

Table S1. Physicochemical and isotopic results of groundwater samples collected during post-monsoon season from Ambaji Basin (NW India) (December, 2017)

Sample ID	Latitude	Longitude	pH	EC (μS)	TDS (mg/L)	Ca ²⁺ (mg/L)	Mg ²⁺ (mg/L)	Na ⁺ (mg/L)	K ⁺ (mg/L)	SO ₄ ²⁻ (mg/L)	Cl ⁻ (mg/L)	NO ₃ ⁻ (mg/L)	HCO ₃ ⁻ (mg/L)	δ ² H (‰)	δ ¹⁸ O (‰)	d-excess (‰)	³ H (TU)
TW-1	24.2893	72.7434	7.09	840	504	73.26	27.41	62.86	2.78	21.64	51.72	22.55	310	-33.57	-5.08	7.07	4.02
TW-2	24.2915	72.7389	6.94	1170	702	77.91	43.44	66.09	2.27	47.18	68.67	43.82	355	-33.11	-4.95	6.47	-
TW-3	24.2910	72.7257	6.94	970	582	90.59	42.19	32.33	1.38	34.66	28.84	6.72	420	-35.83	-5.07	4.73	-
TW-4	24.2840	72.6958	7.38	1070	642	41.13	90.70	54.48	2.97	38.45	70.66	12.07	460	-32.98	-4.56	3.48	28.05
TW-5	24.2998	72.7146	7.12	1060	636	84.81	63.95	37.17	2.59	42.53	58.78	61.57	395	-32.78	-4.44	2.72	2.75
TW-6	24.2755	72.6855	7.05	1640	984	136.91	57.38	104.98	6.77	77.38	184.10	78.49	380	-36.01	-4.80	2.39	3.37
TW-7	24.2678	72.6783	6.91	1070	642	81.55	40.14	48.23	1.39	14.35	32.79	1.53	455	-36.46	-5.22	5.27	2.68
TW-8	24.2606	72.6828	6.81	2980	1788	141.03	111.28	260.15	2.77	195.94	425.70	16.83	535	-32.73	-4.95	6.83	-
BW-9	24.2553	72.6826	6.95	2010	1206	172.96	63.91	166.50	1.78	66.10	307.30	77.42	420	-34.42	-4.98	5.45	1.97
TW-10	24.2716	72.6703	6.95	1500	900	95.34	70.58	119.22	1.77	48.74	136.18	29.66	470	-38.19	-5.53	6.03	3.06
TW-11	24.2829	72.6725	7.07	1260	756	80.35	58.34	76.88	1.42	48.13	101.67	13.00	435	-33.96	-4.88	5.08	-
TW-12	24.2951	72.6720	6.96	670	402	55.27	29.62	40.31	0.83	20.41	42.81	2.30	295	-36.80	-5.61	8.11	-
TW-13	24.3213	72.6762	7.02	630	378	47.89	30.67	37.33	0.73	27.08	36.24	2.11	270	-41.90	-6.17	7.46	6.23
TW-14	24.2675	72.6670	6.60	1580	948	110.76	52.70	42.28	0.83	62.60	159.90	182.48	255	-31.75	-4.88	7.26	-
DW-16	24.2767	72.6584	6.88	1660	996	148.69	53.53	94.38	1.21	53.90	236.11	75.91	335	-32.84	-4.57	3.75	-
TW-17	24.2951	72.6562	6.85	1100	660	97.76	52.13	49.66	3.80	15.51	55.70	21.12	435	-33.82	-5.10	7.01	-
TW-18	24.3043	72.6583	6.91	480	288	39.45	18.13	34.17	0.93	15.10	16.08	11.12	235	-37.33	-5.36	5.53	4.90
DW-19	24.2664	72.6525	6.88	2090	1254	183.60	73.76	106.96	5.00	87.90	311.60	86.54	355	-30.10	-4.27	4.03	1.98
TW-20	24.2670	72.6486	7.03	1620	972	77.94	91.07	114.69	2.57	39.90	146.40	32.77	525	-30.70	-4.52	5.46	-
TW-21	24.2526	72.6438	7.00	1180	708	78.42	58.90	55.75	4.47	40.19	85.82	67.48	340	-33.21	-4.81	5.31	11.89
TW-22	24.2648	72.6308	6.92	1010	606	96.43	33.26	53.31	3.35	27.02	62.37	21.68	335	-35.22	-5.37	7.73	4.71
TW-23	24.2764	72.6237	6.82	1070	642	77.51	33.80	68.98	2.52	22.99	73.72	11.41	365	-36.86	-5.38	6.22	-
TW-24	24.2796	72.6186	6.93	1390	834	108.20	43.66	102.92	2.27	28.18	176.63	13.78	395	-32.22	-4.65	4.96	-
TW-25	24.2809	72.6112	7.11	810	486	75.94	25.42	36.62	2.83	21.61	33.92	48.29	265	-36.42	-5.23	5.38	3.16
TW-26	24.2831	72.5942	7.08	1130	678	86.96	49.24	51.81	5.89	34.41	94.96	11.95	340	-32.51	-4.99	7.43	-
TW-27	24.2704	72.5754	7.15	910	546	85.68	31.65	35.91	2.08	27.13	41.78	68.08	255	-32.68	-5.00	7.35	5.11
TW-28	24.2612	72.5822	7.10	1800	1080	86.47	52.95	165.17	3.58	43.36	207.69	81.08	340	-27.30	-4.00	4.69	2.04
TW-29	24.2644	72.5577	7.30	830	498	86.39	26.92	29.80	1.79	39.57	36.09	99.41	230	-40.06	-5.98	7.75	-

