GSA Data Repository #2005042

Ref	Locality	Latitude	Longitude	Sample	Unit	SiO2	TiO2	Al2O3	Fe2O3	FeO	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total
1	Guraghe	8°14'02"	38°20'58"	KA-0	**Ab**	51.06	2.68	14.20	14.13		0.20	4.65	8.62	2.85	1.03	0.40	0.17	99.99
1	Guraghe	8°14'02"	38°20'58"	KA-03	**Ab**	47.97	1.56	16.26	11.82		0.16	7.12	9.76	2.55	0.56	0.21	2.04	100.01
1	Guraghe	8°14'02"	38°20'58"	KA-05	**Ab**	47.51	1.90	17.62	11.94		0.18	5.37	9.67	2.96	0.68	0.23	1.93	99.99
1	Guraghe	8°14'02"	38°20'58"	KA-07	**Ab**	47.37	1.28	15.50	10.42		0.21	10.22	9.43	2.31	0.55	0.19	2.53	100.01
1	Guraghe	08°07'33"	38°17'06"	Ets 283	**Gb**	70.99	1.01	13.07	3.08	0.80	0.09	0.70	1.76	4.04	3.60	0.23	0.62	100.00
1	Guraghe	08°07'35"	38°16'44"	Ets 284	**Gb**	51.97	2.67	14.80	2.89	9.28	0.18	4.78	8.30	2.96	0.90	0.37	0.89	100.00
1	Guraghe	08°07'24"	38°16'48"	Ets 285	**Gb**	52.73	2.85	14.28	2.87	9.44	0.20	3.80	7.35	2.83	1.50	0.51	1.65	100.00
2	Guraghe-Ketchin Amba	8°18'00"	38*26'20"	Ets 293	**Gb**	52.59	2.98	14.35	3.63	9.04	0.20	4.24	7.70	2.81	1.50	0.40	0.54	100.00
7	Guraghe			BT63	**Gb**	68.18	0.61	13.81	1.10	1.14	0.15	0.27	1.01	3.66	3.95	0.04	6.26	100.18
7	Gash Megal			BT120	**Gb**	75.72	0.21	12.87	0.68	0.62	0.01	0.00	0.41	3.69	4.95	0.01	0.37	99.54
7	Guraghe			ET9b	**Gb**	68.31	1.02	13.41	1.69	2.06	0.11	0.81	2.06	3.44	4.26	0.19	2.48	99.84
1	Guraghe	08°03'32"	38°15'28"	GU-10	**Gb**	50.80	2.97	14.50	13.82		0.17	3.99	8.43	3.30	0.94	0.46	0.62	100
1	Guraghe	08°03'32"	38°15'28"	GU-10.5	**Gb**	50.40	2.94	14.58	14.39		0.19	4.03	8.24	3.21	0.94	0.45	0.65	100.02
1	Guraghe	08°03'37"	38°15'21"	GU-11	**Gb**	49.60	2.66	15.25	14.16		0.19	4.63	8.98	3.19	0.74	0.38	0.22	100
1	Guraghe	08°03'37"	38°15'18"	GU-15	**Gb**	50.18	2.27	14.88	13.36		0.17	5.33	9.23	3.11	0.72	0.27	0.49	100.01
1	Guraghe	8°13'30"	38°21'13"	KA-01	**Gb**	69.17	1.02	12.82	4.06		0.11	0.97	2.10	3.60	3.66	0.19	2.31	100.01
1	Guraghe	8°14'02"	38°20'58"	KA-02	**Gb**	69.21	1.04	12.99	3.86		0.11	1.01	2.16	3.51	3.65	0.21	2.25	100
3	Wechacha	9° 04' 00"	38° 44' 00"	Ets-145	**Aab**	46.27	1.73	15.60	2.25	7.90	0.16	10.94	9.45	2.88	0.74	0.45	1.62	99.99
3	Wechacha	9° 03' 00"	38° 34' 15"	Ets-146	**Aab**	47.79	1.71	18.05	1.55	7.70	0.21	7.73	8.46	3.73	1.19	0.51	1.37	100.00
3	Wechacha	9° 03' 50"	38° 28' 15"	Ets183	**Aab**	48.59	1.77	17.90	1.66	7.34	0.16	6.80	7.78	4.41	1.56	0.92	1.11	100.00
3	Wechacha	8° 53' 25"	38° 39' 05"	Ets-25	**Aab**	50.00	2.60	18.41	2.57	7.36	0.16	4.36	7.65	3.95	1.27	0.68	1.00	100.01
1	Addis Ababa	8° 55' 29"	38° 47' 31"	KB-02	**Aab**	58.53	1.61	15.23	8.67		0.15	2.16	4.46	4.48	2.66	0.78	1.27	100
1	Addis Ababa	8° 56' 17"	38° 46' 41"	KBØ4a	**Np**	70.29	0.44	11.58	2.76	2.66	0.23	0.33	0.48	4.89	4.72	0.04	1.58	100.00
1	Addis Ababa	8° 56' 17"	38° 46' 41"	KBØ4b	**Np**	70.90	0.42	11.39	3.15	2.12	0.23	0.33	0.40	4.69	4.45	0.04	1.88	100.00
3	Debre Zeyt	8° 42' 10"	38° 50' 10"	Ets58	**Np**	47.74	2.31	18.13	3.78	7.58	0.17	5.90	9.02	3.06	0.76	0.53	1.02	100.00
