

Sample	depth (cm)	Shard	SiO ₂	TiO ₂	Al ₂ O ₃	FeO _t tot	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	ClO	Total	Total alk	Alk. Ratio
OT0702-1	74.5- 77.5	1	47.15	1.06	18.95	7.62	0.34	2.08	11.16	6.34	4.35	0.04	0.92	100.01	10.69	0.69
		2	48.32	0.75	20.29	7.56	0.13	1.49	8.45	5.64	6.24	0.09	1.04	100	11.88	1.11
		3	48.28	0.95	21	7.07	0.33	1.39	7.81	5.68	6.39	0	1.09	99.99	12.07	1.13
		4	48.82	0.83	20.75	7.33	0.22	1.24	7.64	6.07	5.99	0.09	1.03	100.01	12.06	0.99
		5	48.61	1.02	20.79	7.28	0.4	1.35	7.72	6.4	5.29	0	1.15	100.01	11.69	0.83
		6	50.33	0.88	20.59	6.72	0.31	1.01	7.12	5.88	5.86	0.09	1.21	100	11.74	1.00
		7	50.21	0.67	21.69	5.96	0.17	1.19	6.41	7.32	5.13	0.09	1.14	99.98	12.45	0.70
		mean	48.82	0.88	20.58	7.08	0.27	1.39	8.04	6.19	5.61	0.06	1.08	-	-	-
		sd	1.12	0.14	0.84	0.58	0.10	0.34	1.51	0.58	0.72	0.04	0.10	-	-	-
OT0702-2	145.5- 144	1	58.08	1.54	17.42	6.33	0.16	2.09	4.70	5.47	3.31	0.54	0.35	99.99	8.78	0.61
		2	54.02	1.72	17.06	8.84	0.44	3.15	5.46	5.16	3.46	0.32	0.37	100.00	8.62	0.67
		3	56.01	1.80	18.89	5.28	0.12	1.65	6.25	6.58	2.85	0.36	0.21	100.00	9.43	0.43
		4	56.26	1.55	18.28	6.61	0.29	1.78	4.53	5.96	3.93	0.43	0.38	100.00	9.89	0.66
		5	55.13	1.74	17.20	8.10	0.13	2.40	5.61	5.42	3.44	0.50	0.32	99.99	8.86	0.63
		6	59.53	1.47	18.21	3.94	0.17	0.89	4.17	6.11	5.05	0.23	0.20	99.97	11.16	0.83
		7	53.15	1.99	17.27	8.81	0.35	2.80	5.87	5.32	3.60	0.53	0.31	100.00	8.92	0.68
		8	56.31	1.04	21.28	3.86	0.14	0.92	7.32	6.05	2.67	0.27	0.13	99.99	8.72	0.44
		9	56.87	1.58	18.59	5.45	0.00	1.32	4.67	6.42	4.33	0.37	0.41	100.01	10.75	0.67
		10	54.41	1.80	17.61	8.02	0.25	2.40	4.93	6.10	3.70	0.47	0.31	100.00	9.80	0.61
		mean	55.98	1.62	18.18	6.52	0.21	1.94	5.35	5.86	3.63	0.40	0.30	-	-	-
		sd	1.92	0.26	1.26	1.88	0.13	0.77	0.95	0.49	0.69	0.11	0.09	-	-	-
OT0702-3	269- 277.5	1	58.94	0.30	21.45	1.89	0.21	0.04	1.86	7.84	6.98	0	0.50	100.01	14.82	0.89
		2	58.79	0.00	21.50	2.02	0.00	0.10	1.93	7.65	7.52	0	0.49	100.00	15.17	0.98
		3	58.96	0.13	21.47	1.83	0.19	0.29	1.84	7.43	7.29	0	0.57	100.00	14.72	0.98
		4	60.50	0.24	21.77	2.00	0.22	0.25	1.66	6.13	6.70	0	0.53	100.00	12.83	1.09
		5	58.98	0.23	21.65	1.95	0.21	0.08	1.50	7.87	7.06	0	0.47	100.00	14.93	0.90
		6	58.82	0.19	21.69	1.83	0.17	0.07	1.78	7.70	7.17	0	0.57	99.99	14.87	0.93
		7	59.18	0.11	21.56	2.14	0.17	0.17	1.79	7.58	6.76	0	0.53	99.99	14.34	0.89
		8	58.68	0.17	21.42	2.08	0.15	0.16	1.82	8.04	6.97	0	0.51	100.00	15.01	0.87
