	6.76	2350	0.307	0.306	0.307	0.306	-	0.306	ICP	
22-Nov-10	10:03 AM	1.7	7.34	2335	0.312	0.311	0.312	0.318	-	0.318	ICP	
23-Nov-10	10:17 AM	2.0	7.20	2408	0.307	0.301	0.304	0.296	-	0.296	ICP	
24-Nov-10	9:26 AM	2.6	7.24	2347	0.313	0.310	0.312	0.307	-	0.307	ICP	
24-Nov-10	5:08 PM	4.7	7.18	2462	0.309	0.309	0.309	0.301	-	0.301	ICP	
25-Nov-10	10:13 AM	3.0	7.43	2293	0.307	0.305	0.306	0.301	-	0.301	ICP	
25-Nov-10	4:37 PM	3.4	7.57	2414	0.297	0.300	0.299	0.297	-	0.297	ICP	
26-Nov-10	10:15 AM	2.9	6.75	2317	0.287	0.285	0.286	0.301	-	0.301	ICP	
26-Nov-10	5:15 PM	2.5	6.99	2386	0.310	0.318	0.314	0.299	-	0.299	ICP	
27-Nov-10	8:42 AM	2.5	6.90	2440	0.291	0.292	0.292	0.286	-	0.286	ICP	
27-Nov-10	6:02 PM	3.2	6.97	2382	0.294	0.293	0.294	0.299	-	0.299	ICP	
28-Nov-10	8:22 AM	2.5	7.02	2415	0.299	0.299	0.299	0.303	-	0.303	ICP	
28-Nov-10	4:10 PM	2.2	6.80	2436	0.300	0.307	0.304	0.308	-	0.308	ICP	
29-Nov-10	10:00 AM	2.9	6.91	2322	0.306	0.306	0.306	0.295	-	0.295	ICP	
29-Nov-10	3:18 PM	3.2	6.91	2322	0.312	0.312	0.312	0.312	-	0.312	ICP	
30-Nov-10	12:02 PM	2.6	7.31	2520	0.303	0.307	0.305	0.303	-	0.303	ICP	
30-Nov-10	3:30 PM	2.8	7.13	2536	0.304	0.304	0.304	0.306	-	0.306	ICP	
1-Dec-10	8:42 AM	2.4	7.12	2493	0.300	0.304	0.302	0.304	-	0.304	ICP	
1-Dec-10	3:32 PM	2.9	6.88	2500	0.285	0.293	0.289	0.295	-	0.295	ICP	Checked calibration on pH meter & was good.
2-Dec-10	9:09 AM	2.7	6.88	2590	0.298	0.301	0.300	0.301	-	0.301	ICP	

Table C-10:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) at X14

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Method of Analysis	Comments		
22-Mar-10	5:46 PM	0.8	7.49	790	0.032	0.032	0.032	0.027	0.028	0.028	ICP	
23-Mar-10	1:10 PM	1.6	7.64	970	0.055	0.055	0.055	0.046	0.048	0.047	ICP	
24-Mar-10	9:23 AM	0.2	7.39	1190	0.143	0.147	0.145	0.141	0.142	0.142	ICP	
25-Mar-10	7:14 AM	0.4	7.48	1010	0.085	0.087	0.086	0.069	0.070	0.070	ICP	
25-Mar-10	2:49 PM	1.3	7.46	1020	0.081	0.082	0.082	0.076	0.076	0.076	ICP	
26-Mar-10	8:06 AM	0.4	7.34	1030	0.097	0.099	0.098	0.086	0.088	0.087	ICP	
27-Mar-10	7:30 AM	0.7	7.46	1040	0.082	0.082	0.082	0.080	0.082	0.081	ICP	
28-Mar-10	7:35 AM	1.2	7.48	1200	0.090	0.093	0.092	0.073	0.085	0.079	ICP	
29-Mar-10	8:32 AM	1.4	7.51	1030	0.091	0.091	0.091	0.078	0.079	0.079	ICP	
30-Mar-10	8:06 AM	1.5	7.59	913	0.086	0.088	0.087	0.079	0.079	0.079	ICP	
30-Mar-10	10:50 AM	1.0	7.37	1030	0.090	0.090	0.090	-	-		ICP	
31-Mar-10	9:03 AM	1.3	7.73	916	0.080	0.079	0.080	0.072	0.072	0.072	ICP	
1-Apr-10	7:57 AM	1.5	7.57	920	0.081	0.080	0.081	0.073	0.072	0.073	ICP	X5 Siphon shut down at 6:30 PM.
5-Apr-10	8:09 AM	1.5	7.53	820	0.027	0.028	0.028	0.023	-	0.023	ICP	X5 siphon opened at 10:10 AM (1/2 open).
5-Apr-10	11:09 AM	0.3	7.38	980	0.058	0.060	0.059	0.047	-	0.047	ICP	
6-Apr-10	8:24 AM	0.8	7.40	1100	0.091	0.092	0.092	0.084	0.085	0.085	ICP	
7-Apr-10	8:48 AM	0.2	7.14	1240	0.090	0.087	0.089	0.082	0.081	0.082	ICP	
8-Apr-10	10:43 AM	1.7	7.70	1129	0.087	0.090	0.089	0.083	0.085	0.084	ICP	
9-Apr-10	7:55 AM	1.6	7.74	1120	0.094	0.095	0.095	0.078	0.081	0.080	ICP	Began discharging from mill to CVP at 11am.
10-Apr-10	7:30 AM	1.0	7.70	994	0.089	0.089	0.089	0.090	-	0.090	ICP	
11-Apr-10	7:50 AM	1.3	7.67	1100	0.064	0.063	0.064	0.057	-	0.057	ICP	
12-Apr-10	8:14 AM	0.8	7.71	1100	0.063	0.066	0.065	0.051	0.052	0.052	ICP	
13-Apr-10	9:04 AM	0.9	7.85	1027	0.074	0.073	0.074	0.073	-	0.073	ICP	
14-Apr-10	8:20 AM	1.6	7.84	1038	0.059	0.059	0.059	0.056	-	0.056	ICP	
15-Apr-10	8:05 AM	1.9	7.14	1150	0.064	0.062	0.063	0.057	0.057	0.057	ICP	
20-Apr-10	2:43 PM	2.7	7.44	1914	0.093	-	0.093	0.043	-	0.043	ICP	
23-Apr-10	7:34 AM	0.8	7.57	696	0.056	-	0.056	-	-		ICP	
25-Apr-10	7:44 AM	1.4	7.81	604	0.058	0.070	0.064	0.025	0.024	0.025	ICP	
26-Apr-10	8:43 AM	0.9	7.93	487	0.035	0.035	0.035	0.026	0.025	0.026	ICP	
27-Apr-10	1:50 AM	2.2	7.30	357	0.034	-	0.034	0.023	-	0.023	ICP	
29-Apr-10	3:35 PM	3.2	7.36	260	0.036	-	0.036	0.018	-	0.018	ICP	
2-May-10	9:05 AM	1.3	7.20	320	0.051	-	0.051	0.028	-	0.028	ICP	
3-May-10	8:29 AM	2.6	8.65	370	0.047	0.046	0.047	0.053	-	0.053	ICP	
4-May-10	8:37 AM	0.8	7.53	560	0.066	-	0.066	0.056	-	0.056	ICP	
5-May-10	8:41 AM	1.0	7.99	544	0.064	-	0.064	0.057	-	0.057	ICP	
6-May-10	8:50 AM	1.6	7.70	566	0.085	-	0.085	0.062	-	0.062	ICP	
7-May-10	6:35 AM	1.4	7.90	530	0.058	-	0.058	0.047	-	0.047	ICP	

**Table C-10:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) at X14**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Method of Analysis	Comments		
8-May-10	8:04 AM	1.5	7.80	568	0.060	-	0.060	0.052	-	0.052	ICP	
9-May-10	8:13 AM	1.6	7.79	477	0.065	-	0.065	0.041	-	0.041	ICP	
10-May-10	8:19 AM	1.4	8.31	526	0.059	-	0.059	0.049	-	0.049	ICP	
11-May-10	8:20 AM	1.0	7.65	471	0.046	0.046	0.046	0.053	-	0.053	ICP	
12-May-10	8:39 AM	2.6	8.32	462	0.059	-	0.059	0.044	-	0.044	ICP	
13-May-10	7:37 AM	2.9	7.65	535	0.051	-	0.051	0.040	-	0.040	ICP	
14-May-10	7:46 AM	1.8	7.98	508	0.052	0.052	0.052	0.042	-	0.042	ICP	
15-May-10	7:24 AM	2.7	8.27	475	0.054	-	0.054	0.034	-	0.034	ICP	
16-May-10	8:03 AM	2.6	7.84	366	0.043	-	0.043	0.033	-	0.033	ICP	
17-May-10	8:27 AM	2.7	7.88	456	0.040	-	0.040	0.029	-	0.029	ICP	
18-May-10	8:34 AM	3.2	7.73	372	0.034	-	0.034	0.027	-	0.027	ICP	
19-May-10	8:25 AM	3.9	7.82	275	0.033	-	0.033	0.019	-	0.019	ICP	
20-May-10	8:18 AM	2.5	8.22	210	0.038	-	0.038	0.013	-	0.013	ICP	pH reading on same sample by lab personnel gave 7.78.
21-May-10	8:36 AM	2.3	7.75	233	0.026	-	0.026	0.016	-	0.016	ICP	
22-May-10	8:05 AM	2.4	8.32	269	0.022	-	0.022	0.019	-	0.019	ICP	
23-May-10	8:16 AM	4.3	8.47	275	0.026	-	0.026	0.016	-	0.016	ICP	
24-May-10	7:33 AM	3.8	7.79	277	0.024	-	0.024	0.018	-	0.018	ICP	
25-May-10	8:40 AM	5.0	8.01	243	0.022	-	0.022	0.015	-	0.015	ICP	
26-May-10	8:19 AM	4.6	7.66	246	0.024	-	0.024	0.018	-	0.018	ICP	
27-May-10	9:07 AM	5.7	8.20	265	0.028	-	0.028	0.015	-	0.015	ICP	
8-Jun-10	8:36 AM	7.0	7.93	380	0.040	-	0.040	0.032	-	0.032	ICP	
15-Jun-10	9:01 AM	7.2	7.87	420	0.046	-	0.046	0.041	-	0.041	ICP	
22-Jun-10	9:56 AM	9.6	7.75	438	0.114	-	0.114	0.046	-	0.046	ICP	
24-Jun-10	9:13 AM	9.3	7.81	457	0.044	-	0.044	0.065	-	0.065	ICP	
29-Jun-10	9:50 AM	9.4	7.35	501	0.047	-	0.047	0.044	-	0.044	ICP	
6-Jul-10	9:56 AM	9.9	8.01	395	0.048	-	0.048	0.022	-	0.022	ICP	
13-Jul-10	8:45 AM	9.4	8.19	456	0.040	-	0.040	0.031	-	0.031	ICP	
20-Jul-10	10:08 AM	11.8	8.04	563	0.046	-	0.046	0.042	-	0.042	ICP	
27-Jul-10	9:01 AM	10.2	8.11	606	0.063	-	0.063	0.054	-	0.054	ICP	
10-Aug-10	8:56 AM	9.8	7.92	658	0.054	-	0.054	0.037	-	0.037	ICP	
17-Aug-10	8:50 AM	11.5	7.92	614	0.051	-	0.051	0.043	-	0.043	ICP	
24-Aug-10	8:40 AM	8.0	8.67	423	0.037	-	0.037	0.026	-	0.026	ICP	
31-Aug-10	2:10 PM	10.9	7.96	650	0.046	-	0.046	-	-	-	AA	
7-Sep-10	9:30 AM	4.5	8.27	532	0.101	-	0.101	0.032	-	0.032	AA	
17-Nov-10	12:20 PM	0.1	7.61	510	0.113	-	0.113	0.103	-	0.103	ICP	
17-Nov-10	3:16 PM	0.1	7.66	530	0.117	-	0.117	0.101	-	0.101	ICP	
17-Nov-10	4:40 PM				0.118	-	0.118	0.100	-	0.100	ICP	Sample taken from surface at X14.

