

Table S1. In situ measurements, geochemical and isotopic data of surface and groundwater samples of the study area.

ID	Type	X	Y	pH	CE	T	Cl ⁻	Na ⁺	K ⁺	Mg ⁺⁺	Ca ⁺⁺	Br ⁻	NO ₃ ⁻	SO ₄ ⁻⁻	HCO ₃ ⁻	Na/Cl	Br/Cl	δ ¹⁸ O	δ ² H
Lower aquifer					μS/cm	°C	mg/L										(x10 ⁻³)	‰	‰
SB1	Piezometer	2.33	6.4	4.69	49.40	31.70	6.77	4.98	0.41	0.86	1.65	0.04	0.18	3.74	10.98	1.14	2.70	-3.67	-19.62
FR4-1	Piezometer	2.33	6.383	5.02	52.10	30.90	7.18	6.16	1.59	0.60	1.52	0.04	1.84	3.87	14.64	1.32	2.80	-3.22	-15.17
FE-1	Piezometer	2.316	6.366	5.75	224.00	30.70	32.37	21.90	5.28	3.79	10.03	0.09	1.22	29.54	36.60	1.04	1.20	-3.43	-16.39
FR-9	Piezometer	2.316	6.366	5.75	46.60	29.90	8.23	4.96	0.31	0.73	1.42	0.13	1.36	2.46	7.32	0.93	7.10	-3.51	-16.69
GAIN	Borehole	2.3	6.35	5.21	128.40	29.40	17.60	14.11	0.77	2.76	3.36	0.08	26.91	1.35	7.32	1.24	2.10	-3.52	-18.10
JA-154	Borehole	2.3	6.366	5.66	40.30	29.40	5.08	4.68	0.10	0.61	1.00	0.15	4.29	4.98	3.66	1.42	13.10	-3.36	-16.12
GAIN1	Borehole	2.327	6.389	4.84	87.80	28.70	18.04	10.65	1.31	1.40	2.31	0.03	2.20	4.61	7.32	0.91	0.90	-3.49	-17.12
GAIN2	Borehole	2.310	6.381	5	79.10	29.10	15.05	9.69	0.34	1.09	2.14	0.09	1.36	4.14	2.44	0.99	2.50	-3.44	-18.06
FA	Borehole	2.275	6.378	5.23	33.90	29.30	8.94	3.83	0.28	0.64	1.28	0.00	0.00	2.62	2.44	0.66	0.00	-3.49	-17.74
FG	Borehole	2.273	6.385	4.72	388.00	29.50	78.50	48.85	14.02	10.89	8.23	0.18	61.38	12.36	7.32	0.96	1.00	-3.38	-16.14
PzN	Piezometer	2.272	6.385	4.56	38.70	30.20	5.47	6.27	0.36	0.66	1.31	0.00	3.08	4.82	2.44	1.77	0.00	-3.40	-17.75
Fag	Borehole	2.283	6.335	4.67	45.90	30.20	1.92	4.87	0.34	0.92	1.81	0.00	1.91	4.58	18.30	3.92	0.00	-3.45	-19.24
Fho	Borehole	2.248	6.384	4.65	53.00	29.20	4.99	6.25	0.30	0.92	1.93	0.03	4.31	4.41	7.32	1.93	3.10	-3.32	-16.37
GAIN3	Borehole	2.206	6.368	4.53	60.60	29.40	10.62	7.97	0.33	0.88	1.49	0.00	2.18	4.26	7.32	1.16	0.00	-3.42	-17.36
FA	Borehole	2.204	6.402	4.75	81.30	29.50	14.43	11.89	0.49	1.29	2.83	0.06	4.50	2.57	9.76	1.27	1.90	-3.21	-17.58
F6	Borehole	2.202	6.407	5.37	48.30	29.60	9.65	5.09	0.12	0.67	1.38	0.00	4.33	1.25	3.66	0.81	0.00	-3.50	-18.47
F5	Borehole	2.201	6.410	5.2	60.50	28.10	7.24	4.14	0.12	0.56	1.19	0.00	1.40	1.04	4.88	0.88	0.00	-3.48	-18.29
JO-27	Borehole	2.219	6.387	4.83	51.60	30.60	6.39	5.98	2.77	0.74	1.62	0.00	9.02	3.46	9.76	1.45	0.00	-3.53	-17.11
FT	Borehole	2.272	6.389	4.97	74.50	30.10	6.55	5.64	2.01	1.53	2.07	0.08	19.50	1.40	7.32	1.33	5.20	-3.32	-15.16
