

PHASE II SITES

STATISTICAL SUMMARY FOR FIELD PARAMETERS, MAJOR AND MINOR ELEMENTS, NUTRIENTS, BACTERIA, SEDIMENT, AND RADIONUCLIDE
DATA COLLECTED FROM JUN 1997 TO NOV 2010

WATER-QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE				(MEDIAN)				5%
		MAXIMUM	MINIMUM	MEAN	95%	75%	50%	25%	
72020 Elevation above NGVD ft	114	1360	1340	1360	1360	1360	1360	1350	1350
72019 WaterLevel, BelowLSD ft	174	40.4	11.9	23.4	31.7	26.8	22.7	20.7	14.6
00010 Temperature, water deg C	175	30	11.8	16.7	25.8	16.4	16.1	15.7	14.7
00020 Temperature, air deg C	169	38	-1	20.2	34.3	28	20.5	12.5	4.5
00025 Air pressure mm/Hg	170	736	716	726	733	729	725	723	717
00300 Dissolved oxygen mg/l	169	10.8	0.01	2.38	7.21	5.76	0.23	0.1	0.02
00400 pH std units	175	7.66	6.07	6.97	7.5	7.23	7.06	6.64	6.34
00403 pH, wu,lab std units	107	7.6	5.92	7.05	7.47	7.29	7.16	6.73	6.54
00095 Specific cond at 25C uS/cm @25C	175	1530	396	767	1220	833	776	625	472
90095 SpecCond,wu25degCLab uS/cm @25C	109	1050	417	703	889	806	732	610	474
63001 Redox potential, raw mV	134	470	-380	141	393	219	134	47.8	-70.1
63002 Redox potential, SHE mV	135	680	120	358	602	450	350	260	140
63675 Turbidity, Nephelom NTU	109	79	0.08	2.17	3.92	1.44	0.54	0.308	0.1
63676 Turbidity, NephRatio NTRU	174	26.5	--	1.589*	*6.517	*1.415	*0.765	*0.328	*0.080
99872 Turbidity,Hach2100,l NTU	23	--	--	--	--	--	--	--	--
00901 Carbonate hardness, wu mg/l CaCO3	161	605	132	268	479	272	244	227	171
00900 Hardness, water mg/l CaCO3	161	605	132	268	480	272	245	228	172
00915 Calcium, wf mg/l	161	180	42.2	83.4	146	87.5	74.7	70.4	55.2
00925 Magnesium, wf mg/l	161	38	6.34	14.5	29.1	15	14	11.4	8.64
00935 Potassium, wf mg/l	161	8.88	2.18	3.65	6.64	3.8	3.4	2.83	2.44
00930 Sodium, wf mg/l	161	125	13.6	64.9	109	83.6	66.7	43.9	23.1
39087 Alkalinity, wf,inflect pt,lab mg/l CaCO3	160	302	106	219	288	274	235	161	125
29806 HCO3, wf, inflection pt, lab mg/l	161	368	129	267	351	334	287	196	152
29809 CO3, wf, inflection pt, lab mg/l	161	1	0	0.043	0	0	0	0	0
00940 Chloride, wf mg/l	161	156	4.53	48.5	96.3	63.4	56	22.5	7.87
00950 Fluoride, wf mg/l	114	1.63	0.13	0.474	1.08	0.48	0.43	0.34	0.188
00955 Silica, wf mg/l	112	29.8	9.11	21.1	26.2	24.4	22.7	19.1	9.89
00945 Sulfate, wf mg/l	160	462	19.3	94.7	333	93	56.1	50	34.1
00500 ROE at 105C, wu mg/l	52	1080	336	496	879	505	474	407	341
70300 Residue, ROE@180C,wf mg/l	161	1070	235	476	883	493	459	395	293
70301 Residue, wf, sum mg/l	160	1070	230	471	888	489	457	393	271
00530 Residue,total nonflt mg/l	161	--	--	*****	--	--	--	--	--
00608 Ammonia, wf mg/l as N	161	0.29	--	0.064*	*0.190	*0.080	*0.040	*0.020	*0.008
00618 Nitrate, wf mg/l as N	114	15	--	3.313*	*12.775	*9.118	*0.160	*0.011	*0.001
00631 NO3+NO2, wf mg/l as N	161	15.3	--	3.058*	*12.689	*5.075	*0.190	*0.060	*0.007
00613 Nitrite, wf mg/l as N	114	0.08	--	0.007*	*0.045	*0.006	*0.002	*0.001	*0.000
00671 Orthophosphate, wf mg/l as P	114	0.12	--	0.034*	*0.075	*0.050	*0.030	*0.016	*0.009
00666 Phosphorus, wf mg/l	161	0.23	--	0.064*	*0.132	*0.080	*0.060	*0.038	*0.020

