

Supplementary materials for Gong et al (2019) Kaolinite experiment data

Expt	Dates	hours	pH	Al, ppb	[Al]uM	Si, ppb	[Si] uM	f28^cc	f29^cc	f30^cc	
Kao1-0	05/12/19	0	7.18	28	1.03703704	292	10.4285714	0.02678753	0.97231435	0.00089812	
kao1-1	05/14/19	48	7.16	27		1	359	12.8214286	0.15213113	0.84276831	0.00510057
Kao1-2	05/17/19	120	7.15	27		1	376	13.4285714	0.17678704	0.81728575	0.00592721
Kao1-3	05/20/19	192	7.17	17	0.62962963		361	12.8928571	0.18789521	0.80580515	0.00629964
Kao1-4	05/23/19	264	7.16	38	1.40740741		395	14.1071429	0.25093832	0.74064836	0.00841332
Kao1-5	05/26/19	336	7.18	28	1.03703704		385	13.75	0.21525884	0.77752409	0.00721708
Kao1-6	05/29/19	408	7.16	31	1.14814815		392	14	0.24641675	0.74532153	0.00826172
Kao2-0	05/12/19	0	7.61	30	1.11111111		301	10.75	0.0160616	0.98339989	0.0005385
Kao2-1	05/14/19	48	7.62	20	0.74074074		355	12.6785714	0.15214892	0.84274992	0.00510116
Kao2-2	05/17/19	120	7.6	25	0.92592593		374	13.3571429	0.19608712	0.79733858	0.0065743
Kao2-3	05/20/19	192	7.6	21	0.77777778		365	13.0357143	0.2217983	0.77076538	0.00743633
Kao2-4	05/23/19	264	7.6	57	2.11111111		414	14.7857143	0.30039048	0.6895382	0.01007132
Kao2-5	05/26/19	336	7.62	36	1.33333333		400	14.2857143	0.27300829	0.71783844	0.00915327
Kao2-6	05/29/19	408	7.58	25	0.92592593		390	13.9285714	0.26263036	0.72856432	0.00880532
Kao3-0	05/12/19	0	7.84	33	1.22222222		306	10.9285714	0.12347439	0.87238584	0.00413978
Kao3-1	05/14/19	48	8.02	7	0.25925926		340	12.1428571	0.26651136	0.7245532	0.00893544
Kao3-2	05/17/19	120	7.95	6	0.22222222		354	12.6428571	0.29451556	0.69561009	0.00987435
Kao3-3	05/20/19	192	7.82	4	0.14814815		310	11.0714286	0.30179739	0.68808412	0.01011849
Kao3-4	05/23/19	264	7.85	4	0.14814815		310	11.0714286	0.3106804	0.67890328	0.01041631
Kao3-5	05/26/19	336	7.81	3	0.11111111		321	11.4642857	0.32079657	0.66844794	0.01075548
Kao3-6	05/29/19	408	7.77	4	0.14814815		319	11.3928571	0.31120245	0.67836373	0.01043382
Kao4-0	05/12/19	0	8.44	33	1.22222222		315	11.25	0.12661859	0.86913622	0.0042452
Kao4-1	05/14/19	48	8.6	24	0.88888889		344	12.2857143	0.28966927	0.70061886	0.00971187
Kao4-2	05/17/19	120	8.51	23	0.85185185		369	13.1785714	0.31303509	0.67646965	0.01049526
Kao4-3	05/20/19	192	8.54	15	0.55555556		326	11.6428571	0.32245976	0.66672899	0.01081125
Kao4-4	05/23/19	264	8.41	16	0.59259259		324	11.5714286	0.33511485	0.65364961	0.01123554
Kao4-5	05/26/19	336	8.39	12	0.44444444		339	12.1071429	0.34395583	0.64451222	0.01153195
Kao4-6	05/29/19	408	8.29	11	0.40740741		346	12.3571429	0.35299566	0.63516931	0.01183504
Kao5-0	05/12/19	0	7.17	31	1.14814815		928	33.1428571	0.00861917	0.99109186	0.00028898
Kao5-1	05/14/19	48	7.17	10	0.37037037		1113	39.75	0.19273065	0.80080759	0.00646176
Kao5-2	05/17/19	120	7.16	13	0.48148148		1191	42.5357143	0.23646458	0.75560737	0.00792805