3	Aminos	8° 36' 30"	39° 0' 25"	Ets11	**Np**	63.97	1.41	14.83	1.54	4.12	0.20	0.92	3.56	3.76	3.46	0.57	1.66	100.00
3	Aminos	8° 49' 15"	39° 3' 30"	Ets13	**Np**	72.31	0.36	11.99	4.28	0.68	0.13	0.05	0.28	4.52	4.75	0.01	0.64	100.00
3	Boru toru	8° 39' 10"	39° 12' 45"	Ets64	**Np**	71.99	0.36	10.42	4.02	1.74	0.20	0.20	1.03	4.54	4.29	0.02	1.19	100.00
3	Boru toru	8° 38' 40"	39° 12' 10"	Ets63	**Np**	72.67	0.38	10.75	4.47	1.68	0.18	0.08	0.33	4.28	4.46	0.02	0.71	100.01
3	Dikub	8° 50' 00"	39° 14' 15"	Ets66	**Np**	68.09	0.65	15.84	3.01	0.24	0.17	0.67	1.29	5.76	3.50	0.16	0.63	100.01
3	Gara Bokan	8° 54' 45"	39° 15' 10"	Ets73	**Np**	67.57	0.72	15.76	2.84	0.26	0.19	0.54	1.57	5.05	3.75	0.15	1.61	100.01
3	Nazret	8° 48' 00"	39° 07' 50"	Y13	**Np**	72.88	0.42	10.94	3.44	1.56	0.22	0.23	0.40	4.62	4.48	0.04	0.77	100.00
3	Ruketi	8° 42' 10"	39° 6' 30"	Ets17	**Np**	74.20	0.30	9.53	2.32	2.96	0.21	0.02	0.20	5.43	4.15	0.01	0.67	100.00
3	Ruketi	8° 52' 40"	39° 12' 55"	Ets72	**Np**	70.13	0.41	14.67	3.25	0.38	0.07	0.13	0.42	5.70	3.98	0.05	0.80	99.99
1	Nazret - Bokutede	8°30'05"	39°10'54'	BT3	**Np**	67.44	0.64	14.91	1.45	1.36	0.21	0.66	0.74	3.42	5.29	0.07	3.80	100.00
1	Nazret	8°33'07"	39°11'16'	NZØ2	**Np**	71.29	0.53	10.59	6.70	0.26	0.20	0.33	0.33	4.85	4.27	0.02	0.62	100.00
7	Guraghe			W834E	**GMr**	75.51	0.24	11.17	2.71	0.69	0.05	0.00	0.15	4.43	4.30	0.01	0.95	100.21
7	Wagebeta			ET75	**GMr**	72.82	0.32	10.30	2.71	1.96	0.32	0.00	0.20	3.27	4.85	0.01	3.60	100.36
7	Guraghe			KEL1	**GMr**	76.70	0.20	10.98	2.66	0.44	0.03	0.00	0.16	4.49	4.17	0.00	0.95	100.78
7	Guraghe			BT16	**GMr**	76.17	0.16	11.33	2.29	0.38	0.05	0.00	0.09	4.33	4.68	0.01	0.21	99.70
7	Guraghe			BT17	**GMr**	76.10	0.23	9.98	3.19	0.99	0.09	0.00	0.16	3.58	4.34	0.01	1.25	99.92
7	Guraghe			BT51	**GMr**	71.56	0.22	11.28	2.70	1.95	0.14	0.08	0.13	3.13	4.42	0.01	4.60	100.22
7	Guraghe			ET7a	**GMr**	73.28	0.25	10.72	1.40	2.43	0.14	0.01	0.08	4.47	4.40	0.00	3.30	100.48
3	Yerer	8° 52' 25"	38° 57' 20"	Y2	**Wt**	70.14	0.27	15.69	2.30	0.12	0.03	0.06	0.26	5.21	4.97	0.02	0.93	100.00
3	Yerer	8° 52' 50"	38° 56' 25"	Ets75	**Wt**	62.36	1.16	15.07	6.28	1.14	0.05	0.40	2.27	4.63	4.40	0.41	1.83	100.00
3	Yerer	8° 52' 50"	38° 54' 20"	Ets74	**Wt**	62.83	1.11	15.40	2.17	4.80	0.15	0.83	2.42	4.64	4.37	0.43	0.85	100.00
3	Yerer	8° 53' 15"	38° 56' 45"	Ets76	**Wt**	64.06	0.92	15.36	2.35	3.76	0.17	0.72	2.38	4.94	3.92	0.34	1.08	100.00
3	Debel	8° 48' 50"	38° 28' 30"	Ets-28	**Wt**	73.01	0.44	10.98	2.16	2.60	0.18	0.16	0.14	4.73	4.37	0.02	1.21	100.00
3	Furi	8° 53' 20"	38° 41' 20"	Ets-24	**Wt**	62.57	1.24	17.13	3.26	1.74	0.12	0.86	2.49	5.51	3.21	0.54	1.33	100.00
3	Menagesha	9° 01' 30"	38° 35' 30"	Ets-32	**Wt**	67.11	0.26	15.72	2.24	1.52	0.14	0.07	0.32	6.71	5.04	0.03	0.83	99.99
3	Menagesha	9° 02' 00"	38° 35' 00"	Ets-147	**Wt**	67.39	0.24	15.93	2.60	1.14	0.13	0.09	0.31	6.56	5.00	0.03	0.59	100.01
3	Repi	8° 58' 15"	38° 41' 30"	Ets-141	**Wt**	61.69	0.93	16.68	3.52	3.28	0.27	0.82	2.58	6.05	3.16	0.37	0.66	100.01
