

APPENDIX I
Battlefield Golf Course
Groundwater Quality Data

TABLE 2A: SUMMARY OF ONSITE GROUNDWATER METALS ANALYSES
 Battlefield Golf Club at Centerville
 1001 Centerville Turnpike
 Chesapeake, VA 23322

Sample ID #	Sample Date	Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
MW-#	mo/d/yr	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW-1	5/20/2008	86,700	MDL	64.6	284	3.8	113	MDL	187	76	9.6	167,000	67.9	31,000	1,330	0.23	MDL	166	MDL	MDL	MDL	232	510
MW-1	7/14/2008	28,800	MDL	22.7	110	0.9	37.7	MDL	58.4	33.9	5.7	48,100	26.3	19,100	416	MDL	MDL	80.2	MDL	MDL	MDL	72.4	235
MW-2	5/20/2008	99,200	MDL	79.6	444	3.4	75.2	MDL	23.1	90.3	4.4	175,000	78.7	41,500	1,300	0.24	MDL	204	MDL	MDL	MDL	287	491
MW-2	7/14/2008	16,100	MDL	2.1	94.1	MDL	40.1	MDL	34.2	22	4.4	32,600	15.3	22,200	284	MDL	MDL	52	MDL	MDL	MDL	45.8	91.1
MW-3	5/20/2008	130,000	MDL	103	463	5.2	75.5	MDL	30.2	148	44.8	229,000	106	47,700	1,540	0.31	MDL	289	MDL	MDL	MDL	384	805
MW-3	7/14/2008	69,500	MDL	71.3	285	3.1	56.4	MDL	158	96.3	32.5	129,000	66.8	33,700	907	0.12	MDL	187	MDL	MDL	MDL	202	524
MW-3D	7/14/2008	37,600	MDL	39.9	148	1	49.6	MDL	89	52.1	12.1	75,900	36.3	26,300	572	MDL	MDL	111	MDL	MDL	MDL	114	307
MW-3	8/25/2008	12,000	BDL	BDL	82	BDL	BDL	BDL	29	28	BDL	26,000	7	21,000	290	BDL	BDL	35	BDL	BDL	BDL	39	130
MW-3	8/25/2008	25,900	MDL	17.4	97.6	0.5	44.2	MDL	126.1	35.6	13	43,800	19.4	28,900	419	MDL	MDL	61	MDL	MDL	MDL	61.2	210
	Mean	55,989	-	52.5	220.9	2.5	61.5	-	46.7	64.7	19.4	101,822	47.1	30,156	784	-	9.6	132.8	-	-	160.8	367.0	-
	Primary MCL	-	6.0	10.0	2000	4.0	-	5.0	100.0	-	-	-	15	-	-	2.0	-	-	50.0	-	2.0	-	-
	Secondary MCL	200	-	-	-	-	-	-	-	-	1000	300	-	-	50	-	-	-	-	100	-	-	5000
	WHO Guideline	-	-	-	-	-	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Average per Well																						
MW-1	--	56,750	43.7	50.4	197	2.4	75.4	122.7	55.0	7.7	102,550	47.1	25,050	873	123.1	152.2	372.5	-	-	-	-	-	-
MW-2	--	57,650	50.4	269	3.4	57.7	132.6	56.2	18.7	103,800	47.0	31,850	792	128.0	171.4	291.1	-	-	-	-	-	-	-
MW-3	--	55,020	57.9	211	2.4	56.4	124.9	72.0	25.6	100,740	47.1	31,520	746	138.6	160.0	395.2	-	-	-	-	-	-	-

Note: MW-1, MW-2 and MW-3 at ~280X above primary MCL for Al.
 MW-2 and MW-3 at 5X above primary MCL for As. MW-1 at 4X above primary MCL.
 MW-1, MW-2, MW-3 just above primary MCL for Cr (~2X)
 MW-1, MW-2, MW-3 at approximately 300X higher than Secondary MCL for Fe

TABLE 2B: SUMMARY OF OFFSITE GROUNDWATER METALS ANALYSES
 Battlefield Golf Club at Centerville
 1001 Centerville Turnpike
 Chesapeake, VA 23322

