

Supplementary Materials

Supplementary Tables:

Table S1. Physicochemical Parameters of the Analyzed Samples from the Plio-Quaternary and Turonian Aquifer of all the 105 groundwater samples of four campaigns 2009. 2017. 2018 and 2019.

Sample	pH	EC	TDS	T	Ca ²⁺	Mg ²⁺	Na ⁺	K ⁻	HCO ₃ ⁻	Cl ⁻	SO ₄ ²⁻	NO ₃ ⁻	IB
		μS/cm	mg/L	°C	mg/L								%
Campaign 2009													
E1	7.37	2440	1220	20	40.00	38.64	266.80	5.46	146.40	475.70	128.64	31.00	-5.78
E2	7.31	3520	1760	21	38.00	45.96	438.15	10.53	109.80	766.80	124.80	89.28	-4.69
E3	7.41	2040	1020	20	40.00	30.24	221.95	13.65	207.40	347.90	104.64	45.26	-5.34
E4	7.4	2249	1124.5	19	42.00	39.84	207.69	10.53	176.90	390.50	102.72	0.62	-4.51
E5	7.41	1763	881.5	19	44.00	35.04	138.69	4.68	219.60	241.40	121.44	10.54	-7.71
E6	7.5	1720	860	23	46.00	41.04	127.42	5.46	195.20	255.60	119.52	13.64	-7.20
E7	7.3	1671	835.5	21	38.00	31.44	135.70	4.68	176.90	217.97	111.84	6.82	-4.46
E8	7.39	1947	973.5	23	34.00	35.04	184.23	4.29	183	319.50	111.84	8.06	-6.50
E9	7.15	2180	1090	20	42.00	38.64	212.98	4.29	189.10	355.00	129.60	27.28	-5.18
E10	7.17	1969	984.5	27	38.00	35.04	149.96	5.07	195.20	270.51	104.64	8.06	-6.94
E11	7.24	2550	1275	22	40.00	42.36	236.44	3.90	146.40	442.33	96.00	50.84	-5.45
E12	7.44	2130	1065	19	34.00	30.24	254.38	5.85	195.20	344.35	44.64	199	-5.09
E13	7.69	2340	1170	25	38.00	30.24	286.35	15.21	231.80	420.32	133.92	0	-3.40
Min	7.15	1671	835.5	19	34	30.24	127.42	3.9	109.8	217.97	44.64	0	-7.71
Max	7.69	3520	1760	27	46	45.96	438.15	15.21	231.8	766.8	133.92	199	-3.40
Moy	7.37	2193.77	1096.88	21.46	39.54	36.44	220.06	7.20	182.53	372.91	110.33	37.72	-5.56
SD	0.14	482.48	241.24	2.47	3.48	5.12	83.82	3.88	32.80	142.38	22.96	54.68	1.23
Campaign 2017													
E14	7.7	3066	1620	22.2	131.50	75.80	482.60	14.10	366.10	1093.40	48.20	11.80	-5.38
E15	7.3	4226	2205	22.9	368.70	161.40	292.00	12.20	244.10	1519.40	134.30	16.50	-5.53

Sample	pH	EC	TDS	T	Ca ²⁺	Mg ²⁺	Na ⁺	K ⁻	HCO ₃ ⁻	Cl ⁻	SO ₄ ²⁻	NO ₃ ⁻	IB
		μS/cm	mg/L	°C	mg/L								%
E16	7.8	762	396	22.9	83.40	33	95	4.40	262.40	170.40	16.20	31	5.59
E17	7.7	926	478	23.4	83.40	33	85	4.70	189.10	170.40	18.70	61.10	7.08
E18	7.6	2550	1276	25	211.60	114.70	198	17.80	384.40	795.20	60.50	11.80	-1.89
E19	7.6	2866	1488	23.1	208.40	105	243.60	11.40	219.70	1050.80	97.40	11.90	-8.47
E20	7.7	2835	1473	23.1	149.10	69	298.40	12.20	311.20	795.20	104.80	87.60	-8.20
E21	7.1	2429	1262	23	118.60	106.90	260.70	10.70	427.10	809.40	43.30	28.20	-8.45
E22	7.8	2333	1240	22	192.40	128.30	217	9.10	219.70	837.80	82.60	37.10	0.47
E23	7.5	2442	1246	23.9	139.50	80.70	240	8.50	286.80	653.20	131.80	35.20	-4.30