3	WataDalecha	8° 56' 30"	38° 28' 15"	Ets-26	**Wt**	73.86	0.21	10.90	3.14	1.90	0.08	0.02	0.10	4.36	4.32	0.04	1.07	100.00
3	Wechacha	8° 58' 30"	38° 34' 40"	Ets-138	**Wt**	59.59	1.40	17.51	2.32	3.82	0.17	1.39	3.82	5.59	3.14	0.67	0.58	100.00
3	Wechacha	9° 00' 20"	38° 42' 30"	Ets-150	**Wt**	60.59	1.07	15.64	4.20	3.34	0.22	1.57	3.14	5.41	2.99	0.69	1.13	99.99
3	Wechacha	8° 57' 45"	38° 33' 00"	Ets-135	**Wt**	62.66	1.27	16.21	4.13	1.66	0.09	0.55	2.26	5.99	3.69	0.44	1.04	99.99
3	Wechacha	9° 01' 10"	38° 41' 25"	Ets-149	**Wt**	64.86	0.52	15.51	5.20	0.70	0.06	0.33	1.50	6.31	3.67	0.17	1.16	99.99
3	Wechacha	8° 55' 00"	38° 35' 35"	Ets-140	**Wt**	65.72	0.71	16.20	2.79	1.14	0.15	0.36	1.29	6.40	4.31	0.20	0.73	100.00
3	Wechacha	8° 58' 10"	38° 34' 35"	Ets-137	**Wt**	65.83	0.60	16.57	3.31	0.60	0.06	0.29	0.87	6.33	4.57	0.12	0.85	100.00

Ref	Locality	Latitude	Longitude	Sample	Unit	SiO2	TiO2	Al2O3	Fe2O3	FeO	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total
3	Wechacha	8° 58' 35"	38° 35' 10"	Ets-139	**Wt**	66.75	0.46	15.97	1.83	1.72	0.20	0.14	1.27	5.79	4.99	0.13	0.77	100.02
3	Wechacha	9° 00' 35"	38° 39' 15"	Ets-148	**Wt**	69.31	0.26	14.37	2.85	1.30	0.20	0.05	0.41	5.74	4.85	0.02	0.74	100.10
3	Bofa	8° 36' 15"	39° 6' 40"	Ets59	**Bb**	48.41	2.10	17.51	4.52	5.04	0.15	6.43	9.13	2.96	1.19	0.60	1.96	100.00
3	Bofa	8° 39' 00"	39° 10' 05"	Ets62	**Bb**	48.62	1.75	16.81	3.84	6.46	0.19	7.13	9.74	2.89	0.84	0.60	1.14	100.01
3	Bofa	8° 54' 05"	39° 02' 20"	Ets69	**Bb**	49.03	1.74	17.17	5.13	4.84	0.16	6.93	10.09	2.86	0.60	0.39	1.06	100.00
3	Bofa	8° 41' 30"	39° 10' 55"	Ets65	**Bb**	49.63	1.71	18.21	5.06	5.14	0.17	6.17	8.47	3.15	0.91	0.48	0.89	99.99
3	Bofa	8° 50' 10"	38° 55' 00"	Ets22	**Bb**	53.60	1.88	16.26	2.85	6.20	0.17	4.84	7.85	3.25	1.53	0.47	1.11	100.01
1	Nazret	8°36'15"	39°13'39"	NZ-04	**Bb**	48.46	1.95	16.04	12.11		0.17	7.70	9.25	2.92	0.79	0.43	0.17	99.99
6	Chilalo			GX 4	**Cv**	45.26	3.40	15.80	4.13	8.43	0.16	8.00	10.90	2.31	0.54	0.40	0.67	100.00
6	Chilalo			GX 7	**Cv**	45.62	3.45	18.02	8.43	3.75	0.15	5.66	10.50	2.83	0.50	0.43	0.67	100.01
6	Chilalo			LX 4	**Cv**	49.96	2.99	18.06	6.06	5.11	0.19	3.51	7.75	3.95	1.23	0.72	0.48	100.01
6	Chilalo			LX 2	**Cv**	51.53	2.95	15.98	3.68	6.72	0.21	3.70	7.41	4.46	1.38	1.37	0.61	100.00
6	Chilalo			LX 1	**Cv**	52.01	3.06	15.62	5.48	5.17	0.16	3.62	7.01	4.50	1.36	1.16	0.92	100.07
6	Chilalo			LX 15	**Cv**	52.51	2.63	15.97	7.09	3.05	0.22	3.38	6.01	4.90	1.71	1.20	1.32	99.99
6	Chilalo			LX 14	**Cv**	52.64	2.92	15.63	5.51	5.33	0.22	2.28	7.09	4.44	1.42	1.47	1.05	100.00
6	Chilalo			LX 16	**Cv**	53.90	2.41	15.98	4.19	5.28	0.20	2.82	6.12	4.98	1.87	1.27	0.98	100.00
6	Chilalo			GX 1	**Cv**	55.18	2.40	15.53	5.39	4.35	0.23	2.37	5.58	4.82	1.76	1.01	1.37	99.99
6	Chilalo			LX 7	**Cv**	56.20	2.22	15.67	5.82	3.61	0.21	1.93	5.07	5.48	1.83	0.89	1.07	100.00
6	Chilalo			LX 3	**Cv**	56.49	2.03	16.40	2.97	5.54	0.33	2.43	5.06	5.15	1.83	0.94	0.82	99.99
6	Chilalo			GX 6	**Cv**	58.22	1.48	15.51	5.08	4.18	0.18	1.63	4.37	5.28	2.49	0.62	0.97	100.01