Supplementary materials for Gong et al (2019) Kaolinite experiment data

Expt	Dates	hours	pH	Al, ppb	[Al]uM	Si, ppb	[Si] uM	f28^cc	f29^cc	f30^cc
Kao5-3	05/20/19	192	7.17	12	0.44444444	1235	44.1071429	0.26276047	0.72842984	0.00880968
Kao5-4	05/23/19	264	7.17	29	1.07407407	1270	45.3571429	0.27923867	0.71139918	0.00936215
Kao5-5	05/26/19	336	7.18	23	0.85185185	1308	46.7142857	0.29211723	0.69808883	0.00979394
Kao5-6	05/29/19	408	7.16	17	0.62962963	1283	45.8214286	0.29863888	0.69134852	0.01001259
Kao6-0	05/12/19	0	7.66	32	1.18518519	927	33.1071429	0.01141089	0.98820653	0.00038258
Kao6-1	05/14/19	48	7.63	8	0.2962963	1101	39.3214286	0.20745396	0.78559065	0.0069554
Kao6-2	05/17/19	120	7.61	10	0.37037037	1162	41.5	0.25645496	0.73494676	0.00859828
Kao6-3	05/20/19	192	7.61	10	0.37037037	1178	42.0714286	0.27565034	0.71510782	0.00924185
Kao6-4	05/23/19	264	7.6	31	1.14814815	1255	44.8214286	0.30047246	0.68945347	0.01007407
Kao6-5	05/26/19	336	7.62	33	1.22222222	1271	45.3928571	0.31276815	0.67674554	0.01048631
Kao6-6	05/29/19	408	7.59	589	21.8148148	1859	66.3928571		0.47770751	0.01694307
Kao7-0	05/12/19	0	8.04	36	1.33333333	1007	35.9642857	0.0419803	0.95661221	0.00140749
Kao7-1	05/14/19	48	8.03	8	0.2962963	1040	37.1428571	0.23909586	0.75288787	0.00801627
Kao7-2	05/17/19	120	7.95	5	0.18518519	1099	39.25	0.27892132	0.71172716	0.00935151
Kao7-3	05/20/19	192	7.78	2	0.07407407	1070	38.2142857	0.30713223	0.68257042	0.01029735
Kao7-4	05/23/19	264	7.81	3	0.11111111	1104	39.4285714	0.32085774	0.66838473	0.01075753
Kao7-5	05/26/19	336	7.8	3	0.11111111	1078	38.5	0.33177946	0.65709683	0.01112371
Kao7-6	05/29/19	408	7.78	3	0.11111111	1089	38.8928571	0.33948634	0.64913155	0.0113821
Kao8-0	05/12/19	0	8.45	41	1.51851852	975	34.8214286	0.04917417	0.94917715	0.00164868
Kao8-1	05/14/19	48	8.61	16	0.59259259	1022	36.5	0.26525928	0.72584726	0.00889346
Kao8-2	05/17/19	120	8.61	20	0.74074074	1043	37.25	0.30821712	0.68144915	0.01033373
Kao8-3	05/20/19	192	8.46	9	0.33333333	1036	37	0.33461633	0.65416484	0.01121882
Kao8-4	05/23/19	264	8.47	9	0.33333333	1032	36.8571429	0.34715171	0.64120919	0.0116391
Kao8-5	05/26/19	336	8.36	8	0.2962963	1051	37.5357143	0.36106707	0.62682728	0.01210565
Kao8-6	05/29/19	408	8.32	10	0.37037037	1051	37.5357143	0.36431711	0.62346827	0.01221462
Kao9-0	05/12/19	0	7.19	37	1.37037037	3353	119.75	0.00455524	0.99529204	0.00015273
Kao9-1	05/14/19	48	7.16	9	0.33333333	4068	145.285714	0.2547285	0.73673111	0.00854039
Kao9-2	05/17/19	120	7.17	13	0.48148148	4182	149.357143	0.30807253	0.68159859	0.01032888
Kao9-3	05/20/19	192	7.16	8	0.2962963	4202	150.071429	0.326789	0.6622546	0.01095639
Kao9-4	05/23/19	264	7.15	26	0.96296296	4305	153.75	0.34781451	0.64052416	0.01166133
Kao9-5	05/26/19	336	7.17	17	0.62962963	4327	154.535714	0.35467484	0.63343382	0.01189134