E24	7.5	724	409	18.9	60.90	31.10	115.00	15.50	341.70	198.80	26.10	6.80	-3.78
E25	7.6	7555	4273	18.9	344.70	205.10	1430.90	69	268.50	3138.20	257.20	75.10	-0.71
E26	7.3	2049	1066	23	113.80	61.20	291.40	10	482	525.40	58.00	81.30	-3.26
E27	7.5	1453	783	21.2	123.40	53.50	178.60	11.90	317.30	454.40	11.30	6	0.76
E28	7.9	1859	1022	20.2	117.00	51.50	245.40	74.50	567.40	511.20	58	16.40	-5.30
E29	7.5	3173	1655	22.9	91.40	82.60	402.50	13.70	475.90	794	104.80	63.30	-6.68
E30	7.4	2913	1563	21.4	176.40	77.80	438.90	19.80	402.70	738.40	114.60	126.50	4.42
E31	8	1772	954	20.9	72.10	61.20	185.40	10.20	268.50	497	55.60	54.00	-9.33
E32	7.6	1298	700	21.2	136.30	53.50	155.20	13.60	329.50	355	87.50	20.80	2.04
E33	7.4	1935	1034	21.7	110.60	86.50	178.60	6.50	396.60	472.20	90	37.10	-4.02
E34	8	1151	616	21.5	44.90	35	153.60	8.10	333.20	234	87.50	9.90	-7.81
E35	7.7	1558	819	22.4	96.20	79.70	140.30	5.90	378.30	411.80	119.50	23.80	-8.03
E36	7.4	1110	612	20.1	83.40	52.50	120.00	5.90	317.30	312.40	94.90	8.50	-7.58
E37	7.5	1836	969	22.4	91.40	67.10	179.10	9.20	347.80	460.40	146.60	9.50	-9.46
E38	7.8	1757	941	21.6	78.60	90.40	169.30	8.20	311.20	497.00	156.40	17.50	-8.95
E39	7.2	2023	1026	24.2	113.80	88.50	166.10	7.00	305.10	539.60	77.70	48.50	-5.25
E40	7.8	2293	1092	27.4	96.20	93.30	230.00	18.40	372.20	568.00	129.30	9.00	-4.19
E41	7.8	1771	878	25.4	104.20	96.20	164.90	17.40	244.10	553.80	107.20	10.30	-3.01
E42	7.6	2298	1171	24	174.70	74.80	213.70	8.10	341.70	681.60	163.80	27.40	-8.11

Sample	pH	EC	TDS	T	Ca ²⁺	Mg ²⁺	Na ⁺	K ⁻	HCO ₃ ⁻	Cl ⁻	SO ₄ ²⁻	NO ₃ ⁻	IB
		μS/cm	mg/L	°C	mg/L								%
E43	7.3	1896	941	25.4	112.20	85.50	158.60	7.70	378.30	482.80	94.90	14.90	-5.52
E44	7.2	1892	922	26.4	120.20	71	152.80	7.90	366.10	468.60	134.30	15.20	-8.72
Min	7.1	724	396	18.9	44.90	31.10	85.00	4.40	189.10	170.40	11.30	6	-9.46
Max	8	7555	4273	27.4	368.70	205.10	1430.90	74.50	567.40	3138.20	257.20	126.50	7.08
Moy	7.57	2217.77	1165.48	22.66	133.84	80.83	254.28	14.63	337.29	670.64	93.97	32.71	-4.25
Sd	0.23	1253.77	700.02	1.98	72.13	36.87	237.58	15.80	82.76	541.43	51.35	29.16	4.55
Campaign 2018													
E45	7.73	3608	1807	21.9	168.50	68.75	414.50	29.25	250.10	1004.50	11.00	4	0.17
E46	7.82	916	458	22.16	61.65	14.20	76.75	2.90	231.80	98.80	25.85	28.35	0.50
E47	7.6	1082	541	23.27	68.94	59.29	81.36	1.89	286.78	284	28.52	29.30	-7.29
E48	7.39	4933	2471	23.32	349.50	100	461	23.50	164.70	1357.50	171.00	13.50	1.70
E49	7.2	2794	1939	23.62	148.60	88	245.80	8.20	347.70	629.20	64.40	21.60	0.83
E50	7.82	2638	1321	22.25	152	83.40	226.60	3.60	262.30	540.20	182	41.40	0.83