4	Debre Zeit - Awash			RFT 19	**Akb**	46.53	1.62	16.48		11.20	0.16	9.38	9.51	2.42	0.59	0.34	1.76	99.99
3	Bishoftu	8° 37' 50"	38° 55' 40"	AA21	**Akb**	46.56	2.33	17.43	3.33	7.16	0.16	7.49	9.63	3.61	1.30	0.51	0.49	100.00
3	Bishoftu	8° 35' 55"	38° 54' 40"	AA20	**Akb**	47.76	1.99	17.41	1.61	7.96	0.16	7.16	9.81	3.54	1.45	0.69	0.46	100.00
3	Bishoftu	8° 36' 45"	38° 55' 00"	AA19	**Akb**	48.29	2.21	17.62	2.46	7.72	0.17	7.16	8.88	3.41	1.32	0.53	0.23	100.00
3	Bishoftu	8° 37' 00"	38° 55' 35"	AA18	**Akb**	48.94	2.10	17.69	2.15	7.92	0.17	6.80	8.52	3.53	1.43	0.56	0.19	100.00
5	Boku-Tede			Ge74	**CDp**	67.87	0.60	12.36	4.29	1.03	0.21	0.77	0.74	3.26	4.43	0.06	4.36	99.98
5	Boku-Tede			Ge127	**CDp**	72.08	0.31	11.62	2.31	1.14	0.20	0.38	0.18	4.78	4.67	0.02	2.31	100.00
5	Keleta			Ge57	**CDp**	70.67	0.51	8.26	4.45	5.24	0.37	0.37	0.48	4.38	4.31	0.04	0.92	100.00
1	Nazret - Koka	8°30'05"	39°10'53"	BT-02	**CDp**	72.31	0.42	10.83	4.68		0.26	0.33	0.41	4.14	4.52	0.02	2.08	100
1	Nazret - Koka	8°30'05"	39°10'53"	BT-04	**CDp**	74.53	0.29	10.19	5.18		0.14	0.11	0.27	4.73	3.95	0.02	0.59	100.01
2	Chefe Donsa	8°58'10"	39°07'20"	CF2	**CDp**	74.25	0.13	12.81	0.00	1.68	0.10	0.06	0.23	5.05	4.74	0.00		99.05
2	Chefe Donsa	8°58'10"	39°07'20"	CF2	**CDp**	75.62	0.13	12.75	0.00	1.40	0.03	0.08	0.23	4.78	4.82	0.00		99.84
2	Chefe Donsa	8°58'10"	39°07'20"	CF2	**CDp**	75.77	0.05	12.61	0.00	1.66	0.12	0.02	0.23	4.96	4.69	0.00		100.11
2	Chefe Donsa	8°58'10"	39°07'20"	CF2	**CDp**	73.31	0.16	12.28	0.00	1.28	0.04	0.09	0.25	4.85	4.44	0.00		96.70
3	Zikwala	8° 36' 05"	38° 47' 20"	Ets57	**Zt**	60.83	1.06	15.31	4.86	3.00	0.20	1.48	3.07	5.38	3.06	0.62	1.13	100.00
3	Zikwala	8° 34' 05"	38° 50' 50"	Ets2	**Zt**	65.96	0.44	14.70	5.52	0.01	0.22	0.18	1.11	6.09	4.70	0.07	1.00	100.00
3	Zikwala	8° 33' 30"	38° 51' 10"	AA46	**Zt**	66.60	0.47	14.80	5.53	0.12	0.22	0.17	0.90	6.08	4.41	0.03	0.67	100.00
3	Zikwala	8° 35' 10"	38° 51' 05"	AA47	**Zt**	67.38	0.43	14.54	5.22	0.00	0.22	0.22	0.98	6.09	4.53	0.05	0.34	100.00
3	Zikwala	8° 32' 35"	38° 51' 35"	AA44	**Zt**	67.55	0.59	12.50	6.76	0.48	0.38	0.09	0.52	5.85	4.62	0.03	0.63	100.00
3	Zikwala	8° 32' 40"	38° 51' 00"	Ets1	**Zt**	67.56	0.52	13.02	3.04	3.36	0.28	0.10	0.71	5.61	4.73	0.05	1.01	99.99
3	Zikwala	8° 30' 00"	38° 51' 50"	Ets56	**Zt**	67.72	0.51	13.84	4.99	1.12	0.20	0.21	0.70	5.56	4.29	0.06	0.80	100.00
3	Zikwala	8° 30' 10"	38° 53' 35"	Ets55a	**Zt**	67.90	0.53	13.67	3.36	2.76	0.28	0.16	0.75	5.87	4.09	0.06	0.57	100.00
3	Zikwala	8° 32' 35"	38° 51' 35"	AA45	**Zt**	68.01	0.54	12.89	3.40	2.97	0.35	0.15	0.84	5.52	4.58	0.04	0.71	100.00
3	Zikwala	8° 36' 00"	38° 50' 20"	AA48	**Zt**	68.83	0.45	13.44	4.08	1.52	0.27	0.14	0.63	5.63	4.45	0.05	0.51	100.00
3	Zikwala	8° 30' 10"	38° 53' 35"	Ets55b	**Zt**	70.71	0.37	12.11	3.39	2.62	0.22	0.05	0.36	5.09	4.70	0.01	0.35	99.98
3	Bede Gebabe	8° 41' 00"	38° 58' 25"	Ets10b	**Br**	67.94	0.33	15.12	1.67	2.80	0.16	0.07	0.79	5.03	5.37	0.03	0.69	100.00
