

Table SM1. Summary statistics for fluoride data in the study area.

Lithology	n	mean	25 th Percentile	Median	75 th Percentile	Fluoride (mg/l)			
						0 - 1.5	1.5 - 2	2 - 3	3 - 4
Augen Gneiss	16	2.16	1.34	2.19	2.86	31.25%	12.50%	31.25%	25.00%
hornblende-biotite Gneiss	3	1.87	1.64	1.84	2.08	33.33%	33.33%	33.33%	0.00%
Charnockitic Gneiss and Granulite	20	1.06	0.61	0.99	1.34	80.00%	10.00%	10.00%	0.00%
All	39	1.58	0.84	1.41	2.20	56.41%	12.82%	20.51%	10.26%

Table SM2. Geochemical data from TA Mazengera samples.

Sample	Type	Latitude	Longitude	pH	EC (µS/cm)	TDS (mg/l)	F (mg/l)	Cl (mg/l)	NO2 (mg/l)	Br (mg/l)	NO3 (mg/l)	PO4 (mg/l)	SO42 (mg/l)	Ca (mg/l)	Mg (mg/l)	Na (mg/l)	K (mg/l)	Total Alkalinity CaCO3 (mg/l)
1	BH	-14.03288	34.01013	7.37	1036	518	1.84	1.24	0.03	0.03	9.35	0.06	73.74	56.12	40.52	26.50	4.38	288.74
2	BH	-14.03319	34.00981	7.54	1067	536	2.02	1.08	0.03	0.03	7.31	0.05	69.90	65.43	45.82	26.56	3.39	327.88
3	BH	-14.04563	34.01110	7.4	946	471	1.78	6.90	0.03	0.03	48.23	0.03	137.12	87.59	56.02	37.55	3.42	403.34
4	BH	-14.04295	34.01076	7.38	860	431	1.45	3.81	0.03	0.03	21.62	0.03	99.12	79.35	49.46	31.61	2.32	374.72
5	BH	-14.05009	34.00824	7.52	893	446	2.31	4.34	0.03	0.03	34.08	0.03	110.53	75.75	59.68	34.74	2.63	381.96
6	BH	-14.03649	34.02924	7.35	635	317	2.08	14.84	0.03	0.03	26.72	0.03	12.97	66.60	28.21	33.39	1.65	290.92
7	BH	-14.03943	34.03418	7.25	909	458	3.04	47.60	0.03	0.17	208.95	0.06	24.25	84.43	40.13	44.06	1.70	257.23
8	SW	-14.04006	34.03488	7.47	603	302	1.41	16.17	0.07	0.03	9.64	0.03	13.04	72.34	24.36	25.62	0.84	272.16
9	BH	-14.03851	34.04143	7.13	1032	518	2.80	89.26	0.09	0.18	276.77	0.03	18.49	98.98	47.49	31.44	2.68	235.08
10	SW	-14.03859	34.04081	7.23	406	203	0.89	1.24	0.05	0.03	0.16	0.20	6.33	47.72	15.60	25.17	0.96	208.71
11	BH	-14.03867	34.04492	7.53	640	321	2.80	32.38	0.08	0.03	98.23	0.16	13.47	61.17	29.52	25.88	1.54	213.16
12	BH	-14.05575	34.02410	7.4	591	296	2.46	9.76	0.03	0.03	16.55	0.03	9.42	56.69	31.64	29.18	1.12	291.97
13	BH	-14.06871	34.01936	7.37	770	389	3.75	30.86	0.03	0.03	115.13	0.03	8.81	63.05	43.94	33.71	2.13	279.98
14	BH	-14.07172	34.02771	7.14	610	306	2.36	10.88	0.03	0.03	3.38	0.07	5.54	60.75	29.71	32.65	2.07	323.22
15	SW	-14.06831	34.02878	7.42	466	234	3.64	4.15	0.03	0.03	7.06	0.07	3.78	48.85	21.25	27.91	0.48	234.68
16	BH	-14.06046	34.03349	7.3	474	237	3.19	8.95	0.05	0.03	46.56	0.03	5.93	44.38	27.27	20.09	1.75	198.15