E51	7.86	1960	981	25.19	91.40	65.70	140.60	12	164.70	388.60	125.30	0	0.37
E52	7.99	2716	1359	26.25	149.60	70.40	168.40	10.40	305	542.20	26.80	0	-0.01
E53	7.64	3034	1519	23.15	178.40	77.60	279.80	5.80	201.30	770.20	116.20	2.60	0.22
E54	7.92	2731	1368	20.47	180.40	76.60	219.60	4.20	225.70	662.20	113.20	66.80	-1.67
E55	8.09	6716	3359	21.29	364	114	829.00	30	189.10	1930.00	406.00	40	-1.73
E56	7.9	2428	1214	21.53	93.40	59	275.60	12.40	280.60	472.80	158.20	0	1.37
E57	7.77	1557	779	19.84	100.50	25.40	134.40	11.90	250.10	252.10	78.20	6.20	1.21
E58	8.4	9744	4875	17.58	304	238	1464	66	140.30	3158.00	323.00	129	-0.03
E59	8.05	1842	920	20.7	70.10	29.20	180.70	5.90	201.30	307.40	78.50	94.70	-4.20
E60	7.37	3408	1705	20.73	227.50	83.75	431.50	20.75	262.30	799.00	179.75	398.25	0.73
E61	7.22	2699	1352	23.23	158.00	69.80	253.40	5.00	237.90	577.40	151.80	60.80	0.92
E62	7.71	2163	1084	20.29	112.22	44.71	236.70	25.41	549.14	497	53.11	15.30	-9.30
E63	7.47	1602	800	21.17	122.40	27.10	120.60	9.30	305	318.30	3.47	0	-0.82
E64	7.43	3482	1741	23.05	90	70.25	429.75	9.75	396.50	765.00	129.25	67.25	-4.32

Sample	pH	EC	TDS	T	Ca ²⁺	Mg ²⁺	Na ⁺	K ⁻	HCO ₃ ⁻	Cl ⁻	SO ₄ ²⁻	NO ₃ ⁻	IB
		μS/cm	mg/L	°C	mg/L								%
E65	8.65	2965	1481	25.84	96.80	85.40	319.40	7.60	12.20	714.40	171.20	32.60	2.98
E66	7.25	2176	1087	21.7	119.50	76.50	128.00	4	335.50	376.00	132.70	34.70	-4.01
E67	7.77	1258	630	22.14	57.72	52.49	119.82	4.61	317.28	184.60	92.46	24.70	-0.80
E68	7.51	1773	887	22.09	89.78	79.70	128.70	1.28	353.89	383.40	119.51	16.50	-7.49
E69	7.29	2054	1028	26.54	123.45	72.90	173.08	2.54	384.40	482.80	112.13	11.70	-6.38
E70	7.34	1967	976	27.08	111.90	63.20	155.20	4.60	317.20	351.50	131.60	8.70	-0.96
E71	7.5	1957	981	22	90.10	60.60	168	4.10	268.40	349.50	151.70	8.70	-1.92
E72	7.48	2187	1095	22.71	95.40	69.80	179.80	5.70	280.60	424.10	157.80	2.50	-3.69
E73	8.24	1896	949	20.66	78.50	43.20	187.30	6.20	189.10	378.90	162.40	0	-4.22
E74	7.45	1900	944	21.33	94.59	70.96	180.00	2.74	359.99	440.20	136.72	6	-7.06
E75	7.34	3184	1597.00	24.06	90.42	66.38	210.08	5.57	312.57	430.75	153.47	34.56	-4.40
Min	7.2	916	458	17.58	57.72	14.20	76.75	1.28	12.20	98.80	3.47	0	-9.30
Max	8.65	9744	4875	2029	364	238	1464	66	549.14	3158	406	398.25	2.98
Moy	7.68	1395	1918.24	90.51	136.75	71.17	278.05	11.20	270.43	640.99	127.33	38.70	-1.89
Sd	0.36	1724.70	869.08	360.24	78.32	37.80	266.15	12.96	95.75	587.91	82.82	73.27	3.21
Campaign 2019													
E76	7.53	3800	1902	21.87	187.57	57.35	552.44	1.77	305	1420.00	30.29	4.50	-9.06
E77	7.63	947	474	22.2	64.13	56.52	84.28	1.92	375.80	226.60	36.18	30	-8.76
E78	7.66	880	440	21.74	84.97	18	217	17.19	427	312.40	62.65	27	-5.88