FD	Borehole	2.251	6.406	5.12	74.20	30.00	7.11	5.02	7.15	1.10	1.00	0.08	5.03	11.41	7.32	1.09	4.80	-3.44	-15.88
FH	Borehole	2.236	6.415	6.01	483.00	29.20	54.06	36.64	44.01	11.78	27.14	0.23	81.84	35.97	36.60	1.05	1.90	-3.03	-14.99
F11	Borehole	2.253	6.404	5.15	46.10	29.80	7.97	5.47	0.56	0.71	1.65	0.00	0.25	4.64	4.88	1.06	0.00	-3.26	-16.33
F12	Borehole	2.343	6.394	4.24	72.50	29.30	7.10	5.33	0.28	1.15	2.93	0.02	7.06	11.07	2.44	1.16	1.00	-3.52	-17.96
F13	Borehole	2.310	6.390	4.83	31.10	29.80	4.99	3.67	0.25	0.39	1.00	0.00	1.84	2.61	3.66	1.14	0.00	-3.36	-16.43
F2	Borehole	2.236	6.387	4.68	87.60	29.60	5.69	12.46	0.27	1.07	2.06	0.05	22.51	4.27	7.32	3.38	4.10	-3.24	-16.16
F5	Borehole	2.218	6.380	4.79	108.60	29.80	8.15	9.36	0.20	0.70	1.68	0.07	18.68	0.56	7.32	1.77	3.70	-3.39	-16.46

F6	Borehole	2.222	6.378	5.24	81.30	30.10	7.45	11.10	0.27	0.74	2.17	0.03	21.55	4.05	4.88	2.30	1.60	-3.29	-15.88
F9	Borehole	2.232	6.359	5.23	43.20	30.30	5.33	3.34	0.71	0.62	1.19	0.05	0.00	1.83	3.66	0.97	3.80	-3.60	-19.44
F8	Borehole	2.186	6.382	4.36	42.00	31.20	5.97	3.45	0.77	0.64	1.31	0.05	0.00	1.32	3.66	0.89	3.70	-3.45	-18.29
F7	Borehole	2.148	6.391	4.87	52.20	30.70	6.91	4.13	0.76	0.67	1.34	0.00	0.00	4.34	4.88	0.92	0.00	-3.45	-17.63
FS	Borehole	2.137	6.385	7.07	286.00	31.70	29.87	18.15	1.90	5.55	45.94	0.13	0.70	1.62	176.90	0.94	2.00	-3.28	-16.16
PU1-2	Piezometer	2.137	6.384	4.55	46.30	30.20	9.17	5.22	0.45	0.91	1.64	0.00	0.67	2.10	7.32	0.88	0.00	-3.33	-18.14
PU1-1	Piezometer	2.076	6.372	4.98	74.20	31.10	11.45	5.10	0.39	0.89	1.57	0.00	0.00	3.03	4.88	0.69	0.00	-3.50	-19.65
SB3	Piezometer	2.095	6.352	4.97	79.40	31.10	7.94	5.80	0.70	1.73	4.77	0.02	0.00	2.88	30.50	1.13	1.20	-3.39	-19.63
SB2	Piezometer	2.087	6.339	4.97	63.40	31.00	8.16	5.79	0.79	1.53	3.52	0.00	0.00	3.64	12.20	1.10	0.00	-3.89	-18.66
F8	Piezometer	2.087	6.322	4.75	43.10	30.10	6.26	4.38	0.28	0.58	1.66	0.04	1.74	2.00	7.32	1.08	2.70	-3.70	-16.22
PP	Piezometer	2.087	6.323	6.25	336.00	32.10	17.05	40.86	4.53	7.80	32.70	0.08	0.00	1.78	170.80	3.70	2.20	-3.93	-18.90
JO-40	Borehole	2.049	6.336	4.18	71.40	29.20	7.87	4.71	0.33	1.43	2.65	0.11	11.78	3.29	4.88	0.92	6.20	-3.41	-17.73
PB-7684	Borehole	2.006	6.339	4.32	48.30	29.20	8.33	4.58	0.34	0.69	1.47	0.00	0.54	3.01	3.66	0.85	0.00	-3.39	-17.08
PB-3138	Borehole	2.028	6.366	4.8	51.20	29.90	6.40	5.47	0.31	0.65	1.55	0.00	8.86	1.48	3.66	1.32	0.00	-3.27	-16.52