3	Bede Gebabe	8° 41' 15"	38° 53' 50"	AA24	**Br**	68.21	0.36	13.29	3.73	1.68	0.18	0.07	0.60	5.93	4.63	0.01	1.31	100.00
3	Bede Gebabe	8° 41' 00"	38° 54' 00"	Y6D	**Br**	69.57	0.27	10.93	3.35	1.80	0.16	0.05	0.34	2.90	6.40	0.01	4.22	100.00
3	Bede Gebabe	8° 41' 00"	38° 54' 00"	Y6U	**Br**	69.87	0.27	10.95	2.74	2.24	0.16	0.04	0.32	3.04	6.33	0.01	4.03	100.00
3	Bede Gebabe	8° 41' 55"	38° 58' 25"	AA31	**Br**	70.47	0.28	14.03	1.15	2.76	0.13	0.03	0.37	5.71	5.05	0.02	0.00	100.00
3	Bede Gebabe	8° 41' 00"	38° 54' 00"	Y8	**Br**	71.13	0.27	12.29	3.12	1.16	0.12	0.10	0.56	4.65	5.28	0.01	1.31	100.00
3	Bede Gebabe	8° 41' 00"	38° 58' 25"	Ets10a	**Br**	71.98	0.17	12.68	1.99	1.12	0.09	0.04	0.83	5.40	4.65	0.05	1.00	100.00
3	Bede Gebabe	8° 39' 20"	38° 54' 55"	AA23	**Br**	72.43	0.25	10.60	6.21	0.16	0.18	0.04	0.17	5.50	4.21	0.02	0.23	100.00
3	Bede Gebabe	8° 40' 00"	38° 56' 25"	Ets8	**Br**	72.50	0.26	9.71	2.39	3.72	0.17	0.01	0.26	6.21	4.10	0.01	0.65	99.99
3	Bede Gebabe	8° 41' 50"	38° 58' 25"	AA28	**Br**	72.63	0.24	9.93	3.93	2.42	0.15	0.05	0.21	5.56	4.10	0.01	0.77	100.00
3	Bede Gebabe	8° 39' 45"	38° 56' 15"	AA57	**Br**	72.75	0.25	9.50	2.69	3.44	0.19	0.02	0.24	6.12	4.07	0.01	0.72	100.00
3	Bede Gebabe	8° 40' 15"	38° 57' 10"	AA55	**Br**	72.78	0.25	9.36	2.70	3.48	0.19	0.03	0.25	6.20	4.04	0.01	0.71	100.00
3	Bede Gebabe	8° 40' 15"	38° 57' 10"	AA54	**Br**	72.87	0.25	9.30	2.66	3.56	0.19	0.02	0.24	6.15	4.03	0.01	0.72	100.00
3	Bede Gebabe	8° 40' 35"	38° 57' 35"	AA53	**Br**	73.49	0.21	10.91	1.79	2.03	0.11	0.05	0.25	5.27	4.23	0.01	1.65	100.00
3	Bede Gebabe	8° 41' 55"	38° 58' 25"	AA29	**Br**	73.77	0.22	11.71	2.71	1.56	0.12	0.02	0.15	4.91	4.51	0.01	0.31	100.00

Ref	Locality	Latitude	Longitude	Sample	Unit	SiO2	TiO2	Al2O3	Fe2O3	FeO	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total
3	Bede Gebabe	8° 43' 45"	38° 58' 00"	AA40	**Br**	73.81	0.17	11.72	3.76	0.00	0.11	0.01	0.45	4.96	4.60	0.01	0.40	100.00
3	Bede Gebabe	8° 41' 00"	38° 54' 00"	Y7	**Br**	73.93	0.18	9.89	4.10	1.40	0.15	0.05	0.37	4.84	4.14	0.01	0.94	100.00
3	Bede Gebabe	8° 41' 55"	38° 58' 25"	AA30	**Br**	74.02	0.20	11.69	2.27	1.82	0.10	0.06	0.19	4.79	4.47	0.01	0.38	100.00
3	Bede Gebabe	8° 43' 40"	38° 58' 00"	AA41	**Br**	74.32	0.21	10.21	2.29	1.84	0.12	0.03	0.21	4.67	4.61	0.01	1.48	100.00
3	Bede Gebabe	8° 41' 55"	38° 57' 50"	AA33	**Br**	74.55	0.20	11.30	2.49	1.62	0.10	0.04	0.10	4.72	4.37	0.01	0.50	100.00
3	Bede Gebabe	8° 40' 35"	38° 57' 35"	AA52	**Br**	74.64	0.21	10.60	2.68	1.84	0.11	0.05	0.17	4.51	4.30	0.01	0.88	100.00
3	Bede Gebabe	8° 38' 30"	38° 54' 45"	AA22	**Br**	74.93	0.12	12.54	2.30	0.16	0.06	0.02	0.18	4.69	4.50	0.01	0.49	100.00
3	Bede Gebabe	8° 41' 45"	38° 57' 25"	AA32	**Br**	70.06	0.17	12.39	4.51	0.72	0.09	0.06	0.10	4.93	3.82	0.01	3.14	100.00
3	Bede Gebabe	8° 41' 50"	38° 58' 30"	AA27	**Br**	70.88	0.24	9.49	3.44	2.72	0.17	0.07	0.27	3.10	5.21	0.01	4.40	100.00
3	Bede Gebabe	8° 46' 00"	39° 00' 00"	AA6	**Br**	74.92	0.06	12.33	0.53	0.62	0.06	0.10	0.48	4.21	4.45	0.01	2.23	100.00