E79	7.78	2287	1147	24.83	112.22	42.77	427.39	10.58	658.80	653.20	112.65	0	-6.02
E80	7.25	4840	2421	22.63	110	56.24	245.74	6.85	302.60	561.40	147.94	4	-6.59
E81	7.09	2757	1378	23.05	171.50	145.80	245.39	16.10	497.80	823.00	89.12	20	-2.93
E82	7.75	1839	919	24.97	96.19	91.37	150	11	275.80	539.00	100.88	0	-6.60
E83	7.75	9641	4818	19.29	450	260	1100	22.02	207.40	3150.50	830.29	38	-8.85
E84	7.6	1322	660	19.5	123.45	6.80	226.65	15.66	500.20	383.40	56.76	8	-8.97
E85	7.81	2284	1114	21.04	233.07	10.69	469.99	7.16	488	653.20	89.12	400	-2.35
E86	7.85	1702	898	20.86	91.38	32.08	315.50	6	366	553.80	92.06	95	-8.65

Sample	pH	EC	TDS	T	Ca ²⁺	Mg ²⁺	Na ⁺	K ⁻	HCO ₃ ⁻	Cl ⁻	SO ₄ ²⁻	NO ₃ ⁻	IB
		μS/cm	mg/L	°C	mg/L								%
E87	7.95	12250	6125	17.26	849.70	83.59	1950	75.0	378.20	4799.60	447.94	135	-5.91
E88	7.1	2800	1370	22.5	165	75.50	270	6.50	230.50	605.50	160.50	62	2.24
E89	7.65	2985	1494	23.06	145.89	93.31	394.70	6	439.20	1036.60	74.41	2	-8.17
E90	7.82	2666	1332	20.04	193.99	69.98	297.05	3.82	353.80	880.40	65.59	65	-7.46
E91	7.62	2663	1332	22.43	182.76	78.73	194.82	63.88	314.80	637.80	145	40	-2.13
E92	7.88	2091	1047	19.65	145.89	36.52	292.95	26	600.50	550.80	109.71	14	-8.13
E93	7.46	1559	780	20.83	152.30	16.52	436.38	12.22	561.20	553.80	45	0	4.62
E94	7.43	3386	1696	22.59	109.02	60.26	500.60	4.79	446.60	908.20	112.65	70	-5.99
E95	9.11	2626	1314	24.14	100.00	76	335.60	5.13	150	908.80	162.65	28	-10.29
E96	7.3	1811	913	2048	129.86	76.38	171.48	3.25	412.40	482.20	142.06	30	-7.93
E97	7.55	1333	666	21.44	70.54	46.94	125	2.52	351.40	226.60	109.71	22	-6.89
E98	7.69	1678	840	20.64	110	85	195.60	3.60	451.40	515.40	124.41	16	-8.07
E99	7.17	1833	918	26.53	121.84	53.46	240	4.61	449	510.60	121.47	8	-7.44
E100	7.43	1750	876	21.02	99.40	65	186.92	5.24	300.20	388.60	162.65	8	-2.17
E101	7.22	2099	1050	23.36	139.48	62.21	139.73	4.37	327	439	115.59	12	-5.37
E102	7.34	1962	982	85.74	129.86	52.49	134.72	5.04	349	382.20	121.47	10	-6.68
E103	8.21	1751	876	18.11	118.64	47.63	119.02	5.76	214.80	382.20	130.29	0	-5.75
E104	7.54	1729	865	20.67	101.00	89.57	195.67	5.14	380	460.60	180.29	5	-4.54
E105	7.53	1991	797	22.54	109.02	71.52	192.96	6.83	336.80	482.20	174.41	2	-6.78
Min	7.09	880	440	17.26	64.13	6.804	84.28	1.77	150	226.60	30.29	0	-10.29
Max	9.11	12250	11146	2305	849.70	260	1950	75	658.8	4799.60	830.29	400	4.62
Mean	7.62	2775.40	1715.87	231.83	163.29	67.27	346.92	12.20	381.71	814.25	145.12	38.53	-5.92
Sd	0.38	2394.10	2146.45	635.64	147.32	46.35	359.90	16.71	116.40	921.05	148.96	75.18	3.32

Table S2. The IWQI values of all 105 samples in the study area.