PA-8772	Borehole	2.028	6.367	5.49	59.50	28.60	9.02	6.36	0.46	0.89	2.09	0.06	2.31	0.34	9.76	1.09	3.00	-3.05	-16.05
JA-73	Borehole	2.002	6.358	5.3	44.30	28.50	5.15	4.11	0.23	0.45	1.12	0.05	0.35	0.54	4.88	1.18	0.60	-3.06	-16.63
GAIN4	Borehole	1.981	6.365	5.56	49.80	28.70	8.53	5.83	0.35	0.75	1.96	0.02	2.92	0.09	7.32	1.06	1.00	-3.11	-17.11
GAIN5	Borehole	1.981	6.366	5.65	48.30	28.80	7.78	5.65	0.31	0.76	1.97	0.02	4.19	0.35	7.32	1.12	0.00	-3.00	-16.51
AT1154	Borehole	1.976	6.388	5.61	50.80	29.60	9.09	5.82	0.25	0.72	1.84	0.00	3.04	0.53	4.88	0.99	0.00	-3.64	-17.83
GAIN6	Borehole	1.976	6.389	5.61	43.30	29.50	5.51	5.71	0.31	0.51	1.36	0.03	3.02	0.67	7.32	1.60	2.50	-3.57	-16.94
GAIN7	Borehole	2.993	6.392	5.82	43.70	29.50	6.70	4.75	0.37	0.73	1.73	0.06	3.80	0.24	4.88	1.09	3.80	-3.67	-17.09
Pz1	Piezometer	1.976	6.399	5.61	142.40	31.20	7.71	9.44	2.21	4.70	11.54	0.14	0.00	0.00	69.54	1.89	8.20	-4.64	-25.54
Upper aquifer																			
P16	Dug well	1.867	6.357	5.63	84.70	28.90	17.38	15.91	0.07	0.30	0.66	0.11	2.10	5.93	12.20	1.41	2.80	-3.65	-16.26
P21	Dug well	2.051	6.401	5.27	208.00	28.80	58.57	38.31	0.28	0.39	1.22	0.06	2.52	5.36	4.88	1.01	0.50	-3.56	-17.56
P22	Dug well	1.917	6.427	4.80	67.60	28.30	9.06	8.29	0.14	0.93	2.55	0.00	0.00	4.40	7.32	1.41	0.00	-3.10	-14.80
P32	Dug well	1.906	6.435	4.36	431.00	28.80	68.18	48.91	3.64	9.62	15.33	0.19	108.06	1.90	7.32	1.11	1.20	-3.39	-17.31
P41	Dug well	1.819	6.377	5.11	76.20	27.50	17.23	12.53	0.35	0.52	1.54	0.00	0.19	2.61	9.76	1.12	0.00	-3.30	-15.55
P42	Dug well	1.836	6.327	5.60	259.00	28.70	54.01	35.44	0.37	2.13	19.06	0.18	3.77	4.92	36.84	1.01	1.50	-3.66	-17.05
P44	Dug well	1.832	6.279	4.00	413.00	28.10	78.21	38.93	5.35	10.60	13.92	0.20	85.06	0.76	7.32	0.77	1.10	-3.32	-16.18

P45	Dug well	2.071	6.373	4.02	160.90	28.70	28.65	17.15	1.43	2.57	3.50	0.09	20.66	1.48	7.32	0.92	1.40	-3.50	-17.71
P83	Dug well	2.073	6.376	6.00	788.00	28.60	113.15	76.04	24.59	20.96	58.98	0.35	215.15	29.92	17.08	1.04	1.40	-3.07	-12.41
P91	Dug well	2.615	6.377	5.48	76.30	29.10	8.81	6.57	0.15	0.49	9.22	0.00	0.82	2.17	34.16	1.15	0.00	-2.98	-15.57
P94	Dug well	2.625	6.371	5.37	203.00	28.60	57.40	34.19	1.37	1.06	2.84	0.15	5.06	0.95	7.32	0.92	1.20	-3.65	-17.30
P95	Dug well	2.675	6.404	5.35	57.70	29.60	10.30	7.09	0.24	0.89	1.68	0.00	1.10	3.90	7.32	1.06	0.00	-3.35	-15.87
P100	Dug well	2.663	6.430	6.48	180.60	29.30	37.16	27.07	0.87	1.93	13.95	0.10	18.42	3.89	19.52	1.12	1.20	-3.30	-15.50