4	Gedemsa			GD 73	**Br**	67.73	0.53	10.05		7.64	0.27	0.78	1.89	5.20	4.08	0.06	1.78	100.01
4	Gedemsa			GD 74a	**Br**	66.21	0.84	11.47		9.02	0.34	0.54	1.48	5.66	3.75	0.12	0.58	100.01
4	Gedemsa			GD 74b	**Br**	65.01	0.79	12.75		8.79	0.39	0.47	1.78	5.59	3.94	0.13	0.36	100.00
4	Gedemsa			GD 74c	**Br**	66.20	0.67	12.66		8.14	0.36	0.34	1.47	5.46	4.21	0.08	0.41	100.00
4	Gedemsa			GD 81	**Br**	69.78	0.57	11.69		6.32	0.17	0.71	1.53	5.08	3.75	0.07	0.34	100.01
4	Gedemsa			GD 83g	**Br**	66.55	0.58	10.07		9.68	0.26	1.12	1.88	4.56	3.64	0.08	1.59	100.01
5	Aluto-Bericha			LA46	**Br**	68.57	0.34	8.66	3.86	2.22	0.19	1.21	1.23	4.52	4.66	0.02	4.52	100.00
5	Aluto-Bericha			LA41	**Br**	71.65	0.33	8.77	3.09	3.75	0.28	0.16	0.22	7.10	4.07	0.01	0.59	100.02
9	Boseti			12-195	**Br**	54.23	2.47	14.48	3.08	8.35	0.36	2.90	6.12	5.35	1.55	1.03	0.41	100.33
9	Boseti			14-435	**Br**	58.30	1.40	15.21	2.02	7.16	0.36	1.57	4.20	6.36	2.08	0.55	0.34	99.55
9	Boseti			42-365	**Br**	67.75	0.45	14.00	2.77	2.70	0.22	0.23	0.69	6.67	3.97	0.09	0.26	99.80
9	Boseti			53-350	**Br**	68.47	0.50	9.41	2.10	6.52	0.30	0.05	0.74	7.21	4.47	0.03	0.10	99.90
9	Boseti			82-527	**Br**	65.19	0.99	14.90	1.37	3.99	0.22	0.78	1.47	6.33	4.12	0.21	0.28	99.85
9	Boseti			87-530	**Br**	70.00	0.33	13.93	2.40	2.04	0.19	0.18	0.40	6.29	4.50	0.08	0.11	100.45
9	Boseti			97-409	**Br**	69.72	0.32	13.75	1.03	3.01	0.21	0.23	0.68	6.12	4.57	0.04	0.28	99.96
9	Boseti			103-432	**Br**	69.88	0.36	13.50	0.72	3.38	0.24	0.20	0.73	6.42	4.59	0.04	0.16	100.22
8	Tullu Moye			13	**Br**	64.74	1.43	14.09	2.08	4.04	0.18	1.00	3.45	4.64	3.10	0.40	0.65	99.80
8	Tullu Moye			14	**Br**	69.56	0.46	14.88	1.81	1.01	0.08	0.32	1.34	5.15	4.79	0.07	0.53	100.00
4	Gedemsa			GD 75	**Br**	--	--	--	--	--	--	--	--	--	--	--	11.10	100.00
4	Gedemsa			GD 77	**Br**	--	--	--	--	--	--	--	--	--	--	--	11.21	100.01
4	Gedemsa			GD 78	**Br**	--	--	--	--	--	--	--	--	--	--	--	10.59	100.00
4	Gedemsa			GD 79	**Br**	49.62	2.04	15.60		11.72	0.17	6.85	8.58	3.01	1.19	0.31	0.93	100.02
4	Gedemsa			GD 80a	**Br**	50.68	1.80	16.30		10.29	0.15	7.34	8.46	3.19	1.16	0.34	0.28	99.99
4	Gedemsa			GD 80b	**Br**	50.62	1.88	16.36		10.22	0.15	7.02	8.43	3.36	1.27	0.35	0.32	99.98
4	Gedemsa			GD 80c	**Br**	50.54	1.83	16.32		9.82	0.15	7.48	8.50	3.29	1.19	0.36	0.51	99.99
4	Gedemsa			GD 82	**Br**	52.77	1.81	16.63		10.05	0.19	3.69	7.51	3.66	1.73	0.39	1.57	100.00
4	Gedemsa			GD 83a	**Br**	51.20	2.02	16.02		11.06	0.17	4.70	8.43	3.71	1.47	0.33	0.88	99.99
4	Gedemsa			GD 83b	**Br**	52.80	1.85	17.30		10.23	0.17	3.78	7.37	3.77	1.63	0.29	0.81	100.00
4	Gedemsa			GD 83c	**Br**	51.51	1.95	16.69		10.22	0.17	4.26	8.35	3.71	1.45	0.33	1.36	100.00
4	Gedemsa			GD 83d	**Br**	52.09	1.80	17.42		9.69	0.16	4.32	8.08	3.74	1.44	0.29	0.97	100.00
4	Gedemsa			GD 83e	**Br**	51.83	1.91	16.55		10.51	0.17	4.09	8.14	3.78	1.51	0.29	1.22	100.00
4	Gedemsa			GD 83f	**Br**	52.82	1.72	17.08		10.17	0.16	3.77	7.49	3.63	1.54	0.25	1.37	100.00
4	Gedemsa			GD 83h	**Br**	52.44	1.83	17.14		10.54	0.17	3.78	7.59	3.78	1.63	0.27	0.84	100.01