Sample ID #	Sample Date	Al	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
MW-#	mo/d/yr	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
FS-6	7/23/2008	585	MDL	MDL	68.5	MDL	33.7	MDL	MDL	9.5	106	2950	22	3660	112	MDL	MDL	9.1	MDL	MDL	MDL	MDL	55.2
MW-4	7/23/2008	5,670	MDL	MDL	33.7	8.1	17.5	MDL	MDL	132	MDL	53,600	MDL	59,400	1,190	MDL	MDL	294	MDL	MDL	MDL	MDL	485
MW-5D	7/23/2008	16,100	MDL	6.0	80.7	MDL	65.9	MDL	39.5	10.6	8.4	43,400	19.9	7,760	443	MDL	MDL	25.2	MDL	MDL	MDL	MDL	138
	Mean	7,455	MDL	6.0	61.0	8.1	39.0	MDL	39.5	50.7	57.2	33,317	21.0	23,573	582	MDL	MDL	109.4	MDL	MDL	MDL	MDL	226.1
	Primary MCL	-	6.0	10.0	2000	4.0	-	5.0	100.0	-	-	300.0	15	-	50.0	-	-	-	50.0	-	2.0	-	-
	Secondary MCL	200	-	-	-	-	500	-	-	-	1000	-	-	-	-	-	-	-	-	100	-	-	5000
	WHO Guideline	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: FS-6, MW-4 and MW-5D at ~3X, ~28X, ~80X above primary MCL for Al.
 MW-4 at 2X above primary MCL for Ba
 FS-6, MW-4 and MW-5D at ~10X, ~178X, ~145X above primary MCL for Fe.
 FS-6, MW-4 and MW-5D slightly above primary MCL for Pb.

TABLE 3A: SUMMARY OF ONSITE WATER CLASSICAL CHEMICAL PARAMETERS
 Battlefield Golf Course at Centerville
 1001 Centerville Turnpike
 Chesapeake, VA 23322

Sample ID #	Sample Date	Ca	Cl	F	N	P	K	Na	SO4	Alk	TDS	TSS
MW-#	mo/d/yr	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(ug/L)	(ug/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-1	5/20/2008	47,800	49	0.15	0.14	1.6	9,140	15,100	76	26	290	4,800
MW-1	7/14/2008	23,700	20	0.16	0.079	0.75	3,980	11,900	79	31	230	660
MW-2	5/20/2008	69,500	50	0.28	1.1	2.1	12,600	28,500	120	28	370	2,100
MW-2	7/14/2008	58,800	38	0.26	0.19	0.99	4,350	27,300	96	89	390	180
MW-3	5/20/2008	57,700	18	0.32	0.15	2.8	14,200	22,900	140	49	360	2,100
MW-3	7/14/2008	56,900	44	0.4	MDL	MDL	10,500	23,700	130	61	380	2,600
MW-3D	7/14/2008	59,000	44	0.4	MDL	0.93	7,380	23,400	130	66	390	1,200
MW-3	8/25/2008	66,900	46	0.45	0.14	0.4	4,270	25,800	130	76	420	1,400
MW-3	8/25/2008	54,000	45	0.31	BDL	0.5	4,500	24,000	130	87	420	560
	Mean	54,922	39	0.30	0.30	1.26	7,880	22,400	115	57	351	1,753
	Primary MCL	-	250	2.0	-	-	-	-	250	-	500	-
	Secondary MCL	-	-	-	-	-	-	-	-	-	-	-
	WHO Guideline	-	-	-	-	-	-	-	-	-	-	-
	Average per Well											
MW-1	--	35,750	35	0.16	0.11	1.18	6,560	13,500	78	29	260	2,730
MW-2	--	64,150	43	0.27	0.65	1.55	8,475	27,900	108	59	380	1,140
MW-3	--	58,900	39	0.38	--	--	8,170	23,760	132	68	394	1,572

Note: All samples in Table 3A below primary and secondary MCLs