Sample	pH	EC	Cl ⁻	NO ₃ ⁻	HCO ₃ ⁻	PI	%NA	SAR	MH	PS	KI	IWQI
Campaign 2009												
E1	7.37	2440	13.42	0.50	2.40	78.39	69.41	7.21	61.43	14.76	2.24	110.59
E2	7.31	3520	21.63	1.44	1.80	82.47	77.30	11.31	66.60	22.93	3.36	149.90
E3	7.41	2040	9.81	0.73	3.40	81.33	69.05	6.45	55.48	10.90	2.15	100.07
E4	7.4	2249	11.02	0.01	2.90	74.52	63.39	5.51	61.00	12.08	1.68	96.46
E5	7.41	1763	6.81	0.17	3.60	71.37	54.78	3.79	56.77	8.07	1.19	78.56
E6	7.5	1720	7.21	0.22	3.20	65.37	50.05	3.29	59.53	8.45	0.98	77.81
E7	7.3	1671	6.15	0.11	2.90	73.23	57.33	3.94	57.70	7.31	1.32	75.42
E8	7.39	1947	9.01	0.13	3.00	77.39	63.95	5.30	62.95	10.18	1.75	91.77
E9	7.15	2180	10.01	0.44	3.10	75.83	63.99	5.70	60.27	11.36	1.76	91.97
E10	7.17	1969	7.63	0.13	3.20	73.54	58.19	4.22	60.32	8.72	1.36	79.51
E11	7.24	2550	12.48	0.82	2.40	75.06	65.45	6.21	63.58	13.48	1.88	103.29
E12	7.44	2130	9.71	3.21	3.20	84.29	72.83	7.65	59.45	10.18	2.64	113.32
E13	7.69	2340	11.86	0.00	3.80	85.54	74.55	8.41	56.75	13.25	2.84	117.74
Min	7.15	1671.00	6.15	0.00	1.80	65.37	50.05	3.29	55.48	7.31	0.98	75.42
Max	7.69	3520.00	21.63	3.21	3.80	85.54	77.30	11.31	66.60	22.93	3.36	149.90
Mean	7.37	2193.77	10.52	0.61	2.99	76.79	64.64	6.08	60.14	11.67	1.93	98.95
Campaign 2017												
E14	7.7	3066	30.84	0.19	6.00	69.37	62.52	8.30	48.73	31.35	1.64	152.74
E15	7.3	4226	42.86	0.27	4.00	33.13	29.12	3.19	41.92	44.26	0.40	156.38
E16	7.8	762	4.81	0.50	4.30	56.37	38.17	2.23	39.48	4.98	0.60	62.25
E17	7.7	926	4.81	0.99	3.10	51.61	35.70	1.99	39.48	5.00	0.54	60.28
E18	7.6	2550	22.43	0.19	6.30	38.88	31.20	2.72	47.19	23.06	0.43	107.63
E19	7.6	2866	29.64	0.19	3.60	42.16	36.38	3.43	45.38	30.66	0.56	126.77
E20	7.7	2835	22.43	1.41	5.10	58.39	50.33	5.07	43.28	23.52	0.99	125.11
E21	7.1	2429	22.83	0.45	7.00	53.68	44.11	4.18	59.78	23.28	0.77	109.60
E22	7.8	2333	23.63	0.60	3.60	38.31	32.42	2.97	52.37	24.49	0.47	113.74
E23	7.5	2442	18.43	0.57	4.70	52.44	43.93	4.00	48.82	19.80	0.77	104.45
E24	7.5	724	5.61	0.11	5.60	69.52	49.10	2.99	45.71	5.88	0.89	65.67
E25	7.6	7555	88.52	1.21	4.40	66.80	65.26	15.08	49.52	91.20	1.83	320.55
E26	7.3	2049	14.82	1.31	7.90	66.21	54.69	5.48	47.00	15.42	1.18	101.06