Table C-10:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) at X14

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Method of Analysis	Comments		
17-Nov-10	4:40 PM				0.119	-	0.119	0.107	-	0.107	ICP	Sample taken from depth (~0.5 m) at X14.
18-Nov-10	10:30 AM	1.5	7.75	1010	0.110	-	0.110	0.094	-	0.094	ICP	
19-Nov-10	11:25 AM	0.1	7.40	1088	0.109	0.109	0.109	0.107	-	0.107	ICP	
20-Nov-10	10:00 AM	1.0	7.31	1110	0.109	-	0.109	0.105	-	0.105	ICP	
21-Nov-10	10:00 AM	0.3	7.10	1060	0.104	-	0.104	0.105	-	0.105	ICP	
22-Nov-10	9:55 AM	<0.0	7.80	1051	0.104	-	0.104	0.089	-	0.089	ICP	
23-Nov-10	10:08 AM	0.8	7.48	1097	0.101	-	0.101	0.096	-	0.096	ICP	
24-Nov-10	9:19 AM	0.9	7.48	1046	0.099	-	0.099	0.098	-	0.098	ICP	
24-Nov-10	5:02 PM	1.0	7.55	1077	0.100	-	0.100	0.092	-	0.092	ICP	
25-Nov-10	10:06 AM	1.1	8.14	997	0.101	-	0.101	0.095	-	0.095	ICP	
25-Nov-10	4:20 PM	0.9	8.21	1008	0.092	-	0.092	0.091	-	0.091	ICP	
26-Nov-10	10:05 AM	1.0	6.98	1008	0.088	-	0.088	0.088	-	0.088	ICP	
26-Nov-10	5:10 PM	1.4	7.33	994	0.093	-	0.093	0.091	-	0.091	ICP	
27-Nov-10	8:55 AM	0.4	7.47	1022	0.087	-	0.087	0.078	-	0.078	ICP	
27-Nov-10	5:55 PM	0.9	7.39	971	0.089	-	0.089	0.086	-	0.086	ICP	
28-Nov-10	8:32 AM	0.1	7.47	982	0.088	-	0.088	0.086	-	0.086	ICP	
28-Nov-10	4:00 PM	0.8	7.49	949	0.086	-	0.086	0.081	-	0.081	ICP	
29-Nov-10	9:51 AM	0.9	7.57	995	0.091	-	0.091	0.086	-	0.086	ICP	
29-Nov-10	3:09 PM	0.7	7.39	971	0.089	-	0.089	0.085	-	0.085	ICP	
30-Nov-10	12:02 PM	0.5	7.71	988	0.089	-	0.089	0.083	-	0.083	ICP	
30-Nov-10	3:23 PM	1.1	7.61	988	0.090	-	0.090	0.080	-	0.080	ICP	
1-Dec-10	8:37 AM	<0.1	7.67	1000	0.085	-	0.085	0.084	-	0.084	ICP	
1-Dec-10	3:25 PM	0.5	7.62	970	0.083	-	0.083	0.082	-	0.082	ICP	
2-Dec-10	8:42 AM	0.1	7.70	1000	0.087	-	0.087	0.096	-	0.096	ICP	

Table C-11:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Thickener

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Config.	Method of Analysis	Comments		
10-Apr-10	8:00 AM	1.3	10.59	1501	0.785	-	0.785	<0.01	-	<0.01	S	ICP	
11-Apr-10	8:00 AM	1.7	10.23	1640	0.094	-	0.094	<0.01	-	<0.01	S	ICP	
12-Apr-10	7:20 AM	2.2	10.72	1620	0.059	0.060	0.060	<0.01	-	<0.01	S	ICP	
13-Apr-10	8:40 AM	1.3	10.79	1497	0.087	-	0.087	<0.01	-	<0.01	S	ICP	
14-Apr-10	8:40 AM	1.0	10.93	1520	0.030	-	0.030	<0.01	-	<0.01	S	ICP	
15-Apr-10	8:26 AM	1.8	11.04	1730	0.069	0.074	0.072	<0.01	<0.01	<0.01	S	ICP	
16-Apr-10	6:59 AM	1.1	11.14	1730	0.052	0.059	0.056	<0.01	<0.01	<0.01	S	ICP	
17-Apr-10	8:00 AM	1.3	11.02	1700	0.026	-	0.026	<0.01	-	<0.01	S	ICP	
18-Apr-10	8:40 AM	1.0	10.82	1760	0.059	-	0.059	<0.01	-	<0.01	S	ICP	
19-Apr-10	8:27 AM	2.0	11.14	1720	0.043	-	0.043	<0.01	-	<0.01	S	ICP	Began treatment of Faro pit water @ 2pm. New ICP standards prepared.
20-Apr-10	12:16 PM	3.1	10.73	1609	0.063	-	0.063	<0.01	-	<0.01	S	ICP	
21-Apr-10	9:15 AM	1.5	10.95	1512	0.475	-	0.475	<0.01	-	<0.01	S	ICP	
22-Apr-10	8:15 AM	2.3		1453	0.086	-	0.086	<0.01	-	<0.01	S	ICP	pH meter malfunctioning, no pH reading obtained.
23-Apr-10	7:14 AM	1.7	10.77	1433	0.039	-	0.039	<0.01	-	<0.01	S	ICP	
24-Apr-10	7:50 AM	1.9	10.64	1482	0.127	-	0.127	<0.01	-	<0.01	S	ICP	
25-Apr-10	8:05 AM	1.9	10.82	1529	0.120	-	0.120	<0.01	-	<0.01	S	ICP	
26-Apr-10	7:57 AM	2.4	10.74	1411	0.093	-	0.093	<0.01	-	<0.01	S	ICP	
27-Apr-10	8:19 AM	1.9	10.51	1354	0.143	-	0.143	<0.01	-	<0.01	S	ICP	
28-Apr-10	8:04 AM	2.5	10.87	1280	0.132	-	0.132	<0.01	-	<0.01	S	ICP	
29-Apr-10	8:52 AM	2.8	10.15	1170	0.146	-	0.146	<0.01	-	<0.01	S	ICP	
30-Apr-10	7:30 AM	3.0	10.81	1220	0.181	-	0.181	<0.01	-	<0.01	S	ICP	
1-May-10		3.4	11.11	1250	0.094	-	0.094	<0.01	-	<0.01	S	ICP	
2-May-10	8:30 AM	3.7	11.07	1250	0.171	-	0.171	<0.01	-	<0.01	S	ICP	
3-May-10	8:08 AM	4.4	10.92	1230	0.208	-	0.208	<0.01	-	<0.01	S	ICP	
4-May-10	8:00 AM	4.0	10.35	1270	0.260	-	0.260	<0.01	-	<0.01	S	ICP	
4-May-10	1:15 PM	4.6	10.76	1190	0.115	-	0.115	<0.01	-	<0.01	S	ICP	
5-May-10	8:30 AM	3.7	10.79	1204	0.141	-	0.141	<0.01	-	<0.01	S	ICP	
6-May-10	7:56 AM	3.9	10.84	1204	0.222	-	0.222	<0.01	-	<0.01	S	ICP	
7-May-10	6:17 AM	3.8	10.39	1234	0.153	-	0.153	<0.01	-	<0.01	S	ICP	
8-May-10	7:40 AM	4.0	10.59	1221	0.294	-	0.294	<0.01	-	<0.01	S	ICP	
9-May-10	7:53 AM	3.8	10.59	1202	0.175	-	0.175	<0.01	-	<0.01	S	ICP	
10-May-10	7:56 AM	4.1	10.56	1284	0.298	-	0.298	<0.01	-	<0.01	S	ICP	Switched to parallel config. At 2:45 PM.
11-May-10	7:50 AM	3.5	10.47	1260	0.230	-	0.230	<0.01	-	<0.01	P	ICP	
11-May-10	2:58 PM	4.5	10.30	1180	0.153	-	0.153	<0.01	-	<0.01	P	ICP	
12-May-10	8:10 AM	4.3	10.84	1249	0.234	-	0.234	<0.01	-	<0.01	P	ICP	
13-May-10	7:20 AM	5.0	10.26	1300	0.394	-	0.394	<0.01	-	<0.01	P	ICP	

**Table C-11:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Thickener**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Config.	Method of Analysis	Comments
13-May-10	1:56 PM	4.3	9.22	1170	0.912	-	0.076	-	P	ICP	Analyzed for Zn T and Diss. May 14, 10.
14-May-10	7:12 AM	4.2	10.44	1178	0.189	-	<0.01	-	P	ICP	Sampled by Env. Crew.
15-May-10	6:00 AM	6.8	10.57	1240	0.136	-	<0.01	-	P	ICP	Sampled by Water Treatment Night Staff.
15-May-10	7:02 AM	5.2	10.94	1311	0.171	-	<0.01	-	P	ICP	Sampled by Env. Crew.
16-May-10	6:00 AM	4.7	10.72	1241	0.201	-	<0.01	-	P	ICP	Sampled by Water Treatment Night Staff.
16-May-10	7:42 AM	4.6	10.62	1143	0.229	-	<0.01	-	P	ICP	Sampled by Env. Crew.
17-May-10	6:00 AM	5.3	10.73	1207	0.160	-	<0.01	-	P	ICP	Sampled by Water Treatment Night Staff.
17-May-10	8:10 AM	5.8	10.59	1468	0.156	-	<0.01	-	P	ICP	Sampled by Env. Crew.
18-May-10	6:00 AM	5.2	10.81	1210	0.271	-	<0.01	-	P	ICP	Sampled by Water Treatment Night Staff.
18-May-10	8:06 AM	5.3	10.60	1303	0.253	-	<0.01	-	P	ICP	Sampled by Env. Crew.
19-May-10	6:00 AM	6.6	10.72	1255	0.089	-	<0.01	-	P	ICP	Sampled by Water Treatment Night Staff.
19-May-10	8:05 AM	5.2	10.73	1406	0.117	-	<0.01	-	P	ICP	Sampled by Env. Crew.
20-May-10	8:00 AM	6.7	10.90	1670	0.146	-	<0.01	-	P	ICP	Sampled by Env. Crew.
21-May-10	8:53 AM	5.7	10.91	1501	0.118	-	<0.01	-	P	ICP	Sampled by Env. Crew.
22-May-10	7:41 AM	5.6	10.98	1503	0.094	-	<0.01	-	P	ICP	Sampled by Env. Crew.
23-May-10	7:50 AM	6.9	10.50	1534	0.103	-	<0.01	-	P	ICP	Sampled by Env. Crew.
24-May-10	7:07 AM	6.2	10.48	1481	0.185	-	<0.01	-	P	ICP	
25-May-10	8:01 AM	6.8	10.48	1534	0.184	-	<0.01	-	P	ICP	
26-May-10	7:58 AM	7.2	10.44	1290	0.191	-	<0.01	-	P	ICP	
27-May-10	8:50 AM	7.5	10.50	1473	0.124	-	<0.01	-	P	ICP	
28-May-10	7:37 AM	7.5	10.88	1449	0.183	-	0.017	-	P	ICP	New sampling point: thickener port.
29-May-10	7:30 AM	8.7	10.62	1420	0.243	-	<0.01	-	P	ICP	
30-May-10	7:35 AM	8.7	10.25	1472	0.144	-	<0.01	-	P	ICP	
31-May-10	7:56 AM	9.3	10.22	1444	0.173	-	<0.01	-	P	ICP	
1-Jun-10	8:05 AM	9.2	10.55	1558	0.104	-	<0.01	-	P	ICP	
2-Jun-10	8:23 AM	9.4	10.28	1515	0.103	-	<0.01	-	P	ICP	Taken from old sampling location.
3-Jun-10	8:10 AM	9.4	10.47	1465	0.197	-	<0.01	-	P	ICP	
4-Jun-10	7:38 AM	8.4	10.49	1441	0.174	-	<0.01	-	P	ICP	
5-Jun-10	6:40 AM	8.5	10.46	1424	0.176	-	<0.01	-	P	ICP	Port not working. Taken from old sampling location.
6-Jun-10	6:30 AM	8.7	10.49	1526	0.190	-	<0.01	-	P	ICP	Port not working. Taken from old sampling location.