		9	59.08	0.20	21.72	1.85	0.21	0.27	1.63	7.76	6.76	0	0.51	99.99	14.52	0.87
		mean	59.10	0.17	21.58	1.95	0.17	0.16	1.76	7.56	7.02	0	0.52	-	-	-
		sd	0.55	0.09	0.13	0.11	0.07	0.09	0.13	0.56	0.27	0	0.03	-	-	-
OT0702-4	617-620	1	61.39	0.45	18.65	3.12	0.09	0.71	2.31	3.61	9.26	0	0.42	100.01	12.87	2.57
		2	60.6	0.42	18.7	3.29	0.16	0.91	2.67	3.26	9.65	0	0.33	99.99	12.91	2.96
		3	61.49	0.45	18.64	3.07	0.26	0.64	2.21	3.7	9.11	0	0.41	99.98	12.81	2.46
		4	60.37	0.46	18.72	3.45	0	0.89	2.7	3.27	9.72	0	0.41	99.99	12.99	2.97
		5	61.26	0.41	18.88	3.07	0.08	0.68	2.18	3.55	9.45	0	0.44	100	13	2.66
		6	60.31	0.37	18.8	3.45	0.08	0.92	2.68	3.07	10.0 4	0	0.28	100	13.11	3.27
		7	60.72	0.39	18.92	3.21	0.05	0.7	2.64	3.32	9.64	0	0.4	99.99	12.96	2.90
		8	62.11	0.34	18.61	2.85	0.11	0.5	2.15	4.07	8.77	0	0.49	100	12.84	2.15
		9	61.92	0.28	18.58	2.83	0.12	0.53	2.17	4.28	8.74	0	0.56	100.01	13.02	2.04
		10	61.75	0.34	18.67	2.93	0.07	0.48	2.23	4.4	8.54	0	0.6	100.01	12.94	1.94
		11	61.24	0.35	18.74	3.02	0.15	0.67	2.1	4.23	8.98	0	0.53	100.01	13.21	2.12
		12	62.02	0.43	18.5	2.98	0.16	0.36	2.13	4.05	8.77	0	0.61	100.01	12.82	2.17
		mean	61.27	0.39	18.70	3.11	0.11	0.67	2.35	3.73	9.22	0	0.46	-	-	-
		sd	0.64	0.06	0.12	0.21	0.07	0.18	0.25	0.46	0.48	0	0.10	-	-	-
OT0702-5	689-696	1	57.76	0.99	21.99	2.64	0.17	0.51	5.06	3.07	7.62	0	0.20	100.01	10.69	2.48
		2	57.79	0.87	19.81	4.26	0.15	0.48	5.24	4.18	6.85	0	0.37	100.00	11.03	1.64
		3	57.55	0.66	19.84	4.08	0.06	0.80	4.41	3.78	8.37	0	0.44	99.99	12.15	2.21
		4	57.06	0.62	20.52	3.82	0.28	0.63	5.91	3.28	7.49	0	0.40	100.01	10.77	2.28
		mean	57.54	0.79	20.54	3.70	0.17	0.61	5.16	3.58	7.58	0	0.35	-	-	-
OT0702-6	743-752	1	60.67	0.43	19.02	2.98	0.13	0.42	1.8	6.45	7.4	0	0.69	99.99	13.85	1.15
		2	60.48	0.36	19.18	2.96	0.21	0.46	1.88	6.43	7.37	0	0.68	100.01	13.8	1.15
		3	61.12	0.38	19.2	2.86	0.13	0.4	1.58	6.36	7.3	0	0.67	100	13.66	1.15
		4	61.1	0.48	18.86	2.76	0.26	0.46	1.79	5.91	7.81	0	0.57	100	13.72	1.32
		5	60.69	0.29	19.06	2.84	0.1	0.48	1.82	6.66	7.32	0	0.73	99.99	13.98	1.10
		6	60.89	0.46	19.1	2.99	0.25	0.46	1.56	6.62	7.05	0	0.62	100	13.67	1.06
		7	61.01	0.45	19.2	3.08	0.26	0.38	1.65	6.22	7.14	0	0.63	100.02	13.36	1.15
		8	61.43	0.14	19.16	3.02	0	0.69	2.3	5.08	7.81	0	0.37	100	12.89	1.54
		9	60.41	0.55	19.2	3	0.36	0.5	1.72	6.44	7.07	0	0.75	100	13.51	1.10
		10	60.65	0.42	19.24	3.06	0.15	0.57	1.6	6.45	7.16	0	0.7	100	13.61	1.11