4	Gedemsa			GD 83i	**Br**	52.32	1.84	17.66		10.22	0.17	3.81	7.84	3.68	1.59	0.27	0.60	100.00
4	Gedemsa			GD 83l	**Br**	52.29	2.00	16.39		10.85	0.17	4.32	7.83	3.85	1.56	0.33	0.41	100.00
9	Boseti			2-153	**Wb**	47.94	1.75	16.58	3.96	6.29	0.17	6.99	11.18	2.79	0.62	0.34	0.72	99.33
9	Boseti			8-332	**Wb**	48.91	3.12	14.71	5.12	8.37	0.24	4.47	8.49	4.02	1.10	0.56	0.45	99.56
3	Bishoftu	8° 48' 05"	39° 06' 20"	Y14	**Wb**	45.01	2.16	16.58	5.73	5.36	0.18	9.55	10.23	2.66	1.18	0.39	0.97	100.00
3	Bishoftu	8° 43' 30"	38° 58' 00"	AA43	**Wb**	45.62	2.01	16.41	2.38	8.15	0.19	9.54	10.25	2.79	1.06	0.40	1.20	100.00
3	Bishoftu	8° 36' 40"	38° 51' 45"	AA50	**Wb**	45.87	2.73	17.36	8.71	4.85	0.21	5.47	9.96	3.10	0.73	0.35	0.66	100.00
3	Bishoftu	8° 52' 25"	38° 57' 20"	Y1	**Wb**	45.92	1.73	17.17	0.85	8.60	0.17	9.95	10.01	2.76	1.01	0.38	1.45	100.00
3	Bishoftu	8° 48' 05"	39° 06' 20"	Ets67	**Wb**	46.10	2.10	16.78	4.16	6.22	0.17	9.32	9.84	2.93	1.21	0.44	0.73	100.00
3	Bishoftu	8° 35' 05"	38° 51' 25"	AA49	**Wb**	46.11	2.44	17.33	3.08	7.56	0.18	7.32	9.71	3.39	1.34	0.68	0.86	100.00
3	Bishoftu	8° 37' 15"	38° 51' 50"	Ets5	**Wb**	46.58	2.48	17.15	3.78	7.16	0.17	6.80	9.52	3.48	1.33	0.58	0.95	99.98
3	Bishoftu	8° 52' 05"	38° 54' 15"	Ets23	**Wb**	46.63	2.55	16.24	1.78	9.08	0.17	8.89	9.19	2.83	0.72	0.55	1.37	100.00
3	Bishoftu	8° 47' 40"	39° 04' 30"	AA14	**Wb**	46.68	2.50	15.80	10.97	0.68	0.18	8.02	9.81	3.07	1.18	0.66	0.45	100.00
3	Bishoftu	8° 38' 30"	39° 01' 15"	Ets14	**Wb**	46.69	2.27	17.52	1.82	8.68	0.17	6.93	10.20	2.93	0.91	0.57	1.30	99.99
3	Bishoftu	8° 48' 15"	39° 04' 20"	Y12	**Wb**	46.96	1.98	16.73	8.08	3.55	0.19	7.70	10.16	2.85	0.81	0.36	0.63	100.00
3	Bishoftu	8° 43' 25"	38° 59' 0"	AA3	**Wb**	47.03	1.90	17.03	3.86	6.20	0.17	8.89	9.93	2.92	1.18	0.51	0.38	100.00
3	Bishoftu	8° 42' 30"	38° 55' 15"	AA36	**Wb**	47.04	2.25	17.36	2.10	8.44	0.16	7.99	9.55	3.04	1.13	0.51	0.43	100.00

Ref	Locality	Latitude	Longitude	Sample	Unit	SiO2	TiO2	Al2O3	Fe2O3	FeO	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	Total
3	Bishoftu	8° 43' 25"	38° 59' 0"	AA1	**Wb**	47.36	1.89	16.77	2.17	7.60	0.17	8.99	9.96	3.15	1.17	0.57	0.20	100.00
3	Bishoftu	8° 41' 50"	38° 58' 35"	AA25	**Wb**	47.42	2.28	17.02	2.58	8.20	0.17	7.69	9.72	2.95	1.04	0.56	0.37	100.00
3	Bishoftu	8° 44' 05"	38° 59' 30"	AA35	**Wb**	47.46	2.06	16.02	3.45	7.80	0.17	7.92	10.06	2.71	1.11	0.36	0.88	100.00
3	Bishoftu	8° 43' 25"	38° 59' 0"	AA2	**Wb**	47.52	1.77	17.27	1.29	8.28	0.16	9.25	9.74	2.92	1.08	0.52	0.20	100.00
3	Bishoftu	8° 46' 0"	38° 59' 0"	AA8	**Wb**	47.52	1.95	16.65	2.03	8.62	0.17	8.46	9.85	2.84	1.07	0.39	0.45	100.00
3	Bishoftu	8° 43' 40"	38° 58' 0"	AA42	**Wb**	48.23	2.01	17.55	1.54	8.24	0.17	7.12	8.69	3.18	1.39	0.51	1.37	100.00
3	Bishoftu	8° 55' 35"	39° 00' 45"	Ets68	**Wb**	48.28	1.63	18.51	3.30	5.66	0.17	7.59	9.62	2.93	1.05	0.47	0.79	100.00
3	Bishoftu	8° 45' 15"	39° 00' 0"	AA12	**Wb**	48.32	1.87	16.87	2.95	7.26	0.16	8.19	9.61	2.84	1.10	0.49	0.34	100.00