00681	Organic carbon, wf mg/l	15	1.55	0.42	0.898	1.55	1.09	0.82	0.69	0.42
00680	Organic carbon, wu mg/l	52	3.56	0.34	0.836	2.29	0.99	0.565	0.412	0.35
90915	Clostridium perfring cfu/100ml	23	--	--	--	--	--	--	--	--
90903	Coliphage,E coli,C13 pfu/100ml	23	--	--	--	--	--	--	--	--
90904	Coliphage,E coli,FAM pfu/100ml	23	--	--	--	--	--	--	--	--
90909	Enterococci, mEI,w cfu/100ml	23	--	--	--	--	--	--	--	--
90902	E. coli, modif m-TEC cfu/100ml	55	--	--	--	--	--	--	--	--
31625	Fecal coliform, M-FC MF, 0.7u cfu/100ml	187	--	--	*****	--	--	--	--	--
31504	Total coliform, LES Endo,imm cfu/100ml	132	196	--	2.525*	*8.000	*0.313	*0.037	*0.005	*0.000
01106	Aluminum, wf ug/l	52	--	--	--	--	--	--	--	--
01095	Antimony, wf ug/l	54	2.25	--	0.268*	*1.321	*0.321	*0.115	*0.038	*0.009
01000	Arsenic, wf ug/l	114	29.4	--	3.716*	*11.270	*3.438	*2.515	*1.132	*0.480
01005	Barium, wf ug/l	52	183	37	85.1	149	115	72.7	54.6	44.2
01010	Beryllium, wf ug/l	52	--	--	--	--	--	--	--	--
01020	Boron, wf ug/l	52	75.6	20	43.9	73.4	50.9	42.2	35.1	20.7
71870	Bromide, wf mg/l	114	0.42	--	0.082*	*0.205	*0.090	*0.070	*0.050	*0.022
01025	Cadmium, wf ug/l	52	0.696	--	0.075*	*0.392	*0.072	*0.028	*0.012	*0.004
01030	Chromium, wf ug/l	52	--	--	--	--	--	--	--	--
01040	Copper, wf ug/l	52	--	--	--	--	--	--	--	--
00723	Cyanide, wf mg/l	52	--	--	--	--	--	--	--	--
01046	Iron, wf ug/l	161	23100	--	672.925*	*4166.984	*35.827	*7.176	*0.420	*0.016
01049	Lead, wf ug/l	52	0.213	--	0.060*	*0.150	*0.079	*0.046	*0.027	*0.014
01056	Manganese, wf ug/l	161	1220	--	176.904*	*638.800	*233.000	*175.000	*8.286	*3.199
71890	Mercury, wf ug/l	52	--	--	--	--	--	--	--	--
01065	Nickel, wf ug/l	52	83.8	--	3.096*	*11.685	*1.652	*0.600	*0.193	*0.031
01145	Selenium, wf ug/l	54	39.9	--	4.323*	*18.125	*7.645	*1.080	*0.423	*0.074
01075	Silver, wf ug/l	52	28.2	--	2.851*	*14.720	*2.814	*0.971	*0.334	*0.072
01080	Strontium, wf ug/l	52	1800	311	716	1120	872	693	515	359
01057	Thallium, wf ug/l	54	0.247	--	0.088*	*0.187	*0.116	*0.076	*0.053	*0.025
01085	Vanadium, wf ug/l	52	30.2	--	2.996*	*6.963	*3.592	*2.006	*1.104	*0.513
01090	Zinc, wf ug/l	52	18	--	3.481*	*16.350	*4.188	*1.933	*0.888	*0.289
75987	Alpha 2scu, wf,Th230 pCi/L	7	4.81	2.42	3.47	4.81	4.1	3.47	2.77	2.42
04126	Alpha activity, wf, Th-230 pCi/L	21	10.4	--	3.717*	*10.238	*5.130	*2.383	*1.480	*0.787
75989	Beta 2scu, wf,Cs137 pCi/L	7	4.85	1.51	3.4	4.85	4.3	4.08	2.31	1.51
99337	Gross alpha 2X CL,wf pCi/L	23	--	--	--	--	--	--	--	--
99323	Gross beta MDC,wf pCi/L	23	--	--	--	--	--	--	--	--
03515	Gross beta, wf,Cs-137 pCi/L	21	12.7	2.28	5.34	12.4	7.01	4.53	3.06	2.31