**Table C-11:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Thickener**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Config.	Method of Analysis	Comments
7-Jun-10	8:00 AM	8.6	10.46	1449	0.172	-	0.172	<0.01	-	<0.01	P	ICP	Port not working. Taken from old sampling location.
8-Jun-10	8:10 AM	8.4	10.61	1427	0.215	-	0.215	<0.01	-	<0.01	P	ICP	
9-Jun-10	8:11 AM	9.0	10.65	1130	0.185	-	0.185	<0.01	-	<0.01	P	ICP	
10-Jun-10	8:00 AM	9.6	10.53	1331	0.186	-	0.186	0.015	-	0.015	P	ICP	
11-Jun-10	7:45 AM	9.0	10.51	1393	0.154	-	0.154	<0.01	-	<0.01	P	ICP	
12-Jun-10	7:35 AM	9.2	10.75	1426	0.182	-	0.182	<0.01	-	<0.01	P	ICP	
13-Jun-10	7:52 AM	9.3	10.63	1493	0.246	-	0.246	<0.01	-	<0.01	P	AA	
14-Jun-10	8:09 AM	8.7	10.52	1492	0.264	-	0.264	<0.01	-	<0.01	P	AA	
15-Jun-10	9:22 AM	9.7	10.54	1360	0.432	0.436	0.434	<0.01	-	<0.01	P	ICP	
16-Jun-10	8:03 AM	10.6	10.30	1360	0.194	-	0.194	<0.01	-	<0.01	P	ICP	includes ETA water starting 4:40 PM.
17-Jun-10	7:56 AM	10.4	10.08	1450	0.155	-	0.155	<0.01	-	<0.01	P	AA	
18-Jun-10	7:18 AM	10.3	10.19	1513	0.094	-	0.094	<0.01	-	<0.01	P	AA	
19-Jun-10	8:55 AM	10.4	10.42	1460	0.131	-	0.131	<0.01	-	<0.01	P	AA	
20-Jun-10	7:21 AM	11.0	10.35	1460	0.149	-	0.149	0.015	-	0.015	P	AA	New port.
21-Jun-10	7:49 AM	10.8	10.27	1422	0.165	-	0.165	0.015	-	0.015	P	AA	
22-Jun-10	9:20 AM										P		not sampled. Pumping sludge.
23-Jun-10	7:55 AM	12.3	10.33	1304	0.154	-	0.154	<0.01	-	<0.01	P	AA	old sample site.
24-Jun-10	8:51 AM	11.3	10.26	1497	0.140	-	0.140	<0.01	-	<0.01	P	ICP	
25-Jun-10	8:02 AM	11.7	10.15	1464	0.098	-	0.098	0.072	-	0.072	P	ICP	
26-Jun-10	8:16 AM	12.8	9.78	1127	0.057	-	0.057	0.020	-	0.020	P	ICP	
27-Jun-10	8:10 AM	11.8	10.17	1644	0.146	-	0.146	<0.01	-	<0.01	P	ICP	
28-Jun-10	8:05 AM	11.5	10.19	1497	0.123	-	0.123	<0.01	-	<0.01	P	ICP	
29-Jun-10	8:25 AM	11.6	9.96	1511	0.124	-	0.124	<0.01	-	<0.01	P	ICP	
30-Jun-10	9:00 AM	11.5	9.91	1515	0.187	-	0.187	0.018	-	0.018	P	ICP	
1-Jul-10	8:40 AM	11.4	9.89	1532	0.327	-	0.327	0.015	-	0.015	P	ICP	
1-Jul-10	5:15 PM	12.2	10.18	1619	0.248	-	0.248	0.018	-	0.018	P	ICP	
2-Jul-10	7:40 AM	12.1	9.81	1640	0.134	-	0.134	0.022	-	0.022	P	ICP	
2-Jul-10	5:36 PM	12.5	9.82	1510	0.094	-	0.094					ICP	
3-Jul-10	8:05 AM	11.9	10.03	1620	0.143	-	0.143	0.035	-	0.035	P	ICP	
4-Jul-10	9:05 AM	11.4	10.00	1640	0.216	-	0.216	0.011	-	0.011	P	ICP	
5-Jul-10	8:30 AM	11.2	9.76	1660	0.219	-	0.219	0.023	-	0.023	P	ICP	
6-Jul-10	8:30 AM	11.3	9.86	1485	0.201	-	0.201	<0.01	-	<0.01	P	ICP	
7-Jul-10	8:32 AM	11.6	9.30	1427	0.209	-	0.209	0.078	-	0.078	P	ICP	
8-Jul-10	8:35 AM	12.9	9.75	1475	0.211	-	0.211	0.011	-	0.011	P	ICP	
9-Jul-10	7:40 AM	13.2	9.97	1425	0.096	0.110	0.103	0.010	-	0.010	P	ICP	
10-Jul-10	7:35 AM	13.2	10.20	1620	0.109	-	0.109	<0.01	-	<0.01	P	ICP	

Table C-11:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Thickener

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Config.	Method of Analysis	Comments
11-Jul-10	8:10 AM	11.6	10.37	1368	0.099	-	0.099	<0.01	-	<0.01	P	ICP	
12-Jul-10	8:16 AM	12.3	10.24	1585	0.062	-	0.062	<0.01	-	<0.01	P	ICP	
13-Jul-10	8:15 AM	13.5	10.23	1303	0.090	-	0.090	<0.01	-	<0.01	P	ICP	
14-Jul-10	8:25 AM	12.4	10.02	1395	0.059	-	0.059	<0.01	-	<0.01	P	ICP	
15-Jul-10	8:13 AM	12.8	10.02	1322	0.109	-	0.109	<0.01	-	<0.01	P	ICP	
16-Jul-10	7:15 AM	13.7	10.18	1600	0.102	-	0.102	<0.01	-	<0.01	P	ICP	
17-Jul-10	7:05 AM	13.4	10.01	1394	0.096	-	0.096	0.013	-	0.013	P	ICP	
18-Jul-10	7:03 AM	13.4	10.00	1620	0.112	-	0.112	0.010	-	0.010	P	ICP	
19-Jul-10	8:10 AM	13.6	10.17	1567	0.153	-	0.153	<0.01	-	<0.01	P	ICP	
20-Jul-10	10:20 AM	13.9	10.22	1438	0.118	-	0.118	<0.01	-	<0.01	P	ICP	
21-Jul-10	8:03 AM	13.8	10.04	1630	0.113	-	0.113	<0.01	-	<0.01	P	ICP	
22-Jul-10	8:38 AM	14.1	10.04	1310	0.182	0.187	0.185	<0.01	-	<0.01	P	ICP	
22-Jul-10	-	-	9.96	1360	0.127	0.127	0.127				P	ICP	
23-Jul-10	7:55 AM	13.1	10.12	1449	0.079	-	0.079	<0.01	-	<0.01	P	ICP	
24-Jul-10	7:42 AM	13.3	10.12	1598	0.099	-	0.099	0.010	-	0.010	P	ICP	
25-Jul-10	7:44 AM	13.6	10.25	1587	0.119	0.125	0.122				P	ICP	dup run to check value.
25-Jul-10	12:10 PM	13.7	10.24	1564	0.195	0.193	0.194				P	ICP	no diss... Samples acidified.
26-Jul-10	7:45 AM	13.8	10.37	1414	0.172	-	0.172	0.011	-	0.011	P	ICP	
27-Jul-10	8:09 AM	13.9	10.27	1372	0.155	-	0.155	<0.01	-	<0.01	P	ICP	
28-Jul-10	8:05 AM	12.4	9.85	1327	0.040	-	0.040	<0.01	-	<0.01	P	ICP	
29-Jul-10	7:59 AM	14.1	10.26	1367	0.554	-	0.554	0.014	0.015	0.015	P	AA	
30-Jul-10	7:47 AM	15.1	10.27	1687	0.032	-	0.032	<0.01	<0.01	<0.01	P	AA	
31-Jul-10	7:47 AM	14.4	10.30	1375	0.198	-	0.198	<0.01	-	<0.01	P	AA	
1-Aug-10	7:45 AM	14.6	10.13	1279	0.174	-	0.174	0.010	-	0.010	P	AA	
2-Aug-10	8:07 AM	14.9	10.18	1580	0.111	-	0.111	0.013	-	0.013	P	AA	
3-Aug-10	7:56 AM	14.9	10.21	1578	0.146	-	0.146	0.025	-	0.025	P	AA	
4-Aug-10	8:00 AM	15.0	10.30	1312	0.171	-	0.171	0.021	-	0.021	P	AA	
5-Aug-10	8:01 AM	15.4	10.11	1443	0.203	-	0.203	0.010	-	0.010	P	AA	Faro pump shutdown 8:11-10:02AM.
6-Aug-10	7:46 AM	15.1	9.89	1358	0.125	-	0.125	0.014	-	0.014	P	AA	
7-Aug-10	7:50 AM	15.2	10.23	1427	0.131	-	0.131	<0.01	-	<0.01	P	AA	
8-Aug-10	8:30 AM	15.0	10.08	1600	0.132	-	0.132	0.011	-	0.011	P	AA	
9-Aug-10	8:05 AM	15.1	9.72	1569	0.148	-	0.148	<0.01	-	<0.01	P	ICP	
9-Aug-10	8:05 AM				0.119	-	0.119	0.013	-	0.013	P	AA	Duplicate analysis on AA.
10-Aug-10	8:05 AM	14.5	10.21	1572	0.164	-	0.164	<0.01	-	<0.01	P	ICP	
11-Aug-10	7:57 AM	14.7	10.01	1380	0.173	-	0.173	<0.01	-	<0.01	P	ICP	
12-Aug-10	7:57 AM	15.2	9.93	1440	0.069	-	0.069	0.011	-	0.011	P	ICP	
13-Aug-10	7:40 AM	14.3	10.33	1060	0.054	-	0.054	<0.01	-	<0.01	P	ICP	

Table C-11:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Thickener

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Config.	Method of Analysis	Comments
14-Aug-10	8:07 AM	14.9	10.37	1399	0.084	-	0.084	<0.01	-	<0.01	P	ICP	
15-Aug-10	7:55 AM	14.5	9.51	1318	0.080	-	0.080	<0.01	-	<0.01	P	ICP	
16-Aug-10	7:43 AM	15.0	10.05	1560	0.228	0.275	0.252	<0.01	-	<0.01	P	ICP	
17-Aug-10	8:10 AM	15.4	9.86	1401	0.085	-	0.085	<0.01	-	<0.01	P	ICP	
18-Aug-10	8:10 AM	14.8	10.04	1500	0.078	-	0.078	<0.01	-	<0.01	P	ICP	
19-Aug-10	9:30 AM	14.2	10.20	1689	0.128	-	0.128	<0.01	-	<0.01	P	ICP	
20-Aug-10	7:44 AM	13.7	9.90	1590	0.074	-	0.074	<0.01	-	<0.01	P	ICP	
21-Aug-10	6:05 AM	13.6	10.34	1570	0.069	-	0.069	<0.01	-	<0.01	P	ICP	
22-Aug-10	7:14 AM	13.3	10.10	1430	0.177	-	0.177	<0.01	-	<0.01	P	ICP	
23-Aug-10	8:02 AM	12.5	10.08	1463	0.141	-	0.141	<0.01	-	<0.01	P	ICP	
24-Aug-10	8:09 AM	13.1	10.05	1183	0.104	-	0.104	<0.01	-	<0.01	P	ICP	
25-Aug-10	7:46 AM	12.4	10.11	1381	0.110	-	0.110	<0.01	-	<0.01	P	ICP	
26-Aug-10	7:50 AM	11.9	9.95	1630	0.145	-	0.145	<0.01	-	<0.01	P	AA	
27-Aug-10	7:35 AM	11.2	10.20	1458	0.234	-	0.234	<0.01	-	<0.01	P	AA	
28-Aug-10	8:58 AM	11.3	9.69	2063	0.091	-	0.091	<0.01	-	<0.01	P	AA	
29-Aug-10	8:30 AM	10.8	10.17	1993	0.111	-	0.111	<0.01	-	<0.01	P	AA	
30-Aug-10	7:56 AM	11.2	9.86	2047	0.099	-	0.099	0.016	-	0.016	P	AA	
30-Aug-10	7:56 AM	11.2	9.67	2133	0.119	-	0.119	<0.01	-	<0.01		AA	Reanalysis of morning sample to verify result. pH and conductivity measured on lab meter.
30-Aug-10	2:48 PM	11.1	10.00	2330	0.129	-	0.129	<0.01	-	<0.01		AA	Sample collected from thickener tank (no discharge from tank now).
30-Aug-10	2:48 PM	11.1	9.80	2145									pH and conductivity measured on lab meter.