P101	Dug well	2.666	6.432	6.64	72.40	29.40	8.97	6.47	0.71	1.19	7.16	0.02	5.25	1.29	19.52	1.11	0.70	-3.34	-16.51
Pz2	Piezometer	2.683	6.432	7.80	2500.00	30.90	523.12	365.72	12.60	60.16	50.93	1.46	0.00	194.85	104.92	1.08	1.20	-3.47	-17.48
F6	Dug well	2.692	6.417	7.69	658.00	30.80	122.57	80.16	5.24	13.26	43.44	0.47	94.30	25.49	85.40	1.01	1.70	-2.79	-12.85
F58	Borehole	2.614	6.522	5.64	164.40	30.50	11.23	5.21	8.80	7.16	2.19	0.09	0.82	3.58	61.00	0.72	3.70	-3.28	-15.85
GAIN	Borehole	2.615	6.525	6.17	5290.00	29.40	1393.09	948.23	16.06	112.02	114.83	6.04	0.00	116.35	201.30	1.05	1.90	-3.45	-17.78
F53	Borehole	2.599	6.484	5.97	12360.00	29.70	3693.21	1678.31	46.92	420.22	803.05	23.31	0.00	557.55	414.80	0.70	2.80	-2.86	-16.99
P5	Dug well	2.610	6.503	7.02	273.00	28.90	11.23	9.33	3.50	4.85	42.29	0.08	0.00	32.99	103.70	1.28	3.00	-2.81	-11.88
P8	Dug well	2.606	6.499	5.17	419.00	29.60	40.54	46.06	14.72	10.86	17.89	0.14	41.38	86.16	48.80	1.75	1.50	-2.89	-13.42
P9	Dug well	2.605	6.494	5.95	406.00	27.50	46.08	46.42	4.34	4.24	37.98	0.29	8.41	17.26	109.80	1.55	2.80	-2.75	-12.06
P10	Dug well	2.596	6.497	5.57	464.00	28.70	54.68	55.88	16.55	5.56	19.50	0.15	130.42	17.55	31.72	1.58	1.20	-3.13	-13.85
P12	Dug well	2.599	6.500	6.42	199.20	28.90	14.11	20.04	2.42	0.97	22.34	0.05	6.08	13.79	64.66	2.19	1.60	-2.58	-11.35
P13	Dug well	2.602	6.502	6.31	162.20	29.60	7.73	10.62	6.37	5.29	11.64	0.10	39.97	14.41	29.28	2.12	5.90	-2.79	-12.82
P14	Dug well	2.593	6.379	6.34	362.00	28.90	21.32	19.79	1.22	1.60	67.33	0.40	1.08	16.52	176.90	1.43	8.40	-3.27	-14.17
P18	Dug well	2.593	385.183	5.76	133.20	28.20	14.01	12.68	1.37	0.47	14.85	0.11	1.84	2.81	36.60	1.40	3.60	-3.43	-16.98
P19	Dug well	2.533	6.399	5.13	268.00	28.70	57.15	44.28	2.12	0.77	7.73	0.31	17.11	9.25	9.76	1.20	2.40	-2.96	-13.75
P23	Dug well	2.343	6.419	4.67	714.00	28.10	70.97	82.39	12.32	9.09	43.39	0.07	192.33	30.00	12.20	1.79	0.40	-2.59	-12.26
P24	Dug well	2.343	6.419	4.26	444.00	28.00	31.18	27.27	5.01	2.99	65.40	0.20	1.71	65.28	102.85	1.35	2.80	-1.96	-9.61
P25	Dug well	2.349	6.428	5.60	317.00	29.10	30.17	27.93	3.63	3.26	31.95	0.11	59.25	8.97	36.60	1.43	1.60	-2.71	-11.78
P26	Dug well	2.343	6.410	4.92	169.50	28.10	14.60	16.75	1.27	1.05	16.84	0.10	20.15	4.92	54.90	1.77	3.10	-2.92	-15.09
P27	Dug well	2.337	6.406	5.82	566.00	29.20	68.36	56.12	36.98	12.03	31.95	0.35	15.87	56.06	109.80	1.27	2.20	-3.16	-15.58