E27	7.5	1453	12.82	0.10	5.20	54.83	43.33	3.38	41.68	12.94	0.74	81.16
E28	7.9	1859	14.42	0.26	9.30	66.14	55.53	4.76	42.05	15.02	1.06	105.74
E29	7.5	3173	22.40	1.02	7.80	70.33	61.13	7.35	59.84	23.49	1.54	135.92
E30	7.4	2913	20.83	2.04	6.60	63.16	56.31	6.92	42.10	22.02	1.26	124.14
E31	8	1772	14.02	0.87	4.40	60.86	49.09	3.88	58.32	14.60	0.93	103.84
E32	7.6	1298	10.01	0.34	5.40	50.54	38.79	2.85	39.29	10.92	0.60	74.82
E33	7.4	1935	13.32	0.60	6.50	50.57	38.57	3.09	56.32	14.26	0.61	87.47
E34	8	1151	6.60	0.16	5.46	76.42	57.36	4.18	56.24	7.51	1.30	88.32
E35	7.7	1558	11.62	0.38	6.20	49.21	35.51	2.56	57.73	12.86	0.54	85.16
E36	7.4	1110	8.81	0.14	5.20	54.74	38.77	2.53	50.93	9.80	0.62	69.32
E37	7.5	1836	12.99	0.15	5.70	56.95	44.32	3.47	54.76	14.51	0.77	89.75
E38	7.8	1757	14.02	0.28	5.10	51.39	40.00	3.09	65.47	15.65	0.65	96.59
E39	7.2	2023	15.22	0.78	5.00	46.87	36.36	2.84	56.18	16.03	0.56	86.41

Sample	pH	EC	Cl ⁻	NO ₃ ⁻	HCO ₃ ⁻	PI	%NA	SAR	MH	PS	KI	IWQI
E40	7.8	2293	16.02	0.15	6.10	55.49	45.64	4.01	61.52	17.37	0.80	106.54
E41	7.8	1771	15.62	0.17	4.00	45.22	36.74	2.80	60.35	16.74	0.55	95.05
E42	7.6	2298	19.23	0.44	5.60	48.26	38.99	3.41	41.38	20.93	0.63	104.09
E43	7.3	1896	13.62	0.24	6.20	48.07	35.97	2.74	55.68	14.61	0.55	83.26
E44	7.2	1892	13.22	0.25	6.00	49.20	36.65	2.73	49.34	14.62	0.56	80.24
Min	7.10	724.00	4.81	0.10	3.10	33.13	29.12	1.99	39.29	4.98	0.40	60.28
Max	8.00	7555.00	88.52	2.04	9.30	76.42	65.26	15.08	65.47	91.20	1.83	320.55
Mean	7.57	2217.77	18.92	0.53	5.53	54.68	43.94	4.14	50.25	19.90	0.82	106.58
Campaign 2018												
E45	7.73	3608	28.34	0.06	4.10	62.49	57.18	6.80	40.22	28.45	1.28	141.24
E46	7.82	916	2.79	0.46	3.80	69.73	44.57	2.29	27.52	3.06	0.79	60.58
E47	7.6	1082	8.01	0.47	4.70	48.13	30.13	1.74	58.64	8.31	0.43	67.77
E48	7.39	4933	38.29	0.22	2.70	47.45	44.59	5.60	32.05	40.07	0.78	157.76
E49	7.2	2794	17.75	0.35	5.70	51.60	42.66	3.95	49.40	18.42	0.73	97.91
E50	7.82	2638	15.24	0.67	4.30	49.09	40.78	3.67	47.50	17.13	0.68	102.86
E51	7.86	1960	10.96	0.00	2.70	48.24	39.19	2.74	54.24	12.27	0.61	85.35
E52	7.99	2716	15.29	0.00	5.00	46.45	36.41	2.85	43.69	15.57	0.55	99.21