* - VALUE IS ESTIMATED BY USING A LOG-PROBABILITY REGRESSION TO PREDICT THE VALUES OF DATA BELOW THE DETECTION LIMIT

STATISTICAL SUMMARY OF ARSENIC SPECIATION DATA COLLECTED FROM JUN 1997 TO NOV 2010

WATER-QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE				(MEDIAN)				5%
		MAXIMUM	MINIMUM	MEAN	95%	75%	50%	25%	
62453 Arsenate, wf ug/L as As	28	2.78	--	0.910*	*2.766	*1.013	*0.493	*0.256	*0.094
62452 Arsenite, wf ug/L as As	29	13.1	--	1.946*	*11.141	*1.723	*0.728	*0.240	*0.075
62455 Dimethylarsinate, wf ug/L as As	29	--	--	--	--	--	--	--	--
62454 Monomethylarsonate, wf ug/L as As	29	--	--	--	--	--	--	--	--

* - VALUE IS ESTIMATED BY USING A LOG-PROBABILITY REGRESSION TO PREDICT THE VALUES OF DATA BELOW THE DETECTION LIMIT

STATISTICAL SUMMARY OF TRIAZINE HERBICIDE SCREEN DATA COLLECTED FROM JUN 1997 TO NOV 2010

WATER-QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS				PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE				(MEDIAN)				5%
		MAXIMUM	MINIMUM	MEAN	95%	75%	50%	25%	
00095 Specific cond at 25C uS/cm @25C	161	1530	396	760	1210	805	776	624	475
34756 Triazines, ELISA, wf ugAtrazn/L	157	0.57	--	0.074*	*0.237	*0.090	*0.044	*0.022	*0.008
34757 Triazines, ELISA, wu ugAtrazn/L	157	0.57	--	0.074*	*0.237	*0.090	*0.044	*0.022	*0.008

* - VALUE IS ESTIMATED BY USING A LOG-PROBABILITY REGRESSION TO PREDICT THE VALUES OF DATA BELOW THE DETECTION LIMIT

STATISTICAL SUMMARY OF COMMONLY USED PESTICIDES AND THEIR DEGRADATES DATA COLLECTED FROM JUN 1997 TO SEPT 2010

WATER-QUALITY CONSTITUENT	DESCRIPTIVE STATISTICS					PERCENT OF SAMPLES IN WHICH VALUES WERE LESS THAN OR EQUAL TO THOSE SHOWN				
	SAMPLE SIZE	MAXIMUM	MINIMUM	MEAN		95%	75%	50%	(MEDIAN)	25%
	SAMPLES ANALYZED BY THE ORGANIC GEOCHEMISTRY RESEARCH LABORATORY									
TRIAZINE HERBICIDES ANALYZED BY GC/MS										
04040 CIAT, wf	40	0.22	--	0.055*		*0.207	*0.070	*0.037	*0.020	*0.009
04038 CEAT, wf	38	--	--	--		--	--	--	--	--
62676 OIAT, w, gf<.7u	1	0.08	--	--		--	--	--	--	--
50355 OIET, wf	1	--	--	--		--	--	--	--	--
62678 OEAT, w, gf<.7u	1	--	--	--		--	--	--	--	--
49260 Acetochlor, wf	40	--	--	--		--	--	--	--	--
46342 Alachlor, wf	40	--	--	--		--	--	--	--	--
38401 Ametryn, wf	37	--	--	--		--	--	--	--	--
82184 Ametryn, wu	1	--	--	--		--	--	--	--	--
39632 Atrazine, wf	40	0.39	--	0.119*		*0.350	*0.225	*0.065	*0.023	*0.009
04039 CAAT, wf	1	0.05	--	--		--	--	--	--	--
61745 Cyanazine acid, wf	1	--	--	--		--	--	--	--	--
61709 Cyanazine amide, wf	38	--	--	--		--	--	--	--	--
04041 Cyanazine, wf	40	--	--	--		--	--	--	--	--
81757 Cyanazine, wu	1	--	--	--		--	--	--	--	--
61750 Deethyl cyanazine acid	1	--	--	--		--	--	--	--	--
61751 Deethyl cyanazine amide, wf	1	--	--	--		--	--	--	--	--
61749 Deethyl cyanazine,wf	1	--	--	--		--	--	--	--	--
61755 DMFM, wf	1	--	--	--		--	--	--	--	--
61588 Dimethenamid, wf	9	--	--	--		--	--	--	--	--
50374 Diuron, wf	1	--	--	--		--	--	--	--	--
62481 Flufenacet, wf	9	--	--	--		--	--	--	--	--
38811 Fluometuron, w, gf<.7u	2	--	--	--		--	--	--	--	--
38478 Linuron, w, gf<.7u	2	--	--	--		--	--	--	--	--
39415 Metolachlor, wf	40	7.01	--	1.178*		*5.796	*1.558	*0.615	*0.050	*0.016
82612 Metolachlor, wu	1	--	--	--		--	--	--	--	--
82630 Metribuzin, wf	1	--	--	--		--	--	--	--	--
82611 Metribuzin, wu	1	--	--	--		--	--	--	--	--
82683 Pendimethalin, gf.7u	1	--	--	--		--	--	--	--	--
04037 Prometon, wf	40	--	--	--		--	--	--	--	--
04036 Prometryn, wf	37	--	--	--		--	--	--	--	--
04024 Propachlor, wf	40	--	--	--		--	--	--	--	--
38535 Propazine, wf	38	0.07	--	0.037*		*0.060	*0.044	*0.035	*0.028	*0.020
04035 Simazine, wf	40	--	--	--		--	--	--	--	--
38888 Terbutryl, wf	37	--	--	--		--	--	--	--	--
ACETANILIDE ACIDS										
61029 Acetochlor ESA, w, gf<.7u ug/l	3	--	--	--		--	--	--	--	--