P28	Dug well	2.332	6.413	4.46	650.00	28.80	101.02	47.05	41.60	23.16	28.89	0.65	78.18	57.29	26.84	0.72	2.90	-2.68	-13.30
P29	Dug well	2.632	6.470	3.41	135.80	29.80	17.62	13.22	5.86	1.33	7.88	0.07	16.15	3.59	14.64	1.16	1.80	-3.22	-16.21
P33	Dug well	2.680	6.477	4.56	123.30	28.80	28.11	19.09	0.16	1.39	2.21	0.21	9.18	2.65	4.88	1.05	3.40	-3.26	-16.19
P34	Dug well	2.672	6.512	4.78	254.00	28.40	27.47	21.59	17.18	3.25	9.96	0.10	66.13	15.17	7.32	1.21	1.60	-2.45	-9.86

P35	Dug well	2.658	6.530	6.27	496.00	29.00	41.51	36.36	28.74	5.48	42.83	0.13	1.73	124.41	24.40	1.35	1.40	-2.59	-12.91
P37	Dug well	2.620	6.467	7.09	1337.00	28.40	382.56	189.32	6.43	20.52	90.49	1.41	9.46	37.72	34.16	0.76	1.60	-2.29	-9.42
P38	Dug well	2.315	6.507	6.14	70.90	27.80	7.65	7.95	1.24	0.82	6.22	0.00	3.33	6.35	17.08	1.60	0.00	-2.33	-9.32
P39	Dug well	2.330	6.486	5.09	650.00	28.30	94.00	93.68	17.37	18.12	12.00	0.51	1.08	163.02	14.64	1.54	2.40	-3.32	-15.58
P51	Dug well	2.344	6.528	5.14	108.70	28.20	10.02	10.19	4.25	1.94	7.06	0.09	13.00	12.11	14.64	1.57	4.00	-2.73	-15.40
P54	Dug well	2.315	6.461	6.47	1101.00	29.10	162.35	101.45	97.50	28.46	58.48	0.69	80.36	73.78	292.80	0.96	1.90	-3.45	-16.97
P59	Dug well	2.222	6.489	6.23	262.00	30.20	25.92	20.48	7.19	3.57	22.46	1.10	49.22	22.24	14.64	1.22	18.90	-2.81	-13.96
P60	Dug well	2.189	6.499	5.55	168.20	28.90	6.90	8.01	4.32	1.91	24.66	0.08	1.66	18.74	91.50	1.79	4.90	-2.87	-14.27
P75	Dug well	2.245	6.444	5.72	170.80	28.90	21.46	14.32	3.73	2.09	20.21	0.11	4.89	5.81	67.10	1.03	2.20	-3.24	-16.09
P76	Dug well	2.006	6.382	5.55	588.00	28.00	175.43	77.02	1.85	6.05	25.72	0.51	4.36	14.22	21.96	0.68	1.30	-2.56	-11.85
P103	Dug well	1.991	6.445	7.09	189.20	29.10	12.44	18.39	7.51	6.54	12.57	0.08	3.64	12.00	67.10	2.28	2.90	-3.46	-16.95
P106	Dug well	1.993	6.464	7.00	668.00	28.30	64.61	78.53	32.88	5.04	76.54	0.25	187.20	67.91	34.16	1.88	1.70	-2.19	-10.11
P107	Dug well	2.005	6.486	6.50	750.00	28.00	102.72	89.11	37.59	7.53	55.38	0.37	165.91	69.35	34.16	1.34	1.60	-2.05	-9.51
P108	Dug well	1.940	6.389	6.50	597.00	29.60	61.82	61.61	26.07	6.92	54.06	0.23	160.85	56.28	25.62	1.54	1.70	-2.81	-14.93
P109	Dug well	1.874	6.577	7.00	786.00	28.00	82.10	80.63	24.59	7.27	95.67	0.36	11.76	120.98	196.42	1.52	2.00	-2.11	-9.45
P110	Dug well	1.915	6.467	7.00	792.00	28.40	68.54	75.26	31.22	9.01	91.25	0.18	103.83	89.31	134.60	1.69	1.20	-2.43	-10.86