Supplementary materials for Gong et al (2019) Kaolinite experiment data

Expt	Dates	hours	pH	Al, ppb	[Al]uM	Si, ppb	[Si] uM	f28^cc	f29^cc	f30^cc
Kao9-6	05/29/19	408	7.16	17	0.62962963	4458	159.214286	0.36487192	0.62289486	0.01223322
Kao10-0	05/12/19	0	7.64	38	1.40740741	3348	119.571429	0.0044196	0.99543222	0.00014818
Kao10-1	05/14/19	48	7.62	18	0.66666667	3611	128.964286	0.27360683	0.71721984	0.00917333
Kao10-2	05/17/19	120	7.62	22	0.81481481	3730	133.214286	0.32098577	0.66825241	0.01076183
Kao10-3	05/20/19	192	7.61	15	0.55555556	3722	132.928571	0.34069176	0.64788573	0.01142252
Kao10-4	05/23/19	264	7.59	38	1.40740741	3770	134.642857	0.35826412	0.6297242	0.01201167
Kao10-5	05/26/19	336	7.61	28	1.03703704	3844	137.285714	0.37086436	0.61670151	0.01243413
Kao10-6	05/29/19	408	7.58	21	0.77777778	3845	137.321429	0.37848267	0.60882778	0.01268955
Kao11-0	05/12/19	0	7.93	39	1.44444444	3358	119.928571	0.01873988	0.98063182	0.0006283
Kao11-1	05/14/19	48	7.92	7	0.25925926	2925	104.464286	0.28510626	0.70533486	0.00955888
Kao11-2	05/17/19	120	7.74	8	0.2962963	2968	106	0.34109333	0.64747068	0.01143598
Kao11-3	05/20/19	192	7.77	3	0.11111111	2919	104.25	0.35830596	0.62968096	0.01201308
Kao11-4	05/23/19	264	7.76	3	0.11111111	3003	107.25	0.37197431	0.61555435	0.01247134
Kao11-5	05/26/19	336	7.75	3	0.11111111	3015	107.678571	0.3848275	0.60227022	0.01290228
Kao11-6	05/29/19	408	7.67	3	0.11111111	3027	108.107143	0.39198125	0.59487663	0.01314212
Kao12-0	05/12/19	0	8.51	49	1.81481481	3426	122.357143	0.02036969	0.97894736	0.00068294
Kao12-1	05/14/19	48	8.55	16	0.59259259	2707	96.6785714	0.30436303	0.68543246	0.01020451
Kao12-2	05/17/19	120	8.46	18	0.66666667	2717	97.0357143	0.35411299	0.63401451	0.0118725
Kao12-3	05/20/19	192	8.49	8	0.2962963	2589	92.4642857	0.37889466	0.60840198	0.01270336
Kao12-4	05/23/19	264	8.46	8	0.2962963	2685	95.8928571	0.39006276	0.59685943	0.0130778
Kao12-5	05/26/19	336	8.47	9	0.33333333	2666	95.2142857	0.40578555	0.58060951	0.01360495
Kao12-6	05/29/19	408	8.29	7	0.25925926	2685	95.8928571	0.41447523	0.57162848	0.01389629
Kao13-0	05/12/19	0	7.19	56	2.07407407	10779	384.964286	0.00540075	0.99441817	0.00018107
Kao13-1	05/14/19	48	7.15	21	0.77777778	10452	373.285714	0.19484799	0.79861925	0.00653275
Kao13-2	05/17/19	120	7.03	24	0.88888889	10229	365.321429	0.23635945	0.75571602	0.00792452
Kao13-3	05/20/19	192	7.13	5	0.18518519	10145	362.321429	0.25038191	0.74122343	0.00839466
Kao13-4	05/23/19	264	7.14	49	1.81481481	10212	364.714286	0.2692177	0.72175612	0.00902618
Kao13-5	05/26/19	336	7.1	16	0.59259259	9998	357.071429	0.27653895	0.71418941	0.00927164
Kao13-6	05/29/19	408	7.13	13	0.48148148	10024	358	0.28647904	0.70391606	0.00960491
Kao14-0	05/12/19	0	7.63	45	1.66666667	10618	379.214286	0.00676107	0.99301225	0.00022668
Kao14-1	05/14/19	48	7.58	15	0.55555556	9095	324.821429	0.20873219	0.78426956	0.00699825