E53	7.64	3034	21.73	0.04	3.30	50.94	44.63	4.40	41.76	22.94	0.80	113.98
E54	7.92	2731	18.68	1.08	3.70	46.17	38.69	3.45	41.18	19.86	0.62	110.33
E55	8.09	6716	54.44	0.65	3.10	59.46	57.21	9.72	34.05	58.67	1.31	233.77
E56	7.9	2428	13.34	0.00	4.60	65.72	56.39	5.50	51.02	14.98	1.26	107.10
E57	7.77	1557	7.11	0.10	4.10	60.77	46.40	3.10	29.41	7.93	0.82	73.32
E58	8.4	9744	89.08	2.08	2.30	66.24	65.29	15.28	56.35	92.44	1.83	352.29
E59	8.05	1842	8.67	1.53	3.30	70.32	57.59	4.58	40.71	9.49	1.33	97.05
E60	7.37	3408	22.54	6.42	4.30	56.31	51.41	6.21	37.77	24.41	1.03	138.75
E61	7.22	2699	16.29	0.98	3.90	52.73	45.00	4.22	42.14	17.87	0.81	96.29
E62	7.71	2163	14.02	0.25	9.00	67.93	54.12	4.78	39.65	14.57	1.11	102.69
E63	7.47	1602	8.98	0.00	5.00	55.08	39.68	2.57	26.74	9.01	0.63	67.54
E64	7.43	3482	21.58	1.08	6.50	73.34	64.84	8.25	56.27	22.92	1.82	136.92
E65	8.65	2965	20.15	0.53	0.20	55.69	54.30	5.71	59.26	21.93	1.17	137.03
E66	7.25	2176	10.61	0.56	5.50	44.39	31.63	2.25	51.35	11.99	0.45	75.13
E67	7.77	1258	5.21	0.40	5.20	60.37	42.54	2.75	59.99	6.17	0.72	73.30
E68	7.51	1773	10.82	0.27	5.80	48.13	33.78	2.38	59.41	12.06	0.51	79.96
E69	7.29	2054	13.62	0.19	6.30	50.99	38.45	3.05	49.33	14.79	0.62	84.55
E70	7.34	1967	9.92	0.14	5.20	51.50	38.91	2.91	48.22	11.28	0.63	75.62
E71	7.5	1957	9.86	0.14	4.40	56.02	43.88	3.36	52.58	11.44	0.77	81.54
E72	7.48	2187	11.96	0.04	4.60	54.38	43.13	3.41	54.67	13.61	0.74	87.16
E73	8.24	1896	10.69	0.00	3.10	63.43	52.64	4.22	47.57	12.38	1.09	99.52
E74	7.45	1900	12.42	0.10	5.90	55.79	42.80	3.41	55.29	13.84	0.74	87.15
E75	7.34	3184	12.15	0.56	5.12	59.66	48.20	4.09	54.76	13.75	0.92	95.86
Min	7.20	916.00	2.79	0.00	0.20	44.39	30.13	1.74	26.74	3.06	0.43	60.58
Max	8.65	9744.00	89.08	6.42	9.00	73.34	65.29	15.28	59.99	92.44	1.83	352.29
Mean	7.68	2753.87	18.08	0.62	4.43	56.40	46.03	4.49	46.54	19.41	0.89	110.31
Campaign 2019												
E76	7.53	3800	40.06	0.07	5.00	68.92	63.10	9.06	33.51	40.37	1.71	171.77

Sample	pH	EC	Cl ⁻	NO ₃ ⁻	HCO ₃ ⁻	PI	%NA	SAR	MH	PS	KI	IWQI
E77	7.63	947	6.39	0.48	6.16	53.38	32.12	1.85	59.23	6.77	0.47	66.71
E78	7.66	880	8.81	0.44	7.00	79.71	63.33	5.58	25.89	9.46	1.65	86.50