61030	Acetochlor OA, w,gf<.7u ug/l
50009	Alachlor ESA, w,gf<.7u ug/l
61031	Alachlor OA, w,gf<.7u ug/l
61951	Dimethenamid ESA, wf ug/l
62482	Dimethenamid OA, wf ug/l
61952	Flufenacet ESA, wf ug/l
62483	Flufenacet OA, wf ug/l
61043	Metolachlor ESA, w,gf<.7u ug/l
61044	Metolachlor OA, w,gf<.7u ug/l
62766	Propachlor ESA, w,gf<.7u ug/l

GLYPHOSATE AND METABOLITES

SAMPLES ANALYZED BY THE NATIONAL WATER QUALITY LABORATORY

61598	Methidathion, wf ug/l	21	--	--	--	--	--	--	--	--	--
38501	Mthiocrb, w, gf<.7u ug/l	21	--	--	--	--	--	--	--	--	--
49296	Methomyl, w, gf<.7u ug/l	21	--	--	--	--	--	--	--	--	--
61664	Methyl paraoxon, wf ug/l	21	--	--	--	--	--	--	--	--	--
82667	Methyl parathion, gf ug/l	46	--	--	--	--	--	--	--	--	--
39415	Metolachlor, wf ug/l	46	5.84	--	0.422*	*2.926	*0.148	*0.008	*0.001	*0.000	
82630	Metribuzin, wf ug/l	46	--	--	--	--	--	--	--	--	--
82671	Molinate, w, gf<.7u ug/l	25	--	--	--	--	--	--	--	--	--
61599	Myclobutanil, wf ug/l	21	--	--	--	--	--	--	--	--	--
82684	Napropamide, w, gf<.7u ug/l	25	--	--	--	--	--	--	--	--	--
49294	Neburon, w, gf<.7u ug/l	21	--	--	--	--	--	--	--	--	--
49293	Norflurazon, w, gf<.7u ug/l	21	--	--	--	--	--	--	--	--	--
49292	Oryzalin, w, gf<.7u ug/l	21	--	--	--	--	--	--	--	--	--
38866	Oxamyl, w, gf<.7u ug/l	21	--	--	--	--	--	--	--	--	--
34653	p,p'-DDE, wf ug/l	25	--	--	--	--	--	--	--	--	--
39542	Parathion, wf ug/l	25	--	--	--	--	--	--	--	--	--
82669	Pebulate, w, gf<.7u ug/l	25	--	--	--	--	--	--	--	--	--
82683	Pendimethalin, gf.7u ug/l	46	--	--	--	--	--	--	--	--	--
61666	Phorate oxon, wf ug/l	21	--	--	--	--	--	--	--	--	--
82664	Phorate, w, gf<.7u ug/l	46	--	--	--	--	--	--	--	--	--
61668	Phosmet oxon, wf ug/l	21	--	--	--	--	--	--	--	--	--
61601	Phosmet, wf ug/l	21	--	--	--	--	--	--	--	--	--
49291	Picloram, w, gf<.7u ug/l	21	--	--	--	--	--	--	--	--	--
04037	Prometon, wf ug/l	46	--	--	--	--	--	--	--	--	--
04036	Prometryn, wf ug/l	22	--	--	--	--	--	--	--	--	--
82676	Propyzamide, w, gf<.7u ug/l	46	--	--	--	--	--	--	--	--	--
04024	Propachlor, wf ug/l	25	--	--	--	--	--	--	--	--	--
82679	Propanil, w, gf<.7u ug/l	25	--	--	--	--	--	--	--	--	--
82685	Propargite, w, gf<.7u ug/l	25	--	--	--	--	--	--	--	--	--
49236	Propham, w, gf<.7u ug/l	21	--	--	--	--	--	--	--	--	--
38538	Propoxur, w, gf<.7u ug/l	21	--	--	--	--	--	--	--	--	--
39762	Silvex, wf ug/l	7	--	--	--	--	--	--	--	--	--
04035	Simazine, wf ug/l	46	--	--	--	--	--	--	--	--	--
82670	Tebuthiuron, w, gf<.7u ug/l	46	--	--	--	--	--	--	--	--	--
82665	Terbacil, w, gf<.7u ug/l	25	--	--	--	--	--	--	--	--	--
61674	Terbufos oxon sulfone, wf ug/l	21	--	--	--	--	--	--	--	--	--
82675	Terbufos, w, gf<.7u ug/l	46	--	--	--	--	--	--	--	--	--
04022	Terbutylazine, wf ug/l	21	--	--	--	--	--	--	--	--	--
82681	Thiobencarb, w, gf<.7u ug/l	25	--	--	--	--	--	--	--	--	--
82678	Triallate, w, gf<.7u ug/l	25	--	--	--	--	--	--	--	--	--
61610	Tribuphos, wf ug/l	21	--	--	--	--	--	--	--	--	--
49235	Triclopyr, w, gf<.7u ug/l	21	--	--	--	--	--	--	--	--	--
82661	Trifluralin, w, gf<.7u ug/l	46	--	--	--	--	--	--	--	--	--
39702	Hexachlorobutadiene, wu ug/l	22	--	--	--	--	--	--	--	--	--
38775	Dichlorvos, wf ug/l	21	--	--	--	--	--	--	--	--	--