P111	Dug well	1.840	6.285	6.50	814.00	28.60	99.01	102.17	26.54	11.09	49.80	0.18	151.22	90.99	2.44	1.59	0.80	-3.08	-15.42
P112	Dug well	1.843	6.298	7.00	867.00	29.00	71.33	90.09	36.22	9.65	84.12	0.30	183.80	104.91	34.16	1.95	1.90	-2.74	-13.82
P113	Dug well	2.824	6.627	6.50	742.00	29.10	83.19	87.24	19.09	14.21	56.78	0.41	176.06	94.41	25.62	1.62	2.20	-2.86	-14.12
P114	Dug well	2.788	6.632	6.30	391.00	30.50	23.31	20.94	8.18	3.69	58.90	0.19	143.96	29.66	34.16	1.39	3.70	-3.30	-17.64
P115	Dug well	2.766	6.652	7.90	2630.00	31.20	560.45	418.03	15.47	40.97	86.96	1.21	0.00	239.98	35.96	1.15	1.00	-2.45	-10.52
P116	Dug well	2.732	6.629	5.80	933.00	30.00	160.89	110.86	3.26	13.89	75.03	0.75	144.37	32.30	34.16	1.06	2.10	-3.13	-14.60
	Lake Nokoué	2.716	6.624	7.50	26300.00	29.70	8277.70	4958.54	159.09	618.43	208.20	31.48	0.00	1300.58	9.76	0.92	1.70	0.90	3.60
	Lake Nokoué	2.665	6.650	7.50	34800.00	30.10	12185.28	6666.08	208.12	796.81	263.30	37.46	0.00	1696.71	9.76	0.84	1.40	1.28	5.7
	Sea water Grand-Popo	2.619	6.637	7.69	55600.00	28.30	19302.94	10692.76	360.56	1242.68	404.13	67.63	0.00	2556.31	0.00	0.86	1.60	0.82	1.60
	Rainwater IITA	2.601	6.655	5.20	21.78		1.41	0.82	0.27	0.39	1.58	0.00	0.53	1.11	4.80				

Table S2. Physico-chemistry and isotopic data for monthly rainwater collected at Cotonou-IITA station in 2013.

Month	Rainfall amount	pH	EC	HCO ₃ ⁻	Cl ⁻	Br ⁻	NO ₃ ⁻	PO ₄ ⁻	SO ₄ ⁻	Na ⁺	NH ₄ ⁺	K ⁺	Mg ²⁺	Ca ²⁺	δ ¹⁸ O	δ ² H
	mm		μS/cm						mg/L						‰	
January	53.3	6.97	62.5	17	2.50	0.02	2.89	0.29	3.32	1.64	3.28	1.97	0.32	2.75	-1.14	-0.01
February	32.3	7.25	27.6	6	1.56	0.01	1.17		2.29	0.89	0.23	0.50	0.28	2.46	-3.76	-20.01
March	105.1	7.04	49	1	1.75	0.01	0.96	1.22	2.13	0.86		0.80	0.29	1.24	-2.18	-4.81
April	246.6	6.82	25.3	5	1.35	0.01	0.78	0.34	1.26	0.62	1.61	0.59	0.09	0.87	-4.12	-19.12
May	148.2	6.59	22.8	1	1.40	0.01	0.60	0.06	1.28	0.66	0.18	0.25	0.11	0.82	-4.29	-19.34
June	118.1	6.51	21.4	2	1.87	0.01	1.27	0.07	1.55	1.03	0.72	0.44	0.15	0.77	-3.10	-13.51
July	42.4	6.97	82.3	1	4.41	0.02	1.94	0.58	3.28	2.70		1.51	0.42	1.42	-3.09	-13.49
August	0.5															
September	117.6	6.79	36.3	7	2.76	0.02	0.90	0.05	1.87	1.57	1.57	0.60	0.28	1.45	-2.89	-12.52
October	63.7	6.70	31.4	6	2.02	0.02	1.28	0.07	1.95	1.00	1.46	0.44	0.20	1.25	-2.16	-6.05
November	25.4	6.71	34.1	6	2.23	0.02	1.13	0.06	1.98	1.19	1.50	0.56	0.22	1.32	-1.98	-4.57

EC: electrical conductivity