**Table C-12:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Clarifier**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Config.	Method of Analysis	Comments
10-Apr-10	8:00 AM	1.4	10.49	1485	0.463	-	<0.01	<0.01	S	ICP	
11-Apr-10	8:00 AM	1.5	10.40	1650	0.079	-	<0.01	<0.01	S	ICP	
12-Apr-10	7:25 AM	1.0	10.47	1680	0.120	0.122	<0.01	<0.01	S	ICP	
13-Apr-10	8:36 AM	2.7	10.50	1502	0.077	-	<0.01	<0.01	S	ICP	
14-Apr-10	8:42 AM	1.1	10.83	1518	0.033	-	<0.01	<0.01	S	ICP	
15-Apr-10	8:28 AM	1.5	11.14	1760	0.067	0.068	<0.01	<0.01	S	ICP	
16-Apr-10	7:08 AM	0.9	10.93	1730	0.050	0.048	<0.01	<0.01	S	ICP	
17-Apr-10	8:05 AM	1.2	11.01	1750	0.034	-	<0.01	<0.01	S	ICP	
18-Apr-10	8:40 AM	1.0	10.78	1750	0.055	-	<0.01	<0.01	S	ICP	
19-Apr-10	8:30 AM	1.1	11.12	1710	0.049	-	<0.01	<0.01	S	ICP	Began treatment of Faro pit water @ 2pm. New ICP standards prepared.
20-Apr-10	12:19 PM	2.7	10.76	1612	0.069	-	<0.01	<0.01	S	ICP	
21-Apr-10	9:10 AM	2.3	10.90	1492	0.246	-	<0.01	<0.01	S	ICP	
22-Apr-10	8:10 AM	3.9		1440	0.091	-	<0.01	<0.01	S	ICP	pH meter malfunctioning, no pH reading obtained.
23-Apr-10	7:16 AM	1.7	10.41	1479	0.063	-	<0.01	<0.01	S	ICP	
24-Apr-10	7:52 AM	1.8	10.74	1513	0.080	-	<0.01	<0.01	S	ICP	
25-Apr-10	8:07 AM	2.0	10.66	1555	0.109	-	<0.01	<0.01	S	ICP	
26-Apr-10	7:55 AM	3.6	10.37	1374	0.135	-	<0.01	<0.01	S	ICP	
27-Apr-10	8:20 AM	2.8	10.51	1354	0.146	-	<0.01	<0.01	S	ICP	
28-Apr-10	8:02 AM	3.0	10.55	1250	0.147	-	<0.01	<0.01	S	ICP	
29-Apr-10	8:50 AM	2.8	10.23	1180	0.153	-	<0.01	<0.01	S	ICP	
30-Apr-10	7:30 AM	3.2	10.86	1230	0.135	-	<0.01	<0.01	S	ICP	
1-May-10		3.6	11.41	1270	0.142	-	<0.01	<0.01	S	ICP	
2-May-10	8:30 AM	4.0	10.73	1240	0.133	-	<0.01	<0.01	S	ICP	
3-May-10	8:09 AM	4.1	10.86	1220	0.096	-	<0.01	<0.01	S	ICP	
4-May-10	7:59 AM	4.2	10.28	1270	0.296	-	<0.01	<0.01	S	ICP	
4-May-10	1:20 PM	4.4	10.86	1190	0.141	-	<0.01	<0.01	S	ICP	
5-May-10	8:29 AM	4.6	10.64	1300	0.250	-	0.011	0.011	S	ICP	
6-May-10	7:52 AM	3.9	10.61	1221	0.270	-	<0.01	<0.01	S	ICP	
7-May-10	6:20 AM	3.7	10.56	1207	0.155	-	<0.01	<0.01	S	ICP	
8-May-10	7:38 AM	4.6	10.48	1253	0.332	-	<0.01	<0.01	S	ICP	
9-May-10	7:50 AM	5.3	10.48	1271	0.315	-	<0.01	<0.01	S	ICP	
10-May-10	7:55 AM	4.1	10.45	1288	0.278	-	<0.01	<0.01	S	ICP	Switched to parallel discharge from thickener and clarifier at 2:45 PM.
11-May-10	7:50 AM	4.5	10.33	1280	0.429	-	<0.01	<0.01	P	ICP	
11-May-10	3:00 PM	4.2	10.21	1180	0.363	-	<0.01	<0.01	P	ICP	

**Table C-12:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Clarifier**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Config.	Method of Analysis	Comments		
12-May-10	8:11 AM	4.4	10.27	1304	0.407	-	0.407	<0.01	-	<0.01	P	ICP	
13-May-10	7:20 AM	4.1	10.20	1260	0.683	-	0.683	<0.01	<0.01	<0.01	P	ICP	
13-May-10	2:01 PM	4.2	9.18	1070	2.415	-	2.415	0.023	-	0.023	P	ICP	Analyzed for Zn T and Diss. May 14, 10.
14-May-10	6:00 AM	8.2	10.55	1255	0.287	-	0.287	<0.01	-	<0.01	P	ICP	Sampled by Water Treatment Staff.
14-May-10	7:15 AM	4.1	10.49	1230	0.274	-	0.274	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
15-May-10	6:00 AM	6.9	10.50	1234	0.246	-	0.246	<0.01	-	<0.01	P	ICP	Sampled by Water Treatment Night Staff.
15-May-10	7:07 AM	5.0	10.86	1263	0.282	-	0.282	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
16-May-10	6:00 AM	5.6	10.61	1255	0.260	-	0.260	<0.01	-	<0.01	P	ICP	Sampled by Water Treatment Night Staff.
16-May-10	7:46 AM	4.7	10.46	1240	0.331	-	0.331	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
17-May-10	6:00 AM	5.1	10.66	1247	0.243	-	0.243	<0.01	-	<0.01	P	ICP	Sampled by Water Treatment Night Staff.
17-May-10	8:11 AM	4.8	10.63	1435	0.248	-	0.248	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
18-May-10	6:00 AM	5.6	10.68	1226	0.209	-	0.209	<0.01	-	<0.01	P	ICP	Sampled by Water Treatment Night Staff.
18-May-10	8:04 AM	6.3	10.58	1318	0.246	-	0.246	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
19-May-10	6:00 AM	6.1	10.82	1288	0.203	-	0.203	<0.01	-	<0.01	P	ICP	Sampled by Water Treatment Night Staff.
19-May-10	8:08 AM	5.1	10.75	1402	0.206	-	0.206	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
20-May-10	8:03 AM	5.1	10.99	1585	0.286	-	0.286	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
21-May-10	8:55 AM	5.6	10.97	1500	0.289	-	0.289	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
22-May-10	7:41 AM	5.7	10.97	1539	0.168	-	0.168	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
23-May-10	7:53 AM	6.8	10.82	1483	0.529	-	0.529	<0.01	-	<0.01	P	ICP	Sampled by Env. Crew.
24-May-10	7:10 AM	6.1	10.50	1486	0.396	-	0.396	<0.01	-	<0.01	P	ICP	
25-May-10	8:04 AM	6.5	10.53	1500	0.362	-	0.362	<0.01	-	<0.01	P	ICP	
26-May-10	8:00 AM	7.0	10.48	1272	0.349	-	0.349	<0.01	-	<0.01	P	ICP	
27-May-10	8:45 AM	8.2	10.34	1506	0.261	-	0.261	<0.01	-	<0.01	P	ICP	
28-May-10	7:28 AM	7.9	10.53	1482	0.223	-	0.223	0.012	-	0.012	P	ICP	old clarifier.
28-May-10	7:34 AM	7.7	10.85	1465	0.335	-	0.335	0.011	-	0.011	P	ICP	new sampling port clarifier.
29-May-10	7:30 AM	8.8	10.23	1486	0.416	-	0.416	<0.01	-	<0.01	P	ICP	old clarifier.
29-May-10	7:30 AM	8.8	10.23	1486	0.388	-	0.388	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
30-May-10	7:40 AM	9.9	10.06	1485	0.274	-	0.274	<0.01	-	<0.01	P	ICP	old clarifier.
30-May-10	7:40 AM	9.9	10.06	1485	0.412	-	0.412	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
31-May-10	7:53 AM	10.8	10.10	1483	0.235	-	0.235	<0.01	-	<0.01	P	ICP	old clarifier.
31-May-10	7:55 AM	9.4	10.15	1455	0.238	-	0.238	<0.01	-	<0.01	P	ICP	new sampling port clarifier.

Table C-12:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Clarifier

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Config.	Method of Analysis	Comments	
1-Jun-10	8:04 AM	10.8	10.48	1614	0.216	-	<0.01	-	<0.01	P	ICP	old clarifier.
1-Jun-10	8:08 AM	10.0	10.49	1585	0.277	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
2-Jun-10	8:25 AM	9.3	10.43	1510	0.129	-	<0.01	-	<0.01	P	ICP	old clarifier.
2-Jun-10	8:11 AM	11.0	10.00	1543	0.445	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
3-Jun-10	8:13 AM	9.6	10.45	1449	0.140	-	<0.01	-	<0.01	P	ICP	old clarifier.
3-Jun-10	8:09 AM	10.6	10.27	1475	0.453	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
4-Jun-10	7:34 AM	9.5	10.40	1456	0.347	-	<0.01	-	<0.01	P	ICP	old clarifier.
4-Jun-10	7:35 AM	8.9	10.46	1455	0.387	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
5-Jun-10	6:29 AM	8.7	10.42	1438	0.196	-	<0.01	-	<0.01	P	ICP	old clarifier.
5-Jun-10	6:36 AM	8.2	10.44	1420	0.593	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
6-Jun-10	6:25 AM	8.5	10.47	1514	0.198	-	<0.01	-	<0.01	P	ICP	old clarifier.
6-Jun-10	6:36 AM	8.1	10.51	1518	1.053	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
7-Jun-10	7:55 AM	8.9	10.51	1460	0.468	-	<0.01	-	<0.01	P	ICP	old clarifier.
7-Jun-10	7:56 AM	10.1	10.52	1322	0.740	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
8-Jun-10	8:13 AM	8.3	10.66	1413	0.232	-	<0.01	-	<0.01	P	ICP	old clarifier.
8-Jun-10	8:07 AM	9.8	10.48	1443	0.446	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
9-Jun-10	8:15 AM	8.9	10.68	1130	0.316	-	<0.01	-	<0.01	P	ICP	old clarifier.
9-Jun-10	8:09 AM	10.2	10.58	1145	0.349	-	<0.01	-	<0.01	P	ICP	new sampling port clarifier.
10-Jun-10	8:03 AM	8.7	10.58	1343	0.272	-	0.015	-	0.015	P	ICP	old clarifier.
10-Jun-10	7:58 AM	9.7	10.50	1361	0.428	-	0.014	-	0.014	P	ICP	new sampling port clarifier.
11-Jun-10	7:45 AM	8.5	10.70	1386	0.346	-	<0.01	-	<0.01	P	ICP	old clarifier - New sampling port discontinued.
12-Jun-10	7:35 AM	9.2	10.61	1488	0.222	-	<0.01	-	<0.01	P	ICP	old clarifier - New sampling port discontinued.
13-Jun-10	7:56 AM	8.9	10.68	1479	0.290	-	<0.01	-	<0.01	P	AA	
14-Jun-10	8:02 AM	8.9	10.46	1538	0.423	-	<0.01	-	<0.01	P	AA	
15-Jun-10	9:19 AM	9.6	10.56	1350	0.272	-	<0.01	-	<0.01	P	ICP	
16-Jun-10	8:06 AM	10.0	10.43	1335	0.273	-	0.015	-	0.015	P	ICP	includes ETA water starting 4:40 PM.
17-Jun-10	8:00 AM	10.0	10.19	1439	0.161	-	<0.01	-	<0.01	P	AA	
18-Jun-10	7:13 AM	10.6	10.06	1539	0.065	-	0.011	-	0.011	P	AA	
19-Jun-10	8:50 AM	10.4	10.40	1450	0.633	-	<0.01	-	<0.01	P	AA	
20-Jun-10	7:15 AM	11.2	10.27	1480	0.170	-	0.016	-	0.016	P	AA	Old sampling point.
21-Jun-10	7:46 AM	11.8	10.22	1430	0.273	-	0.012	-	0.012	P	AA	
22-Jun-10	9:20 AM	11.2	10.14	1440	0.196	-	0.013	-	0.013	P	AA	
23-Jun-10	7:58 AM	11.3	10.39	1482	0.148	-	0.010	-	0.010	P	AA	
24-Jun-10	8:52 AM	11.0	10.32	1485	0.161	-	<0.01	-	<0.01	P	ICP	
25-Jun-10	8:05 AM	12.1	10.13	1522	0.079	-	0.100	-	0.100	P	ICP	