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STATISTICAL SUMMARY OF VOLATILE ORGANIC COMPOUNDS DATA COLLECTED FROM JUN 1997 TO SEPT 2010

34668	CFC-12, wu ug/l	22	--	--	--	--	--	--	--	--	--
34423	Dichloromethane, wu ug/l	22	--	--	--	--	--	--	--	--	--
34371	Ethylbenzene, wu ug/l	22	--	--	--	--	--	--	--	--	--
39702	Hexachlorobutadiene, wu ug/l	36	--	--	--	--	--	--	--	--	--
34396	Hexachloroethane, wu ug/l	14	--	--	--	--	--	--	--	--	--
77223	Isopropylbenzene, wu ug/l	22	--	--	--	--	--	--	--	--	--
34696	Naphthalene, wu ug/l	36	--	--	--	--	--	--	--	--	--
77342	n-Butylbenzene, wu ug/l	22	--	--	--	--	--	--	--	--	--
77224	n-Propylbenzene, wu ug/l	22	--	--	--	--	--	--	--	--	--
77350	sec-Butylbenzene, wu ug/l	22	--	--	--	--	--	--	--	--	--
77128	Styrene, wu ug/l	22	--	--	--	--	--	--	--	--	--
78032	MTBE, wu ug/l	22	--	--	--	--	--	--	--	--	--
77353	t-Butylbenzene, wu ug/l	22	--	--	--	--	--	--	--	--	--
34475	Tetrachloroethene, wu ug/l	22	--	--	--	--	--	--	--	--	--
32102	Tetrachloromethane, wu ug/l	22	--	--	--	--	--	--	--	--	--
34010	Toluene, wu ug/l	22	--	--	--	--	--	--	--	--	--
34546	trans-1,2-Dichloroethene, wu ug/l	22	--	--	--	--	--	--	--	--	--
34699	trans-1,3-Dichloropropene, wu ug/l	22	--	--	--	--	--	--	--	--	--
32104	Tribromomethane, wu ug/l	22	--	--	--	--	--	--	--	--	--
39180	Trichloroethene, wu ug/l	22	--	--	--	--	--	--	--	--	--
34488	CFC-11, wu ug/l	22	--	--	--	--	--	--	--	--	--
32106	Trichloromethane, wu ug/l	22	--	--	--	--	--	--	--	--	--
39175	Vinyl chloride, wu ug/l	22	--	--	--	--	--	--	--	--	--

* - VALUE IS ESTIMATED BY USING A LOG-PROBABILITY REGRESSION TO PREDICT THE VALUES OF DATA BELOW THE DETECTION LIMIT