TW-30	24.2809	72.5558	6.61	1370	822	100.14	47.02	85.90	2.04	34.44	151.61	27.58	325	-31.99	-4.53	4.28	2.10
TW-31	24.2863	72.5774	6.87	1030	618	85.74	35.56	63.80	3.34	31.06	60.93	58.23	355	-32.24	-4.92	7.10	2.35
TW-33	24.2956	72.5953	7.19	1640	984	38.17	38.23	180.89	4.18	44.82	158.48	0.61	395	-24.51	-3.23	1.30	-
TW-34	24.3073	72.5925	6.83	1020	612	83.08	41.73	52.32	2.43	24.89	44.23	1.02	410	-32.20	-4.93	7.27	5.93
TW-35	24.3030	72.6089	6.85	880	528	72.21	34.08	47.06	2.80	21.09	34.93	4.44	335	-34.92	-5.05	5.47	6.70
TW-36	24.2984	72.6188	6.96	1280	768	86.64	63.94	62.71	4.26	44.64	79.43	1.78	445	-32.51	-4.57	4.08	-
TW-37	24.3016	72.6300	7.13	1480	888	57.84	87.50	114.34	3.01	37.17	102.87	23.49	510	-29.59	-3.92	1.81	-
TW-38	24.3063	72.6276	6.70	360	216	21.92	11.94	28.70	0.50	12.29	25.14	1.85	125	-36.73	-5.42	6.66	3.09
TW-40	24.2838	72.6404	6.96	1080	648	86.49	59.80	51.99	2.52	26.56	50.80	15.51	445	-36.67	-5.05	3.75	2.62
TW-41	24.3056	72.6828	7.15	670	402	47.28	35.09	43.32	1.63	32.02	45.56	2.44	245	-30.42	-4.03	1.81	-
TW-42	24.3257	72.6711	7.11	1900	1140	81.70	42.89	43.42	7.27	23.37	47.93	24.88	350	-37.32	-5.32	5.22	-
TW-43	24.3072	72.7695	6.78	1020	612	101.06	34.21	44.13	1.06	50.16	114.25	10.45	225	-40.30	-6.03	7.91	3.64
		Minimum	6.60	360	216	21.92	11.94	28.70	0.50	12.29	16.08	0.61	125	-41.90	-6.17	1.30	1.97
		Maximum	7.38	2980	1788	183.60	111.28	260.15	7.27	195.94	425.70	182.48	535	-24.51	-3.23	8.11	28.05
		Average	6.97	1231.5	738.9	87.04	48.97	74.19	2.69	40.61	105.01	34.34	359.25	-34.03	-4.93	5.44	5.10