Table C-12:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Clarifier

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Config.	Method of Analysis	Comments
26-Jun-10	8:20 AM	12.2	9.90	1130	0.062	-	0.062	<0.01	-	<0.01	P	ICP	
27-Jun-10	8:13 AM	11.8	10.31	1653	0.103	-	0.103	<0.01	-	<0.01	P	ICP	
28-Jun-10	8:10 AM	11.4	10.24	1489	0.143	-	0.143	<0.01	-	<0.01	P	ICP	
29-Jun-10	8:22 AM	12.3	8.89	1550	0.162	-	0.162	<0.01	-	<0.01	P	ICP	
30-Jun-10	8:55 AM	11.3	9.90	1484	0.318	-	0.318	0.015	-	0.015	P	ICP	
1-Jul-10	8:43 AM	11.5	10.10	1633	0.382	-	0.382	0.025	-	0.025	P	ICP	
1-Jul-10	5:19 PM	12.0	10.07	1448	0.319	-	0.319	0.017	-	0.017	P	ICP	
2-Jul-10	7:40 AM	11.8	9.91	1490	0.270	-	0.270	0.010	-	0.010	P	ICP	
3-Jul-10	7:55 AM	12.0	9.99	1630	0.406	-	0.406	0.013	-	0.013	P	ICP	
4-Jul-10	9:05 AM	11.6	9.94	1640	0.413	-	0.413	0.020	-	0.020	P	ICP	
5-Jul-10	8:25 AM	11.3	9.75	1650	0.504	-	0.504	0.015	-	0.015	P	ICP	
6-Jul-10	8:40 AM	11.2	9.84	1483	0.655	-	0.655	0.030	-	0.030	P	ICP	
7-Jul-10	8:43 AM	11.5	9.33	1423	0.392	-	0.392	0.038	-	0.038	P	ICP	
8-Jul-10	8:43 AM	12.7	9.76	1447	0.272	-	0.272	<0.01	-	<0.01	P	ICP	
9-Jul-10	7:37 AM	13.8	9.89	1438	0.075	0.065	0.070	<0.01	-	<0.01	P	ICP	
10-Jul-10	7:38 AM	13.1	10.26	1660	0.107	-	0.107	<0.01	-	<0.01	P	ICP	
11-Jul-10	8:03 AM	11.8	10.38	1371	0.182	-	0.182	<0.01	-	<0.01	P	ICP	
12-Jul-10	8:18 AM	12.0	10.33	1571	0.049	-	0.049	<0.01	-	<0.01	P	ICP	
13-Jul-10	8:13 AM	13.7	10.05	1330	0.152	-	0.152	<0.01	-	<0.01	P	ICP	
14-Jul-10	8:20 AM	13.1	9.95	1395	0.055	-	0.055	<0.01	-	<0.01	P	ICP	
15-Jul-10	8:09 AM	13.0	9.94	1343	0.114	-	0.114	<0.01	-	<0.01	P	ICP	
16-Jul-10	7:16 AM	13.5	10.24	1580	0.174	-	0.174	<0.01	-	<0.01	P	ICP	
17-Jul-10	7:07 AM	13.1	10.17	1386	0.085	-	0.085	<0.01	-	<0.01	P	ICP	
18-Jul-10	7:04 AM	12.9	10.31	1590	0.235	-	0.235	<0.01	-	<0.01	P	ICP	
19-Jul-10	8:07 AM	13.8	9.89	1591	0.244	-	0.244	<0.01	-	<0.01	P	ICP	
20-Jul-10	10:15 AM	14.3	10.14	1424	0.061	-	0.061	<0.01	-	<0.01	P	ICP	
21-Jul-10	8:04 AM	13.7	10.30	1630	0.213	-	0.213	<0.01	-	<0.01	P	ICP	
22-Jul-10	8:41 AM	13.6	10.21	1298	0.037	0.035	0.036	<0.01	-	<0.01	P	ICP	
22-Jul-10	-	-	9.98	1371	0.176	0.175	0.176	-	-	-	P	ICP	
23-Jul-10	7:50 AM	13.6	10.00	1455	0.064	-	0.064	0.010	-	0.010	P	ICP	
24-Jul-10	7:46 AM	13.1	10.28	1577	0.307	0.286	0.297	<0.01	-	<0.01	P	ICP	Sample reanalyzed due to high Zn conc.
24-Jul-10	11:16 AM	13.4	10.22	1588	0.156	0.160	0.158				P	ICP	New sample collected to verify previous result.
25-Jul-10	7:47 AM	13.4	10.31	1577	0.763	0.794	0.779				P	ICP	dup run to check value.
25-Jul-10	12:15 PM	13.6	10.30	1570	0.310	-	0.310				P	ICP	no diss... Samples acidified.
26-Jul-10	7:45 AM	13.7	10.34	1401	0.409	0.403	0.406	0.014	-	0.014	P	ICP	Flow reduced to clarifier at 12:00 PM.

**Table C-12:
 2010 FMC Lab Analysis - Zinc
 (Total and Dissolved) in the Clarifier**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T	Zn-T Average	Zn-D	Zn-D Average	Config.	Method of Analysis	Comments		
27-Jul-10	8:10 AM	14.1	10.16	1382	0.098	-	0.098	<0.01	-	<0.01	P	ICP	
28-Jul-10	8:07 AM	13.9	10.11	1296	0.335	-	0.335	0.010	-	0.010	P	ICP	
29-Jul-10	7:58 AM	14.9	10.38	1402	0.183	-	0.183	0.015	-	0.015	P	AA	
30-Jul-10	7:43 AM	15.6	10.00	1650	0.039	-	0.039	<0.01	<0.01	<0.01	P	AA	
31-Jul-10	7:43 AM	15.2	10.23	1387	0.145	-	0.145	0.017	-	0.017	P	AA	
1-Aug-10	7:44 AM	14.7	10.29	1268	0.140	-	0.140	0.030	-	0.030	P	AA	
2-Aug-10	8:10 AM	14.9	10.20	1570	0.138	-	0.138	0.031	-	0.031	P	AA	
3-Aug-10	7:58 AM	14.9	10.21	1558	0.229	-	0.229	0.031	-	0.031	P	AA	
4-Aug-10	8:03 AM	15.1	10.40	1280	0.089	-	0.089	0.018	-	0.018	P	AA	
5-Aug-10	8:02 AM	15.2	10.10	1432	0.164	-	0.164	0.015	-	0.015	P	AA	Faro pump shutdown 8:11-10:02AM.
6-Aug-10	7:42 AM	15.4	9.59	1316	0.132	-	0.132	<0.01	-	<0.01	P	AA	
7-Aug-10	7:50 AM	15.0	10.25	1434	0.107	-	0.107	<0.01	-	<0.01	P	AA	
8-Aug-10	8:32 AM	15.0	10.15	1610	0.074	-	0.074	<0.01	-	<0.01	P	AA	
9-Aug-10	8:07 AM	14.6	10.28	1582	0.175	-	0.175	0.029	-	0.029	P	ICP	
9-Aug-10					0.178	-	0.178	0.022	-	0.022	P	AA	Duplicate analysis by AA.
10-Aug-10	8:07 AM	14.7	10.28	1561	0.109	-	0.109	0.024	-	0.024	P	ICP	
11-Aug-10	7:50 AM	14.7	10.22	1370	0.115	-	0.115	<0.01	-	<0.01	P	ICP	
12-Aug-10	7:59 AM	14.7	10.15	1440	0.115	-	0.115	0.016	-	0.016	P	ICP	
13-Aug-10	7:40 AM	14.6	10.33	1077	0.027	-	0.027	0.013	-	0.013	P	ICP	
14-Aug-10	8:05 AM	15.1	10.30	1410	0.047	-	0.047	0.012	-	0.012	P	ICP	
15-Aug-10	8:00 AM	14.7	10.14	1316	0.038	-	0.038	<0.01	-	<0.01	P	ICP	
16-Aug-10	7:46 AM	15.2	10.12	1540	0.072	0.069	0.071	<0.01	-	<0.01	P	ICP	
17-Aug-10	8:13 AM	15.4	10.09	1387	0.088	-	0.088	0.021	-	0.021	P	ICP	
18-Aug-10	8:12 AM	14.6	10.16	1486	0.080	-	0.080	0.027	-	0.027	P	ICP	
19-Aug-10	9:32 AM	14.2	10.33	1631	0.044	-	0.044	<0.01	-	<0.01	P	ICP	
20-Aug-10	7:42 AM	13.8	9.83	1620	0.047	-	0.047	<0.01	-	<0.01	P	ICP	
21-Aug-10	6:10 AM	13.6	10.41	1630	0.073	-	0.073	<0.01	-	<0.01	P	ICP	
22-Aug-10	7:15 AM	12.9	10.09	1426	0.066	-	0.066	<0.01	-	<0.01	P	ICP	
23-Aug-10	8:00 AM	12.8	10.11	1476	0.073	-	0.073	0.017	-	0.017	P	ICP	
24-Aug-10	8:11 AM	12.5	10.18	1163	0.092	-	0.092	<0.01	-	<0.01	P	ICP	
25-Aug-10	7:50 AM	12.2	10.11	1376	0.088	-	0.088	<0.01	-	<0.01	P	ICP	
26-Aug-10	7:55 AM	12.0	10.10	1580	0.166	-	0.166	0.018	-	0.018	P	AA	
27-Aug-10	7:40 AM	11.5	10.28	1418	0.164	-	0.164	0.022	-	0.022	P	AA	
28-Aug-10	8:55 AM	11.3	9.72	2093	0.073	-	0.073	<0.01	-	<0.01	P	AA	
29-Aug-10	8:30 AM	11.0	10.15	1988	0.074	-	0.074	<0.01	-	<0.01	P	AA	
30-Aug-10	7:58 AM	10.7	7.65	2060	4.011	-	4.011	2.290	-	2.290	P	AA	Discharge from mill shut down before results available.

Table C-12:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Clarifier

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Zn-T		Zn-T Average	Zn-D		Zn-D Average	Config.	Method of Analysis	Comments
30-Aug-10	7:58 AM	10.7	7.40	2141	4.180	-	4.180	2.210	-	2.210		AA	Reanalysis of morning sample to verify previous result. pH and conductivity measured on lab meter.
30-Aug-10	2:45 PM	11.1	9.24	2430	0.770	-	0.770	0.050	-	0.050		AA	Sample collected from clarifier tank (no discharge from tank now).
30-Aug-10	2:45 PM	11.1	9.14	2165									pH and conductivity measured on lab meter.

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments				
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg						
13-May-10	6:00 PM	6.7	10.00	1244	0.144	-	0.144	0.012	-	0.012						ICP	Mill Spill taken at sample port 6 PM	
14-May-10	12:00 AM	5.3	10.21	1245	0.120	-	0.120	<0.01	-	<0.01						ICP	Mill Spill taken at sample port 12 AM	
14-May-10	6:00 AM	8.2	10.25	1341	0.174	-	0.174	<0.01	-	<0.01						ICP	Mill Spill taken at sample port 6 AM	
14-May-10	8:30 AM	16.6	9.60	1160							0.123	0.333	0.228	<0.01	<0.01	<0.01	ICP	Combined Mill Spill, 8:30 AM; Rerun - 0.347 - ZnT dup
14-May-10	12:00 PM	6.7	10.26	1333	0.387	0.380	0.384	<0.01	-	<0.01						ICP	Rerun the undissolved sample	
14-May-10	6:00 PM	6.6	10.05	1334	0.300	0.286	0.293	<0.01	-	<0.01						ICP	Rerun the undissolved sample	
15-May-10	12:00 AM	7.1	10.60	1256	0.056	0.053	0.055	<0.01	-	<0.01						ICP	Rerun the undissolved sample	
15-May-10	6:00 AM	5.3	10.63	1254	0.317	0.305	0.311	<0.01	-	<0.01						ICP	Rerun the undissolved sample	
15-May-10	8:00 AM	19.4	9.48	1135							0.050	0.066	0.058	<0.01	<0.01	<0.01	ICP	Combined Mill Effluent
15-May-10	11:50 AM	8.5	10.52	1252	0.183	-	0.183	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
15-May-10	6:00 PM	6.6	10.61	1272	0.114	-	0.114	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
16-May-10	12:00 AM	6.1	10.61	1278	0.066	-	0.066	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
16-May-10	6:00 AM	6.3	10.60	1259	0.097	-	0.097	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
16-May-10	9:21 AM	6.3	10.60	1259							0.143	-	0.143	<0.01	-	<0.01	ICP	Combined Mill Effluent
16-May-10	12:00 PM	7.5	10.58	1251	0.201	-	0.201	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
16-May-10	6:00 PM	7.9	10.56	1281	0.210	-	0.210	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
17-May-10	12:00 AM	-6.8	10.61	1262	0.208	-	0.208	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
17-May-10	6:00 AM	5.3	10.62	1224	0.205	-	0.205	<0.01	-	<0.01						ICP	Mill Effluent taken at Sample Port	
17-May-10	8:00 AM	19.1	9.81	1274							0.182	0.221	0.202	<0.01	<0.01	<0.01	ICP	Combined Mill Effluent; pH, EC and Temp were measured at 10:07 AM
17-May-10	12:00 PM	8.5	10.55	1254	0.364	-	0.364	<0.01	-	<0.01						ICP		
17-May-10	6:00 PM	7.2	10.61	1256	0.307	-	0.307	<0.01	-	<0.01						ICP		