		11	60.63	0.39	19.24	2.66	0.17	0.41	1.72	6.74	7.32	0	0.73	100.01	14.06	1.09

		12	60.57	0.42	19.21	3.03	0.31	0.45	1.67	6.53	7.07	0	0.73	99.99	13.6	1.08
		<i>mean</i>	60.80	0.40	19.14	2.94	0.19	0.47	1.76	6.32	7.32	0	0.66	-	-	-
		<i>sd</i>	0.31	0.10	0.11	0.13	0.10	0.08	0.20	0.45	0.26	0	0.10	-	-	-
OT0702-7	822-825	1	71.88	0.33	8.26	7.97	0.16	0	0.29	5.99	4.2	0	0.92	100	10.19	0.70
		2	71.75	0.51	8.15	8.1	0.41	0	0.38	5.54	4.23	0	0.93	100	9.77	0.76
		3	71.57	0.45	8.3	8.12	0.33	0.12	0.28	5.46	4.48	0	0.9	100.01	9.94	0.82
		4	72.06	0.6	8.28	8.02	0.46	0.06	0.36	4.92	4.31	0	0.92	99.99	9.23	0.88
		5	72.61	0.58	8.45	8.29	0.34	0.2	0.35	3.88	4.45	0	0.84	99.99	8.33	1.15
		6	71.13	0.51	8.07	8.15	0.39	0.12	0.35	6.04	4.26	0	0.98	100	10.3	0.71
		7	71.55	0.32	8.18	8	0.23	0.17	0.3	5.82	4.47	0	0.96	100	10.29	0.77
		8	72.44	0.44	8.36	7.86	0.31	0	0.29	5.05	4.4	0	0.83	99.98	9.45	0.87
		9	71.56	0.32	8.3	8.05	0.34	0.14	0.42	5.57	4.36	0	0.95	100.01	9.93	0.78
		10	72.31	0.48	8.76	8.1	0.38	0.08	0.34	4.15	4.48	0	0.92	100	8.63	1.08
		11	69.23	0.56	10.59	7.95	0.29	0.18	0.57	5.38	4.71	0	0.54	100	10.09	0.88
		12	66.84	0.61	12.15	7.56	0.41	0.35	0.85	6.06	4.66	0	0.5	99.99	10.72	0.77
		<i>mean1</i>	71.89	0.45	8.31	8.07	0.34	0.09	0.34	5.24	4.36	0	0.92	-	-	-
		<i>sd1</i>	0.47	0.10	0.19	0.12	0.09	0.07	0.05	0.74	0.11	0	0.05	-	-	-
		<i>mean2</i>	68.04	0.59	11.37	7.76	0.35	0.27	0.71	5.72	4.69	0	0.52	-	-	-
		<i>sd2</i>	1.64	0.11	1.25	0.18	0.08	0.10	0.16	0.71	0.16	0	0.16	-	-	-
OT0702-8	1140-1146.5	1	57.51	0.61	19.39	4.57	0.15	1.26	3.74	4.19	8.21	0	0.37	100	12.4	1.96
		2	57.18	0.63	19.39	4.76	0.25	1.28	4.07	4.06	7.91	0	0.47	100	11.97	1.95
		3	57.09	0.58	19.61	4.88	0.1	1.3	4.36	4.05	7.41	0.09	0.53	100	11.46	1.83
		4	58.27	0.52	19.32	4.11	0.19	1.01	3.43	3.92	8.83	0	0.39	99.99	12.75	2.25
		5	57.83	0.48	19.39	4.52	0.1	1.09	3.82	4.44	7.84	0	0.48	99.99	12.28	1.77
		6	57.69	0.43	19.48	4.39	0.16	1.25	4	4.31	7.82	0	0.47	100	12.13	1.81
		7	57.72	0.47	19.84	4.74	0.15	1.3	3.4	3.84	8.06	0	0.48	100	11.9	2.10
		8	58.05	0.56	19.37	4.01	0.13	1.07	3.48	4.38	8.5	0	0.45	100	12.88	1.94
		9	57.06	0.66	19.52	4.65	0.18	1.37	3.88	4.33	7.88	0	0.45	99.98	12.21	1.82
		10	57.21	0.58	19.46	4.75	0.22	1.51	4.07	4.31	7.48	0	0.41	100	11.79	1.74
		11	58.46	0.42	19.73	3.78	0	0.97	3.23	4.23	8.66	0	0.52	100	12.89	2.05
		12	57.12	0.62	19.38	4.62	0.23	1.24	3.77	4.05	8.46	0	0.52	100.01	12.51	2.09