3	Bishoftu	8° 46' 10"	39° 00' 0"	AA7	**Wb**	48.35	1.92	16.58	2.11	8.20	0.17	8.06	9.45	2.99	1.30	0.40	0.47	100.00
3	Bishoftu	8° 44' 10"	38° 59' 35"	AA34	**Wb**	48.37	1.92	16.73	2.12	8.12	0.16	7.99	9.68	2.90	1.17	0.46	0.38	100.00
3	Bishoftu	8° 41' 50"	38° 58' 35"	AA26	**Wb**	48.65	1.88	16.99	1.39	8.12	0.16	8.55	9.31	2.92	1.18	0.41	0.44	100.00
3	Bishoftu	8° 35' 40"	38° 55' 05"	Ets6	**Wb**	48.73	2.10	17.46	1.35	8.56	0.17	6.40	8.49	3.50	1.39	0.54	1.31	100.00
3	Bishoftu	8°48'25"	39°06'37"	AA15	**Wb**	48.77	1.83	17.18	2.55	6.84	0.16	8.19	9.19	3.10	1.44	0.47	0.28	100.00
3	Bishoftu	8° 44' 05"	38° 57' 35"	AA38	**Wb**	48.77	2.07	17.21	3.72	6.76	0.19	5.95	9.21	3.21	1.23	0.55	1.13	100.00
3	Bishoftu	8° 47' 25"	38° 59' 45"	AA13	**Wb**	48.93	1.97	16.93	3.33	6.76	0.17	7.06	9.44	3.05	1.41	0.58	0.37	100.00
3	Bishoftu	8° 51' 15"	39° 08' 45"	Ets71	**Wb**	49.15	1.82	18.74	0.78	8.76	0.16	5.77	8.56	3.30	0.96	0.55	1.45	100.00
3	Bishoftu	8° 50' 50"	39° 01' 10"	Ets79	**Wb**	49.29	2.71	17.62	2.62	8.80	0.19	4.94	6.68	4.20	1.21	0.56	1.18	100.00
3	Bishoftu	8° 50' 45"	38° 55' 45"	Ets21	**Wb**	49.53	2.34	17.73	2.54	8.10	0.17	4.81	8.64	3.35	1.06	0.74	1.00	100.01
3	Bishoftu	8°48'25"	39°06'45"	AA16	**Wb**	50.21	1.94	17.13	8.75	1.64	0.17	6.28	8.17	3.29	1.53	0.47	0.42	100.00
3	Bishoftu	8° 40' 20"	38° 56' 40"	AA56	**Wb**	50.38	1.71	17.20	2.36	6.04	0.16	6.99	9.01	3.16	1.86	0.44	0.71	100.02
3	Bishoftu	8° 45' 50"	39° 01' 55"	AA17	**Wb**	50.38	1.60	17.51	9.56	0.14	0.16	6.61	8.65	3.31	1.25	0.42	0.41	100.00
3	Bishoftu	8° 59' 15"	39° 02' 35"	Ets78	**Wb**	50.45	1.52	19.60	3.33	4.96	0.14	5.27	9.47	3.23	0.71	0.39	0.93	100.00
3	Bishoftu	8° 34' 50"	38° 52' 25"	Ets3	**Wb**	50.66	2.54	16.78	4.17	7.12	0.22	3.66	7.08	3.85	2.01	0.68	1.23	100.00
3	Bishoftu	8° 37' 00"	38° 51' 45"	AA51	**Wb**	50.74	1.50	18.09	5.38	3.64	0.17	6.08	8.12	3.48	1.73	0.37	0.70	100.00
3	Bishoftu	8° 44' 15"	38° 58' 00"	AA39	**Wb**	51.24	1.61	17.23	1.38	6.44	0.14	7.43	7.60	3.37	2.04	0.51	1.01	100.00
3	Bishoftu	8° 40' 05"	38° 56' 45"	Ets9	**Wb**	51.63	1.62	16.91	2.37	5.76	0.14	6.33	8.65	3.46	1.93	0.48	0.72	100.00
3	Bishoftu	8° 45' 40"	38° 59' 05"	AA11	**Wb**	54.22	1.34	16.34	1.83	6.32	0.14	6.63	7.10	3.37	2.04	0.26	0.41	100.00
3	Bofa	8° 34' 40"	39° 6' 30"	Ets60	**Wb**	46.80	1.77	15.54	2.05	7.00	0.16	10.21	10.37	2.83	1.23	0.46	1.58	100.00
1	Butajira	08°09'43"	38°25'40"	Ets 286	**Wb**	49.59	2.72	17.74	2.94	7.04	0.16	5.80	7.93	3.97	1.35	0.66	0.09	100.00
1	Butajira	08°07'36"	38°27'00"	Ets 287	**Wb**	48.12	2.74	17.13	1.70	8.48	0.16	6.80	8.79	3.43	1.08	0.70	0.86	100.00
1	Butajira	08°03'36"	38°20'54"	Ets 290	**Wb**	48.12	2.53	17.57	2.06	7.84	0.16	7.48	8.91	3.30	1.08	0.56	0.39	100.00
1	Butajira	08°18'17"	38°34'46"	Ets 292	**Wb**	49.39	1.59	18.98	3.80	5.52	0.13	5.19	10.54	2.63	0.57	0.28	1.38	100.00
3	Bishoftu	8° 46' 10"	38° 00' 0"	AA5	**Wb**	57.58	1.23	16.05	1.73	5.44	0.13	5.02	5.75	3.81	2.75	0.29	0.40	100.18

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