Supplementary materials for Gong et al (2019) Kaolinite experiment data

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Kao14-2	05/17/19	120	7.46	25	0.92592593	8679	309.964286	0.24763499	0.74406244	0.00830256
Kao14-3	05/20/19	192	7.56	13	0.48148148	8638	308.5	0.26355935	0.72760419	0.00883647
Kao14-4	05/23/19	264	7.57	46	1.7037037	8674	309.785714	0.28039566	0.7102034	0.00940095
Kao14-5	05/26/19	336	7.54	35	1.2962963	8581	306.464286	0.29079319	0.69945726	0.00974955
Kao14-6	05/29/19	408	7.54	27	1	8560	305.714286	0.29829487	0.69170407	0.01000106
Kao15-0	05/12/19	0	8.02	60	2.22222222	10297	367.75	0.00900713	0.99069088	0.00030199
Kao15-1	05/14/19	48	7.69	7	0.25925926	7417	264.892857	0.18864751	0.80502763	0.00632487
Kao15-2	05/17/19	120	7.53	9	0.33333333	6894	246.214286	0.2271912	0.76519166	0.00761714
Kao15-3	05/20/19	192	7.53	9	0.33333333	6937	247.75	0.25708762	0.7342929	0.00861949
Kao15-4	05/23/19	264	7.52	7	0.25925926	6820	243.571429	0.27036298	0.72057245	0.00906458
Kao15-5	05/26/19	336	7.54	7	0.25925926	6946	248.071429	0.28532848	0.70510519	0.00956633
Kao15-6	05/29/19	408	7.51	10	0.37037037	6876	245.571429	0.29038759	0.69987646	0.00973595
Kao16-0	05/12/19	0	8.62	64	2.37037037	11465	409.464286	0.01163139	0.98797864	0.00038997
Kao16-1	05/14/19	48	8.48	22	0.81481481	6131	218.964286	0.21348413	0.77935829	0.00715757
Kao16-2	05/17/19	120	8.37	25	0.92592593	5679	202.821429	0.2513717	0.74020045	0.00842785
Kao16-3	05/20/19	192	8.38	10	0.37037037	5525	197.321429	0.26645595	0.72461047	0.00893358
Kao16-4	05/23/19	264	8.39	12	0.44444444	5450	194.642857	0.28438127	0.70608415	0.00953457
Kao16-5	05/26/19	336	8.29	13	0.48148148	5504	196.571429	0.29358279	0.69657414	0.00984308
Kao16-6	05/29/19	408	8.16	9	0.33333333	5600	200	0.2989133	0.6910649	0.01002179