		<i>mean</i>	57.60	0.55	19.49	4.48	0.16	1.22	3.77	4.18	8.09	0.01	0.46	-	-	-
		<i>sd</i>	0.48	0.08	0.16	0.34	0.07	0.16	0.33	0.19	0.45	0.03	0.05	-	-	-
OT0702-9	1229-1232.5	1	61.45	0.45	18.91	3.07	0.16	0.49	1.75	5.37	7.93	0	0.42	100	13.3	1.48
		2	61.7	0.38	18.85	2.86	0.18	0.51	1.72	5.86	7.28	0	0.66	100	13.14	1.24
		3	61.15	0.59	18.89	3.1	0.23	0.57	1.73	5.38	7.84	0	0.51	99.99	13.22	1.46
		4	61.55	0.47	18.83	2.99	0.28	0.58	1.66	5.56	7.48	0	0.59	99.99	13.04	1.35
		5	61.3	0.47	18.81	2.87	0.22	0.48	1.67	5.97	7.61	0	0.6	100	13.58	1.27
		6	61.35	0.45	18.52	3.11	0.39	0.38	1.73	6.05	7.48	0	0.55	100.01	13.53	1.24
		7	60.97	0.51	19.01	2.88	0.32	0.37	1.62	6.91	6.7	0	0.71	100	13.61	0.97
		8	61.03	0.4	18.72	3.37	0.21	0.29	1.75	6.38	7.02	0	0.84	100.01	13.4	1.10
		9	61.13	0.36	18.76	3.12	0.17	0.32	1.63	7.11	6.58	0	0.82	100	13.69	0.93
		10	60.77	0.49	18.91	3.19	0.47	0.33	1.71	6.71	6.63	0	0.78	99.99	13.34	0.99
		11	60.83	0.56	18.98	3.16	0.33	0.34	1.55	6.94	6.43	0	0.87	99.99	13.37	0.93
		12	60.76	0.5	18.74	3.13	0.37	0.24	1.77	6.99	6.67	0	0.84	100.01	13.66	0.95
		13	61.48	0.44	18.78	3.05	0.36	0.4	1.49	6.55	6.72	0	0.73	100	13.27	1.03
		14	60.78	0.42	18.75	3.23	0.33	0.33	1.66	7.14	6.52	0	0.83	99.99	13.66	0.91
		15	60.96	0.39	18.84	3.15	0.34	0.29	1.69	6.88	6.57	0	0.89	100	13.45	0.95
		<i>mean</i>	61.15	0.46	18.82	3.09	0.29	0.39	1.68	6.39	7.03	0	0.71	-	-	-
		<i>sd</i>	0.31	0.07	0.12	0.14	0.09	0.11	0.08	0.64	0.52	0	0.15	-	-	-
OT0702-10	1440-1447	1	66.08	0.51	14.15	5.88	0.43	0.19	0.91	6.55	5.11	0	0.20	100.01	11.66	0.78
		2	67.11	0.53	14.73	6.04	0.23	0.42	0.90	5.00	4.87	0	0.18	100.01	9.87	0.97
		3	65.34	0.24	19.80	0.49	0.04	0.00	0.70	6.00	7.39	0	0.00	100.00	13.39	1.23
		4	72.19	0.44	8.61	6.77	0.30	0.10	0.40	6.01	4.46	0	0.74	100.02	10.47	0.74
		5	71.17	0.38	11.80	5.91	0.40	0.19	0.40	4.08	5.08	0	0.59	100.00	9.16	1.25
		6	73.49	0.25	9.33	6.82	0.25	0.00	0.36	4.43	4.31	0	0.75	99.99	8.74	0.97
		7	72.95	0.48	8.80	6.75	0.36	0.14	0.22	5.40	4.24	0	0.65	99.99	9.64	0.79
		8	72.76	0.49	8.84	6.99	0.32	0.13	0.29	5.02	4.34	0	0.82	100.00	9.36	0.86
		9	72.56	0.43	8.66	6.96	0.25	0.14	0.35	5.39	4.56	0	0.71	100.01	9.95	0.85
		<i>mean1</i>	66.18	0.43	16.23	4.14	0.23	0.20	0.84	5.85	5.79	0	0.13	-	-	-
		<i>sd1</i>	0.89	0.16	3.11	3.16	0.20	0.21	0.12	0.79	1.39	0	0.11	-	-	-
		<i>mean2</i>	72.52	0.41	9.34	6.70	0.31	0.12	0.34	5.06	4.50	0	0.71	-	-	-
		<i>sd2</i>	0.79	0.09	1.23	0.40	0.06	0.07	0.71	0.31	0.08	0	0.08	-	-	-