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments				
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg						
18-May-10	12:00 AM	6.0	10.69	1219	0.908	-	0.908	<0.01	-	<0.01						ICP	thickener tank being flushed	
18-May-10	6:00 AM	5.7	10.72	1231	0.346	-	0.346	<0.01	-	<0.01						ICP		
18-May-10	7:51 AM	20.4	9.89	1242							0.366	0.361	0.364	<0.01	<0.01	<0.01	ICP	
18-May-10	12:00 PM	8.0	10.60	1236	0.387	-	0.387	<0.01	-	<0.01						ICP	thickener tank being flushed 10:30am to 12:30 pm	
18-May-10	6:00 PM	8.6	10.60	1261	0.315	-	0.315	<0.01	-	<0.01						ICP		
19-May-10	12:00 AM	7.1	10.62	1344	0.209	-	0.209	<0.01	-	<0.01						ICP		
19-May-10	6:00 AM	6.9	10.71	1327	0.202	-	0.202	<0.01	-	<0.01						ICP		
19-May-10	8:00 AM	21.6	9.58	1257							0.278	0.262	0.270	<0.01	<0.01	<0.01	ICP	pH, EC and temp measured at 1:16 PM
19-May-10	12:00 PM	7.7	10.58	1362	0.216	-	0.216	<0.01	-	<0.01						ICP		
19-May-10	6:00 PM	7.5	10.35	1388	0.305	-	0.305	<0.01	-	<0.01						ICP		
20-May-10	12:00 AM	6.7	10.67	1371	0.292	-	0.292	<0.01	-	<0.01						ICP		
20-May-10	6:15 AM	6.9	10.70	1405	0.293	-	0.293	<0.01	-	<0.01						ICP		
20-May-10	8:20 AM	17.4	10.09	1373							0.244	0.241	0.243	<0.01	-	<0.01	ICP	
20-May-10	12:00 PM	7.6	10.62	1455	0.210	-	0.210	<0.01	-	<0.01						ICP		
20-May-10	6:00 PM	8.0	10.48	1417	0.179	-	0.179	<0.01	-	<0.01						ICP		
21-May-10	12:00 AM	7.1	10.58	1375	0.177	-	0.177	<0.01	-	<0.01						ICP		
21-May-10	6:00 AM	7.4	10.62	1367	0.207	-	0.207	<0.01	-	<0.01						ICP		
21-May-10	9:15 AM	19.3	9.98	1388							0.178	0.178	0.178	<0.01	-	<0.01	ICP	
21-May-10	12:00 PM	9.1	10.56	1458	0.191	-	0.191	<0.01	-	<0.01						ICP		
21-May-10	6:00 PM	9.1	10.63	1439	0.258	-	0.258	<0.01	-	<0.01						ICP		
22-May-10	12:00 AM	8.2	10.70	1458	0.167	-	0.167	<0.01	-	<0.01						ICP		
22-May-10	6:00 AM	8.4	10.70	1458	0.200	-	0.200	<0.01	-	<0.01						ICP		
22-May-10	8:30 AM	20.3	9.87	1383							0.138	0.142	0.140	<0.01	-	<0.01	ICP	pH, EC and temp measured at 12pm
22-May-10	12:00 PM	10.1	10.61	1456	0.111	-	0.111	<0.01	-	<0.01						ICP		
22-May-10	6:00 PM	10.1	10.63	1388	0.178	-	0.178	<0.01	-	<0.01						ICP		
23-May-10	12:00 AM	7.7	10.67	1357	0.193	-	0.193	<0.01	-	<0.01						ICP		
23-May-10	6:00 AM	7.7	10.67	1375	0.304	-	0.304	<0.01	-	<0.01						ICP		
23-May-10	8:45 AM	20.4	9.98	1398							0.162	0.152	0.157	<0.01	-	<0.01	ICP	pH, EC and temp. measured at 12pm
23-May-10	12:00 PM	9.1	10.54	1327	0.142	-	0.142	<0.01	-	<0.01						ICP		
23-May-10	6:00 PM	8.2	10.62	1332	0.394	-	0.394	<0.01	-	<0.01						ICP		
24-May-10	12:00 AM	7.4	10.47	1340	0.308	-	0.308	<0.01	-	<0.01						ICP		

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments				
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg						
24-May-10	6:00 AM	6.9	10.51	1351	0.347	-	0.347	<0.01	-	<0.01					ICP			
24-May-10	8:10 AM	15.4	10.23	1367							0.202	0.210	0.206	<0.01	-	<0.01	ICP	pH, EC and temp. measured at 8:15am
24-May-10	12:00 PM	9.1	10.57	1320	0.233	-	0.233	<0.01	-	<0.01							ICP	
24-May-10	6:00 PM	9.0	10.59	1326	0.189	-	0.189	<0.01	-	<0.01							ICP	
25-May-10	12:00 AM	8.3	10.56	1343	0.288	-	0.288	<0.01	-	<0.01							ICP	
25-May-10	6:00 AM	7.6	10.41	1351	0.326	-	0.326	<0.01	-	<0.01							ICP	
25-May-10	8:35 AM	20.2	9.94	1363							0.255	0.239	0.247	<0.01	-	<0.01	ICP	pH, EC and temp. measured at 10:40am
25-May-10	12:00 PM	9.6	10.50	1321	0.289	-	0.289	<0.01	-	<0.01							ICP	
25-May-10	6:00 PM	9.9	10.52	1289	0.342	-	0.342	<0.01	-	<0.01							ICP	
26-May-10	12:00 AM	8.8	10.56	1351	0.269	-	0.269	<0.01	-	<0.01							ICP	
26-May-10	6:00 AM	7.8	10.56	1359	0.274	-	0.274	<0.01	-	<0.01							ICP	
26-May-10	8:10 AM	16.1	10.13	1367							0.198	0.189	0.194	<0.01	-	<0.01	ICP	pH, EC and temp. measured at 8:10am
26-May-10	12:00 PM	10.1	10.41	1349	0.259	-	0.259	<0.01	-	<0.01							ICP	
26-May-10	6:00 PM	9.2	10.54	1314	0.317	-	0.317	<0.01	-	<0.01							ICP	
27-May-10	12:00 AM	9.3	10.44	1358	0.299	-	0.299	<0.01	-	<0.01							ICP	
27-May-10	6:00 AM	8.6	10.43	1336	0.279	-	0.279	<0.01	-	<0.01							ICP	
27-May-10		-	-	-	-	-					0.293	-	0.293	<0.01	-	<0.01	ICP	Combined sample pH, EC, and temp. not measured
27-May-10	12:00 PM	10.0	10.36	1425	0.398	-	0.398	<0.01	-	<0.01							ICP	
27-May-10	6:00 PM	10.4	10.43	1427	0.227	-	0.227	<0.01	-	<0.01							ICP	
28-May-10	12:00 AM	10.0	10.36	1486	0.205	-	0.205	<0.01	-	<0.01							ICP	
28-May-10	6:00 AM	-	-	-	-	-											ICP	
28-May-10	7:53 AM	19.9	9.71	1337							0.238	0.246	0.242	<0.01	-	<0.01	ICP	pH, EC and temp measured at 9:25 AM
28-May-10	12:00 PM	10.6	10.40	1550														
28-May-10	6:00 PM	10.8	10.40	1554														
29-May-10	12:00 AM	9.5	10.30	1500														
29-May-10	6:00 AM	8.7	10.42	1492														
29-May-10	7:40 AM	20.5	9.91	1380							0.219	0.213	0.216	0.011	-	0.011	ICP	
29-May-10	12:00 PM	10.0	10.60	1440														
29-May-10	6:00 PM	10.0	10.60	1520														
30-May-10	12:00 AM	9.6	10.27	1499														
30-May-10	6:00 AM	9.3	10.26	1488														
30-May-10	7:39 AM	20.6	9.86	1346							0.222	0.219	0.221	<0.01	-	<0.01	ICP	
30-May-10	12:00 PM	10.6	10.40	1470														

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
30-May-10	6:00 PM	10.6	10.40	1500											
31-May-10	12:00 AM	10.0	10.30	1503											
31-May-10	6:00 AM	9.8	10.23	1410											
31-May-10	7:50 AM	-	-	-					0.189	0.187	0.188	<0.01	-	<0.01	ICP
31-May-10	12:00 PM	10.2	10.26	1468											
31-May-10	6:00 PM	11.3	10.36	1496											
1-Jun-10	12:00 AM	10.3	10.33	1448											
1-Jun-10	6:00 AM	10.5	10.27	1504											
1-Jun-10	7:50 AM	-	-	-					0.151	0.144	0.148	<0.01	-	<0.01	ICP
1-Jun-10	12:00 PM	10.9	10.20	1467											
1-Jun-10	6:00 PM	11.7	10.32	1472											
2-Jun-10	12:00 AM	11.0	10.24	1505											
2-Jun-10	6:00 AM	10.0	10.33	1450											
2-Jun-10	8:15 AM	-	-	-					0.112	-	0.112	<0.01	-	<0.01	ICP
2-Jun-10	12:00 PM	11.1	10.27	1454											Tanks being flushed.
2-Jun-10	6:00 PM	10.9	10.47	1452											
3-Jun-10	12:00 AM	10.5	10.20	1511											
3-Jun-10	6:00 AM	10.4	10.10	1483											
3-Jun-10	8:21 AM	-	-	-					0.169	-	0.169	<0.01	-	<0.01	ICP
3-Jun-10	12:00 PM	10.9	10.22	1497											
3-Jun-10	6:00 PM	10.4	10.66	1492											
4-Jun-10	12:00 AM	10.0	10.20	1453											
4-Jun-10	6:00 AM	10.2	10.24	1445											
4-Jun-10	7:40 AM	-	-	-					0.184	0.196	0.190	<0.01	-	<0.01	ICP
4-Jun-10	12:00 PM	9.7	10.80	1455	0.815	-	0.815								
4-Jun-10	6:00 PM	9.8	10.37	1501	0.320	-	0.320								
5-Jun-10	12:00 AM	9.8	10.40	1404	0.248	-	0.248								
5-Jun-10	6:00 AM	9.8	10.40	1498	0.349	-	0.349								
5-Jun-10	7:50 AM	-	-	-					0.411	-	0.411	<0.01	-	<0.01	ICP
5-Jun-10	12:00 PM	9.3	10.47	1476											
5-Jun-10	6:00 PM	9.8	10.40	1484											
6-Jun-10	12:00 AM	9.5	10.44	1467											
6-Jun-10	6:00 AM	9.8	10.46	1470											
6-Jun-10	7:55 AM	-	-	-					0.305	0.314	0.310	<0.01	-	<0.01	ICP
6-Jun-10	12:00 PM	9.6	10.35	1478	0.422		0.422								
6-Jun-10	6:00 PM	9.8	10.41	1509	0.300		0.300								
7-Jun-10	12:00 AM	9.8	10.45	1460	0.303		0.303								
7-Jun-10	6:00 AM	9.8	10.50	1450	0.308		0.308								

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments		
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg				
7-Jun-10	7:55 AM								0.337	0.340	0.339	<0.01	-	<0.01	ICP	
7-Jun-10	12:00 PM	10.2	10.18	1478												
7-Jun-10	6:00 PM	10.4	10.41	1512												
8-Jun-10	12:00 AM	9.8	10.50	1470												
8-Jun-10	6:00 AM	8.8	10.50	1450												
8-Jun-10	7:55 AM								0.212	0.216	0.214	0.010	-	0.010	ICP	
8-Jun-10	12:00 PM	10.5	10.45	1428												sludge being pumped out at time of the sample
8-Jun-10	6:00 PM	9.9	10.42	1430												
9-Jun-10	12:00 AM	9.6	10.35	1441												
9-Jun-10	6:00 AM	8.6	10.41	1415												
9-Jun-10	8:20 AM								0.268	0.271	0.270	<0.01	-	<0.01	ICP	
9-Jun-10	12:00 PM	10.8	10.36	1408												
9-Jun-10	6:00 PM	10.5	10.40	1416												
10-Jun-10	12:00 AM	9.2	10.26	1464												
10-Jun-10	6:00 AM	9.8	10.21	1448												
10-Jun-10	8:03 AM								0.245	0.243	0.244	0.010	-	0.010	ICP	
10-Jun-10	12:00 PM	10.8	10.32	1513												
10-Jun-10	6:00 PM	10.5	10.29	1495												
11-Jun-10	12:00 AM	10.1	10.46	1448												
11-Jun-10	6:00 AM	9.3	10.57	1442												
11-Jun-10	7:55 AM								0.213	0.272	0.243	<0.01	-	<0.01	ICP	
11-Jun-10	12:00 PM	10.6	10.40	1390												
11-Jun-10	6:00 PM	10.0	10.40	1410												
12-Jun-10	12:00 AM	10.1	10.26	1514												
12-Jun-10	6:00 AM	9.5	10.31	1451												
12-Jun-10	8:05 AM								0.187	0.189	0.188	<0.01	-	<0.01	ICP	
12-Jun-10	12:00 PM	10.6	10.40	1437												
12-Jun-10	6:00 PM	10.2	10.40	1440												
13-Jun-10	12:00 AM	9.5	10.13	1419												
13-Jun-10	6:00 AM	10.1	10.05	1489												
13-Jun-10	7:45 AM								0.388	0.386	0.387	<0.01	-	<0.01	AA	
13-Jun-10	12:00 PM	10.6	10.40	1450												
13-Jun-10	6:00 PM	10.6	10.30	1451												
14-Jun-10	12:00 AM	9.5	9.91	1469												
14-Jun-10	6:00 AM	8.4	10.05	1408												
14-Jun-10	7:54 AM								0.311	0.298	0.305	<0.01	-	<0.01	AA	
14-Jun-10	2:00 PM	10.1	10.60	1350												