17	BH	-14.06728	34.03855	6.77	297	148	0.43	18.98	0.03	0.03	7.23	0.06	2.18	29.74	10.37	19.86	1.58	123.95
18	BH	-14.06052	34.04897	7.09	520	261	1.62	35.98	0.03	0.03	65.11	0.03	8.53	51.91	23.79	18.62	2.05	168.46
19	BH	-14.05359	34.05683	7.11	231	116	1.03	1.74	0.03	0.03	8.10	0.07	3.91	20.28	13.40	11.97	0.55	111.63
20	BH	-14.05130	34.05466	7.48	472	237	1.96	4.63	0.03	0.03	5.60	0.03	3.13	44.71	29.49	20.27	0.90	246.23
21	BH	-14.04390	34.05705	7.34	556	280	2.62	13.28	0.03	0.03	28.81	0.03	7.55	48.07	30.45	23.81	0.85	251.82
22	BH	-14.03923	34.05810	7.09	471	236	1.31	12.32	0.03	0.03	19.03	0.03	5.57	44.95	25.27	23.60	0.81	214.10
23	BH	-14.04796	34.06648	7.1	487	244	0.78	23.19	0.03	0.03	83.68	0.03	11.89	51.01	23.16	13.16	0.82	145.30
24	BH	-14.04683	34.07601	7.23	615	307	1.09	3.60	0.03	0.03	0.61	0.05	18.05	69.36	33.91	14.33	0.51	310.73
25	BH	-14.05515	34.06576	7.16	907	455	1.42	57.70	0.03	0.03	178.78	0.03	21.96	93.49	46.90	14.86	1.27	275.94
26	BH	-14.05632	34.06157	7.31	687	344	1.31	13.63	0.03	0.03	45.71	0.03	11.06	82.00	38.54	13.09	1.17	307.19
27	BH	-14.06732	34.05043	7.06	220	110	0.29	1.43	0.03	0.03	0.99	0.12	1.97	24.27	10.61	7.46	2.30	113.28
28	BH	-14.07588	34.04165	7.38	639	320	0.95	5.86	0.03	0.03	14.43	0.05	8.04	83.29	27.04	23.83	2.15	317.69
29	BH	-14.08637	34.05310	6.84	407	204	0.33	17.09	0.03	0.03	37.40	0.08	11.29	45.20	14.78	19.03	0.90	148.16
30	BH	-14.08078	34.05538	7.04	475	238	0.95	13.74	0.06	0.03	25.76	0.03	14.07	54.67	25.21	12.46	0.10	196.42
31	BH	-14.08079	34.05819	6.9	605	305	0.41	39.74	0.03	0.03	131.24	0.03	26.23	73.75	27.38	10.95	0.51	146.75
32	BH	-14.07666	34.06965	7.03	189.7	95.5	0.61	7.58	0.03	0.03	25.96	0.06	3.41	19.11	8.57	6.53	0.42	56.78
33	BH	-14.07690	34.06926	7.16	248	124	0.73	8.12	0.03	0.03	15.82	0.07	14.57	28.13	11.45	7.72	0.47	85.86
34	BH	-14.09336	34.05629	7	346	173	0.73	2.29	0.03	0.03	21.82	0.03	3.34	43.24	16.16	8.39	0.17	159.02
35	PS	-14.08790	34.08660	7.33	151.5	76.1	0.61	2.85	0.03	0.03	0.17	0.05	0.72	14.95	7.24	9.32	0.10	76.71
36	PS	-14.08687	34.08691	7.09	147.6	74.9	0.61	2.54	0.03	0.03	0.13	0.05	0.69	14.69	7.12	9.19	0.10	74.59
37	BH	-14.07681	34.09715	6.83	254	127	1.10	2.60	0.03	0.03	0.37	0.06	15.20	24.62	12.75	13.72	0.10	116.71
38	BH	-14.06459	34.10258	7.4	512	256	1.05	7.32	0.77	0.03	25.94	0.27	45.75	57.94	18.39	25.65	0.81	196.09
39	BH	-14.06412	34.10166	6.85	516	258	1.67	1.92	0.03	0.03	3.75	0.06	33.06	50.11	22.48	35.80	0.31	242.86