E79	7.78	2287	18.43	0.00	10.80	78.95	67.41	8.71	38.59	19.60	2.04	128.80
E80	7.25	4840	15.84	0.06	4.96	62.08	51.78	4.75	45.74	17.38	1.06	111.00
E81	7.09	2757	23.22	0.32	8.16	43.33	35.04	3.33	58.36	24.14	0.52	108.00
E82	7.75	1839	15.20	0.00	4.52	45.91	35.59	2.63	61.03	16.25	0.53	93.18
E83	7.75	9641	88.87	0.61	3.40	54.19	52.47	10.22	48.79	97.51	1.09	330.87
E84	7.6	1322	10.82	0.13	8.20	76.74	60.42	5.38	8.33	11.41	1.47	86.98
E85	7.81	2284	18.43	6.45	8.00	70.62	62.25	8.17	7.03	19.35	1.63	135.99
E86	7.85	1702	15.62	1.53	6.00	77.30	65.84	7.23	36.66	16.58	1.91	118.21
E87	7.95	12250	135.39	2.18	6.20	65.11	63.77	17.09	13.96	140.05	1.72	462.91
E88	7.1	2800	17.08	1.00	3.78	52.27	45.19	4.37	43.00	18.75	0.81	96.86
E89	7.65	2985	29.24	0.03	7.20	61.79	53.66	6.28	51.33	30.02	1.15	141.93
E90	7.82	2666	24.83	1.05	5.80	54.05	45.75	4.65	37.29	25.52	0.84	126.89
E91	7.62	2663	17.99	0.65	5.16	44.64	39.32	3.03	41.53	19.50	0.54	102.38
E92	7.88	2091	15.54	0.23	9.84	68.96	56.59	5.62	29.21	16.68	1.24	110.48
E93	7.46	1559	15.62	0.00	9.20	78.79	68.29	8.97	15.17	16.09	2.12	106.52
E94	7.43	3386	25.62	1.13	7.32	76.09	67.80	9.55	47.68	26.79	2.09	148.20
E95	9.11	2626	25.64	0.45	2.46	62.56	56.71	6.16	55.62	27.33	1.30	159.44
E96	7.3	1811	13.60	0.48	6.76	49.74	37.14	2.95	49.23	15.08	0.58	84.40
E97	7.55	1333	6.39	0.35	5.76	61.14	42.70	2.83	52.32	7.53	0.74	71.95
E98	7.69	1678	14.54	0.26	7.40	53.49	40.79	3.41	56.02	15.83	0.68	95.71
E99	7.17	1833	14.40	0.13	7.36	62.88	50.19	4.56	41.98	15.67	1.00	89.50
E100	7.43	1750	10.96	0.13	4.92	56.13	44.50	3.58	51.88	12.65	0.79	82.45
E101	7.22	2099	12.38	0.19	5.36	46.23	33.88	2.47	42.37	13.59	0.50	76.16
E102	7.34	1962	10.78	0.16	5.72	49.53	35.67	2.52	39.99	12.05	0.54	74.80
E103	8.21	1751	10.78	0.00	3.52	46.97	35.11	2.33	39.83	12.14	0.53	86.57
E104	7.54	1729	12.99	0.08	6.23	52.61	41.05	3.42	59.38	14.87	0.69	89.71
E105	7.53	1991	13.60	0.03	5.52	54.48	43.07	3.53	51.96	15.42	0.74	91.29
Min	7.09	880.00	6.39	0.00	2.46	43.33	32.12	1.85	7.03	6.77	0.47	66.71
Max	9.11	12250.00	135.39	6.45	10.80	79.71	68.29	17.09	61.03	140.05	2.12	462.91
Mean	7.62	2775.40	22.97	0.62	6.26	60.29	49.69	5.47	41.43	24.48	1.09	124.54