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
14-Jun-10	6:00 PM	9.6	10.30	1430											
15-Jun-10	12:00 AM	10.1	10.12	1468											
15-Jun-10	6:00 AM	10.1	0.14	1458											
15-Jun-10	7:50 AM								0.329	0.309	0.319	0.014	-	0.014	ICP
15-Jun-10	12:00 PM	11.6	10.40	1440											
15-Jun-10	6:00 PM	12.1	10.40	1480											
16-Jun-10	12:00 AM	11.2	10.10	1477											
16-Jun-10	6:00 AM	10.2	10.15	1440											
16-Jun-10	8:15 AM								0.243	0.243	0.243	<0.01	-	<0.01	ICP
16-Jun-10	12:00 PM	12.2	10.36	1370											
16-Jun-10	6:00 PM	11.0	10.17	1477											
17-Jun-10	12:00 AM	10.2	10.33	1526											
17-Jun-10	6:00 AM	9.9	10.35	1527											
17-Jun-10	8:20 AM								0.219	0.211	0.215	<0.01	-	<0.01	AA
17-Jun-10	12:00 PM	12.6	10.01	1442											
17-Jun-10	6:00 PM	11.7	10.38	1554											
18-Jun-10	12:00 AM	10.5	10.26	1549											
18-Jun-10	6:00 AM	10.1	10.32	1550											
18-Jun-10	7:55 AM								0.089	0.114	0.102	<0.01	-	<0.01	AA
18-Jun-10	12:00 PM	10.9	9.85	1542											
18-Jun-10	6:00 PM	10.4	9.95	1534											
19-Jun-10	12:00 AM	10.0	10.26	1555											
19-Jun-10	6:00 AM	9.9	10.32	1497											
19-Jun-10	9:15 AM								0.368	0.374	0.371	<0.01	-	<0.01	AA
19-Jun-10	12:00 PM	11.1	9.89	1501											
19-Jun-10	6:00 PM	11.5	10.00	1532											
20-Jun-10	12:00 AM	10.7	10.31	1525											
20-Jun-10	6:00 AM	10.3	10.40	1494											
20-Jun-10	8:00 AM								0.271	0.269	0.270	0.016	-	0.016	AA
20-Jun-10	12:00 PM	11.9	9.88	1500											
20-Jun-10	6:00 PM	11.7	10.06	1522											
21-Jun-10	12:00 AM	11.9	10.10	1530											
21-Jun-10	6:00 AM	11.8	10.30	1515											
21-Jun-10	7:50 AM								0.158	0.165	0.162	0.015	-	0.015	AA
21-Jun-10	12:00 PM	12.3	9.93	1576											
21-Jun-10	6:00 PM	12.3	9.98	1545											
22-Jun-10	12:00 AM	12.0	10.06	1540											
22-Jun-10	6:00 AM	11.7	10.16	1562											

**Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments		
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg				
22-Jun-10	9:00 AM								0.181	0.182	0.182	<0.01		0.005	AA	
22-Jun-10	12:00 PM	11.7	9.88	1511												
22-Jun-10	6:00 PM	11.9	10.11	1443												
23-Jun-10	12:00 AM	11.8	10.10	1520												
23-Jun-10	6:00 AM	11.9	10.40	1540												
23-Jun-10	10:30 AM								0.173	0.189	0.181	<0.01		0.005	AA	
23-Jun-10	12:00 PM	11.6	9.85	1525												
23-Jun-10	6:00 PM	11.7	9.92	1551												
24-Jun-10	12:00 AM	11.8	10.10	1540												
24-Jun-10	6:00 AM	11.8	10.10	1548												
24-Jun-10	11:45 AM								0.138	0.142	0.140	<0.01		0.005	ICP	
24-Jun-10	12:00 PM	12.7	10.32	1556												
24-Jun-10	6:00 PM	12.6	10.29	1512												
25-Jun-10	12:00 AM	12.0	10.80	1555												
25-Jun-10	6:00 AM	11.2	10.13	1522												
25-Jun-10	10:30 AM								0.110	0.160	0.135	<0.01	-	<0.01	ICP	
25-Jun-10	12:00 PM	12.8	10.10	1483												
25-Jun-10	6:00 PM	13.5	10.13	1469												
25-Jun-10	12:00 AM	12.2	9.98	1490												
26-Jun-10	6:00 AM	11.3	9.97	1503												
26-Jun-10	10:00 AM								0.077	-	0.077	<0.01	-	<0.01	ICP	
26-Jun-10	12:00 PM	13.5	9.97	1515												
26-Jun-10	6:00 PM	13.5	10.14	1474												
27-Jun-10	12:00 AM	13.3	10.13	1485												
27-Jun-10	6:00 AM	12.2	10.15	1478												
27-Jun-10	8:50 AM								0.130	-	0.130	<0.01	-	<0.01	ICP	
27-Jun-10	12:00 PM	12.4	10.10	1490												
27-Jun-10	6:00 PM															No field parameters recorded
28-Jun-10	12:00 AM	12.1	10.16	1416												
28-Jun-10	6:00 AM	11.2	10.13	1522												
28-Jun-10	9:30 AM								0.157	-	0.157	0.012	-	0.012	ICP	
28-Jun-10	12:00 PM	11.6	9.84	1350												
28-Jun-10	6:00 PM	12.0	10.00	1350												
29-Jun-10	12:00 AM	12.4	9.63	1433												
29-Jun-10	6:00 AM	11.4	9.37	1371												
29-Jun-10	8:05 AM								0.262	-	0.262	0.011	-	0.011	ICP	
29-Jun-10	12:00 PM	13.6	10.00	1390												

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
29-Jun-10	6:00 PM	13.6	11.48	1440											
30-Jun-10	12:00 AM	12.3	9.32	1453											
30-Jun-10	6:00 AM	11.9	11.33	1557											
30-Jun-10	8:05 AM								0.191	0.194	0.193	<0.01	-	<0.01	ICP
30-Jun-10	12:00 PM		9.78	1403											
30-Jun-10	6:00 PM	13.6	10.00	1408											
1-Jul-10	12:00 AM	12.0	9.60	1397											
1-Jul-10	6:00 AM	11.8	11.95	2066											
1-Jul-10	10:15 AM								0.210	-	0.210	<0.01	-	<0.01	ICP
1-Jul-10	12:00 PM	12.6	10.00	1440											
1-Jul-10	6:00 PM	12.6	10.10	1430											
2-Jul-10	12:00 AM	12.5	9.42	1408											
2-Jul-10	6:00 AM	11.9	9.62	1413											
2-Jul-10	11:00 AM								0.262	-	0.262	<0.01	-	<0.01	ICP
2-Jul-10	12:00 PM														Tanks being flushed, no sample.
2-Jul-10	6:00 PM	13.5	10.98	1482											
3-Jul-10	12:00 AM	12.9	9.90	1398											
3-Jul-10	6:00 AM	12.0	9.96	1389											
3-Jul-10	9:00 AM								0.306	0.309	0.308				ICP No dissolved sample analyzed.
3-Jul-10	12:00 PM	13.0	9.90	1393											
3-Jul-10	6:00 PM	13.2	10.22	1390											
4-Jul-10	12:00 AM	13.5	9.91	1369											
4-Jul-10	6:00 AM	12.3	9.95	1404											
4-Jul-10	9:45 AM								0.183	-	0.183				ICP
4-Jul-10	12:00 PM	12.9	11.21	1548											
4-Jul-10	6:00 PM	13.3	9.92	1400											
5-Jul-10	12:00 AM	12.0	9.90	1387											
5-Jul-10	6:00 AM	11.6	12.22	2412											Lime line plugged up so was flushed previous to this sample.
5-Jul-10	9:50 AM								0.244	-	0.244	<0.01	-	<0.01	ICP
5-Jul-10	12:00 PM	13.6	9.63	1410											
5-Jul-10	6:00 PM	12.9	9.73	1384											
6-Jul-10	12:00 AM	12.4	9.75	1410											
6-Jul-10	6:00 AM	11.6	9.95	1414											
6-Jul-10	8:30 AM								0.341	0.336	0.339				ICP

**Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
6-Jul-10	12:00 PM	12.9	10.95	1554											
6-Jul-10	6:00 PM	15.5	9.37	1644											
7-Jul-10	12:00 AM	13.0	10.80	1554											
7-Jul-10	6:00 AM	14.0	11.00	1560											
7-Jul-10	8:45 AM								0.460	-	0.460			ICP	
7-Jul-10	12:00 PM	13.3	10.85	1588											
7-Jul-10	6:00 PM	14.5	11.60	2635											
8-Jul-10	12:00 AM	14.6	11.60	1245											
8-Jul-10	6:00 AM	14.0	11.20	2206											
8-Jul-10	9:00 AM								0.285	-	0.285	<0.01	-	<0.01	ICP
8-Jul-10	12:00 PM	14.1	9.57	-											
8-Jul-10	6:00 PM	15.3	9.42	-											
9-Jul-10	12:00 AM	14.1	10.10	-											
9-Jul-10	6:00 AM	13.4	10.10	-											
9-Jul-10	8:08 AM								0.116	-	0.116	<0.01	-	<0.01	ICP
9-Jul-10	12:00 PM	14.7	9.76	1447											
9-Jul-10	6:00 PM	16.6	9.60	1498											
10-Jul-10	12:00 AM	14.0	9.80	1440											
10-Jul-10	6:00 AM	13.6	9.80	1404											
10-Jul-10	7:46 AM								0.125	-	0.125	<0.01	-	<0.01	ICP
10-Jul-10	12:00 PM	13.2	10.09	1408											
10-Jul-10	6:00 PM	13.5	10.13	1417											
11-Jul-10	12:00 AM	12.8	10.11	1415											
11-Jul-10	6:00 AM	11.7	10.17	1410											
11-Jul-10	8:13 AM								0.183	-	0.183			ICP	
11-Jul-10	12:00 PM	12.6	10.20	1580											
11-Jul-10	6:00 PM	13.5	10.23	1570											
12-Jul-10	12:00 AM	12.0	10.27	1570											
12-Jul-10	6:00 AM	11.8	10.20	1570											
12-Jul-10	8:26 AM								0.132	0.132	0.132			ICP	
12-Jul-10	12:00 PM	13.3	10.15	1580											
12-Jul-10	6:00 PM	14.4	10.22	1560											
13-Jul-10	12:00 AM	13.5	10.21	1570											
13-Jul-10	6:00 AM	12.9	10.18	1560											
13-Jul-10	11:30 AM								0.166	0.167	0.167			ICP	
13-Jul-10	12:00 PM	15.6	10.02	1367											
13-Jul-10	6:00 PM	14.8	10.00	1395											
14-Jul-10	12:00 AM	13.5	10.09	1411											

**Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
14-Jul-10	6:00 AM	12.6	10.18	1400											
14-Jul-10	8:25 AM								0.117	-	0.117			ICP	
14-Jul-10	12:00 PM	14.6	9.70	1347											
14-Jul-10	6:00 PM	15.0	9.90	1420											
15-Jul-10	12:00 AM	13.9	9.35	1443											
15-Jul-10	6:00 AM	13.4	9.16	1417											
15-Jul-10	8:30 AM								0.187	-	0.187			ICP	
15-Jul-10	12:00 PM	14.4	9.90	1440											
15-Jul-10	6:00 PM	14.4	9.40	1440											
16-Jul-10	12:00 AM	13.8	9.48	1435											
16-Jul-10	6:00 AM	13.7	9.53	1406											
16-Jul-10	8:45 AM								0.184	0.182	0.183			ICP	
16-Jul-10	12:00 PM	14.4	10.00	1450											
16-Jul-10	6:00 PM	14.4	10.00	1450											
17-Jul-10	12:00 AM	13.5	9.64	1424											
17-Jul-10	6:00 AM	13.5	9.34	1411											
17-Jul-10	7:40 AM								0.301	0.303	0.302			ICP	
17-Jul-10	12:00 PM	14.4	10.00	1480											
17-Jul-10	6:00 PM	14.4	9.80	1440											
18-Jul-10	12:00 AM	13.8	9.26	1458											
18-Jul-10	6:00 AM	13.1	9.55	1445											
18-Jul-10	8:15 AM								0.166	-	0.166			ICP	
18-Jul-10	12:00 PM	14.6	10.59	1351											Tanks were being flushed
18-Jul-10	6:00 PM	14.8	10.44	1386											Tanks were being flushed
19-Jul-10	12:00 AM	14.0	10.29	1424											Tanks were being flushed
19-Jul-10	6:00 AM	13.2	10.33	1385											Tanks were being flushed
19-Jul-10	9:05 AM								0.155	0.154	0.155			ICP	
19-Jul-10	12:00 PM	14.9	10.42	1337											Faro and ETA water only
19-Jul-10	6:00 PM	14.8	10.43	1315											Faro and ETA water only
20-Jul-10	12:00 AM	14.3	10.29	1398											
20-Jul-10	6:00 AM	13.7	10.37	1404											
20-Jul-10	10:00 AM								0.154	-	0.154			ICP	
20-Jul-10	12:00 PM	15.1	10.31	1408											Tanks were being Flushed

**Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
20-Jul-10	6:00 PM	15.3	10.36	1414											
21-Jul-10	12:00 AM	14.1	10.22	1468											
21-Jul-10	6:00 AM	13.9	10.41	1430											
21-Jul-10	9:15 AM								0.142	0.143	0.143		ICP		
21-Jul-10	12:00 PM	14.4	10.40	1442											
21-Jul-10	6:00 PM	-	-	-											no measurments were taken
22-Jul-10	12:00 AM	14.1	10.36	1410											
22-Jul-10	6:00 AM	13.9	10.35	1408											
22-Jul-10	10:11 AM								0.085	0.085	0.085		ICP		
22-Jul-10	12:00 PM	14.7	9.70	1435											
22-Jul-10	6:00 PM	15.6	9.81	1427											
23-Jul-10	12:00 AM	14.6	10.30	1407											
23-Jul-10	6:00 AM	13.7	10.15	1420											
23-Jul-10	8:00 AM								0.257	0.258	0.258		ICP		
23-Jul-10	12:00 PM	14.6	9.61	1438											
23-Jul-10	6:00 PM	15.0	9.58	1443											
24-Jul-10	12:00 AM	14.4	10.00	1440											
24-Jul-10	6:00 AM	13.7	9.90	1440											
24-Jul-10	8:15 AM								0.205	0.204	0.205		ICP		
24-Jul-10	12:00 PM	13.9	9.82	1419	3.490	-	3.490						ICP		
24-Jul-10	6:00 PM	15.0	9.62	1447	0.444	-	0.444						ICP		
25-Jul-10	12:00 AM	14.8	9.90	1440	0.213	-	0.213						ICP		
25-Jul-10	6:00 AM	14.0	9.90	1440	0.241	-	0.241						ICP		
25-Jul-10									1.094	-	1.094		ICP	individuals run to identify source	
25-Jul-10	12:30 PM	14.5	10.20	1557	0.271	-	0.271						ICP		
25-Jul-10	12:00 PM	15.0	9.40	1473											
25-Jul-10	6:00 PM	15.4	9.65	1440											
26-Jul-10	12:00 AM	14.4	10.00	1380											
26-Jul-10	6:00 AM	14.4	10.00	1397											
26-Jul-10	8:30 AM								0.265	0.261	0.263		ICP		
26-Jul-10	12:00 PM	-	-	-											
26-Jul-10	6:00 PM	16.0	9.82	1569											
27-Jul-10	12:00 AM	14.6	10.06	1559											
27-Jul-10	6:00 AM	14.3	10.12	1561											
27-Jul-10									0.243	-	0.243		ICP		
27-Jul-10	12:00 PM	16.5	9.14	1498											no sample collected

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg		
27-Jul-10	6:00 PM	17.2	9.40	1417										
28-Jul-10	12:00 AM	15.2	9.78	1402										
28-Jul-10	6:00 AM	-	-	-										
28-Jul-10	8:15 AM								0.289	0.288	0.289		ICP	
28-Jul-10	12:00 PM	-	-	-										sample not collected
28-Jul-10	6:00 PM	16.6	9.35	1464										
29-Jul-10	12:00 AM	14.6	10.05	1400										
29-Jul-10	6:00 AM	14.0	10.12	1380										
29-Jul-10	8:30 AM								0.229	-	0.229		AA	
29-Jul-10	12:00 PM	16.1	9.51	1425										
29-Jul-10	6:00 PM	16.6	10.81	1392										
30-Jul-10	12:00 AM	15.4	10.28	1418										
30-Jul-10	6:00 AM	14.5	10.36	1462										ETA and IP water only
30-Jul-10	8:20 AM								0.289	0.292	0.291		AA	
30-Jul-10	12:00 PM	16.0	10.10	1440										
30-Jul-10	6:00 PM	16.5	9.95	1455										
31-Jul-10	12:00 AM	12.0	10.10	1484										
31-Jul-10	6:00 AM	15.4	9.72	1439										
31-Jul-10	7:50 AM								0.247	0.237	0.242		AA	
31-Jul-10	12:00 PM	18.0	9.97	1480										
31-Jul-10	6:00 PM	17.1	9.80	1426										
1-Aug-10	12:00 AM	15.9	9.53	1467										
1-Aug-10	6:00 AM	15.2	9.60	1422										
1-Aug-10	8:10 AM								0.148	-	0.148		AA	
1-Aug-10	12:00 PM	17.6	9.90	1480										
1-Aug-10	6:00 PM	17.8	9.89	1482										
2-Aug-10	12:00 AM	15.9	9.47	1449										
2-Aug-10	6:00 AM	15.1	9.63	1423										
2-Aug-10	8:00 AM								0.141	0.178	0.160		AA	
2-Aug-10	12:00 PM	17.1	9.90	1450										
2-Aug-10	6:00 PM	16.8	9.86	1466										
3-Aug-10	12:00 AM	16.0	9.50	1455										
3-Aug-10	6:00 AM	14.7	9.80	1422										
3-Aug-10	8:45 AM								0.291	-	0.291		AA	
3-Aug-10	12:00 PM	17.1	9.97	1451										
3-Aug-10	6:00 PM	18.2	10.00	1359										
4-Aug-10	12:00 AM	15.8	9.68	1444										
4-Aug-10	6:00 AM	16.5	9.87	1432										

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
4-Aug-10	8:05 AM								0.277	-	0.277			AA	
4-Aug-10	12:00 PM	17.8	9.94	1390											
4-Aug-10	6:00 PM	18.4	9.99	1390											
5-Aug-10	12:00 AM	16.5	9.97	1440											
5-Aug-10	6:00 AM	16.3	9.50	1420											
5-Aug-10	8:10 AM								0.217	-	0.217			AA	Faro pump shutdown 8:11-10:02AM.
5-Aug-10	12:00 PM	16.8	9.98	1690											
5-Aug-10	6:00 PM	17.7	9.74	1650											
6-Aug-10	12:00 AM	16.0	9.96	1600											
6-Aug-10	6:00 AM	1560.0	9.53	1630											
6-Aug-10	8:10 AM								0.149	-	0.149			AA	
6-Aug-10	12:00 PM	16.9	9.86	1471											
6-Aug-10	6:00 PM	17.1	9.93	1470											
7-Aug-10	12:00 AM	13.0	9.52	1472											
7-Aug-10	6:00 AM	13.2	9.34	1474											
7-Aug-10	8:00 AM								0.165	-	0.180			AA	
7-Aug-10	12:00 PM	17.1	9.37	1438											
7-Aug-10	6:00 PM	17.0	9.25	1478											
8-Aug-10	12:00 AM	15.6	9.80	1503											
8-Aug-10	6:00 AM	16.0	9.60	1508											
8-Aug-10	8:30 AM								0.362	-	0.362			AA	
8-Aug-10	12:00 PM	15.5	9.21	1434											
8-Aug-10	6:00 PM	15.7	9.34	1437											
9-Aug-10	12:00 AM	15.5	9.80	1480											
9-Aug-10	6:00 AM	15.5	9.80	1478											
9-Aug-10	9:00 AM								0.273	-	0.273			ICP	
9-Aug-10	9:00 AM								0.212	-	0.212			AA	Duplicate analysis by AA
9-Aug-10	12:00 PM	16.5	9.20	1438											
9-Aug-10	6:00 PM	17.4	9.14	1460											
10-Aug-10	12:00 AM	16.0	9.80	1470											
10-Aug-10	6:00 AM	15.1	9.80	1480											
10-Aug-10	8:45 AM								0.146	-	0.146			ICP	
10-Aug-10	12:00 PM	17.7	9.65	1492											
10-Aug-10	6:00 PM	17.1	9.26	1470											
11-Aug-10	12:00 AM	16.4	9.80	1480											
11-Aug-10	6:00 AM	15.0	9.80	1470											
11-Aug-10	7:45 AM								0.202	-	0.202			ICP	

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
11-Aug-10	12:00 PM	15.8	9.20	1455											
11-Aug-10	6:00 PM	16.6	9.31	1467											
12-Aug-10	12:00 AM	14.8	9.84	1452											
12-Aug-10	6:00 AM	14.1	10.28	1454											
12-Aug-10	9:00 AM								0.319	-	0.319			ICP	
12-Aug-10	12:00 PM	17.1	8.80	1482											
12-Aug-10	6:00 PM	17.6	9.50	1478											
13-Aug-10	12:00 AM	16.0	10.05	1468											
13-Aug-10	6:00 AM	14.7	10.02	1478											
13-Aug-10	9:10 AM								0.154	-	0.154			ICP	
13-Aug-10	12:00 PM	16.4	9.91	1109											
13-Aug-10	6:00 PM	17.7	9.86	1084											
14-Aug-10	12:00 AM	15.9	10.18	1085											
14-Aug-10	6:00 AM	15.1	10.15	1055											
14-Aug-10	9:30 AM								0.124	0.125	0.125			ICP	
14-Aug-10	12:00 PM	17.2	10.05	1219											
14-Aug-10	6:00 PM	17.2	10.09	1234											
15-Aug-10	12:00 AM	15.6	10.04	1181											
15-Aug-10	6:00 AM	14.8	10.23	1171											
15-Aug-10	8:15 AM								0.085	-	0.085			ICP	
15-Aug-10	12:00 PM	16.6	9.80	1170											
15-Aug-10	6:00 PM	17.6	9.59	1178											
16-Aug-10	12:00 AM	16.4	9.41	1181											
16-Aug-10	6:00 AM	15.3	9.33	1169											
16-Aug-10	7:50 AM								0.216	0.214	0.215			ICP	
16-Aug-10	12:00 PM	17.6	9.80	1420											
16-Aug-10	6:00 PM	18.6	9.80	1155											
17-Aug-10	12:00 AM	16.6	9.30	1170											
17-Aug-10	6:00 AM	15.4	9.23	1158											
17-Aug-10	9:00 AM								0.194	-	0.194			ICP	
17-Aug-10	12:00 PM														Field parameters misplaced
17-Aug-10	6:00 PM														
18-Aug-10	12:00 AM														
18-Aug-10	6:00 AM														
18-Aug-10	9:30 AM								0.170	-	0.170			ICP	
18-Aug-10	12:00 PM	16.0	9.80	1180											
18-Aug-10	6:00 PM	16.0	10.30	130											

**Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent**

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
19-Aug-10	12:00 AM	14.9	9.28	1167											
19-Aug-10	6:00 AM	14.9	9.24	1188											
19-Aug-10	10:30 AM								0.107	-	0.107			ICP	
19-Aug-10	12:00 PM	14.5	9.70	1224											
19-Aug-10	6:00 PM	14.2	9.69	1169											
20-Aug-10	12:00 AM	14.1	10.11	1202											
20-Aug-10	6:00 AM	13.2	9.50	1172											
20-Aug-10									0.109	-	0.109			ICP	
20-Aug-10	12:00 PM	14.4	9.48	1467											
20-Aug-10	6:00 PM	13.7	9.84	1432											
21-Aug-10	12:00 AM	14.4	9.87	1434											
21-Aug-10	6:00 AM	12.9	9.99	1428											
21-Aug-10	6:45 AM								0.118	-	0.118			ICP	
21-Aug-10	12:00 PM	13.9	10.18	1640											
21-Aug-10	6:00 PM	13.8	10.29	1640											
22-Aug-10	12:00 AM	12.6	9.92	1630											
22-Aug-10	6:00 AM	12.5	10.18	1610											
22-Aug-10	8:15 AM								0.162	-	0.162			ICP	
22-Aug-10	12:00 PM	13.3	9.80	1442											
22-Aug-10	6:00 PM	13.8	9.95	1422											
23-Aug-10	12:00 AM	13.2	9.96	1454											
23-Aug-10	6:00 AM	12.6	9.86	1433											
23-Aug-10	8:10 AM								0.139	-	0.139			ICP	
23-Aug-10	12:00 PM	13.0	9.22	1151											
23-Aug-10	6:00 PM	15.1	9.25	1208											
24-Aug-10	12:00 AM	13.6	9.80	1150											
24-Aug-10	6:00 AM	13.6	9.80	1163											
24-Aug-10	7:50 AM								0.184	-	0.184			ICP	
24-Aug-10	12:00 PM	13.1	9.40	1468											
24-Aug-10	6:00 PM	14.0	9.22	1475											
25-Aug-10	12:00 AM	13.6	9.80	1480											
25-Aug-10	6:00 AM	13.2	9.80	1488											
25-Aug-10	8:50 AM														
25-Aug-10	12:00 PM	14.5	8.91	1499					0.134	-	0.134			ICP	
25-Aug-10	6:00 PM	13.8	8.95	1475											
26-Aug-10	12:00 AM	11.6	9.70	1392											
26-Aug-10	6:00 AM	11.3	9.80	1380											
26-Aug-10	9:00 AM								0.360	-	0.360			AA	

Table C-13:
2010 FMC Lab Analysis - Zinc
(Total and Dissolved) in the Mill Effluent

Date	Time	Temp. (°C)	pH	EC (µS/cm)	Mill Effluent				Combined Mill Effluent				Method of Analysis	Comments	
					Zn-T	Zn-T Avg	Zn-D	Zn-D Avg	Zn-T	Zn-T Avg	Zn-D	Zn-D Avg			
26-Aug-10	12:00 PM	13.3	8.97	1481											
26-Aug-10	6:00 PM	13.8	8.81	1463											
27-Aug-10	12:00 AM	13.4	9.40	1420											
27-Aug-10	6:00 AM	10.5	9.40	1410											
27-Aug-10	8:00 AM								0.227	-	0.227		AA		
27-Aug-10	12:00 PM	13.4	9.06	1463	0.798								AA		
27-Aug-10	6:00 PM														
28-Aug-10	12:00 AM														lower flow through treatment system; no water from sampling port; could not collect sample
28-Aug-10	6:00 AM														
28-Aug-10															
28-Aug-10															
28-Aug-10															