Clinopyroxene	Major element oxides (wt%)											Cations to 6 O												Cation ratios, etc.																		
	SiO_2	TiO_2	Al_2O_3	Cr_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO	Na_2O	Total	Fe as FeO	Si	Ti	Al	Cr	Fe^{3+}	Fe^{2+}	Mn	Mg	Ca	Na	Total	Ca	Mg	Fe(t) + Mn	Mg#	Jadeite	Acmite	Fe_2CaTs	CrCaTs	TiCaTs	CaTs	Wollastonite	Enstatite	Ferrosilite	Allocation (%)
304-U1309D-16R-2, 68–81 cm (thin section 122): altered diabase																																									
Augite 1/1	52.69	0.65	2.40	0.06	0.00	8.23	0.21	16.44	19.11	0.27	100.06	8.23	1.940	0.018	0.104	0.002	0.000	0.253	0.007	0.902	0.754	0.019	3.999	39.3	47.1	13.6	77.6	1.9	0.0	0.0	0.1	1.8	2.5	35.6	45.2	13.0	99.9
Augite-rim 1/2	52.07	0.68	2.58	0.08	0.50	7.73	0.20	16.78	18.58	0.26	99.45	8.17	1.926	0.019	0.112	0.002	0.014	0.239	0.006	0.926	0.737	0.018	4.000	38.3	48.2	13.5	78.1	1.8	0.0	0.0	0.7	0.1	1.9	2.8	34.1	46.3	12.3	100.0
Augite 1/3	53.48	0.43	1.93	0.20	0.00	7.50	0.19	17.88	18.06	0.20	99.87	7.50	1.958	0.012	0.083	0.006	0.000	0.229	0.006	0.976	0.709	0.014	3.993	36.9	50.8	12.3	80.6	1.4	0.0	0.0	0.3	1.2	2.3	33.8	49.2	11.9	99.5
Augite 1/4	52.20	0.67	2.29	0.01	0.78	8.30	0.33	16.60	18.48	0.24	99.89	9.00	1.929	0.019	0.100	0.000	0.022	0.256	0.010	0.915	0.732	0.017	4.000	37.8	47.3	14.9	76.0	2.5	0.0	0.0	1.1	0.0	1.9	2.3	34.0	45.8	13.3	100.0
Augite infiltration along gabbro 1/5	51.24	1.08	1.80	0.00	1.09	10.99	0.31	15.05	17.83	0.28	99.67	11.97	1.924	0.031	0.080	0.000	0.031	0.345	0.010	0.843	0.717	0.020	4.000	36.9	43.3	19.8	68.6	2.0	0.0	1.5	0.0	3.0	0.0	33.6	42.1	17.7	99.9
Augite 1/6	53.14	0.47	1.74	0.08	0.00	8.12	0.27	17.24	18.60	0.22	99.87	8.12	1.956	0.013	0.075	0.002	0.000	0.250	0.008	0.946	0.733	0.016	4.000	37.8	48.8	13.3	78.5	1.6	0.0	0.0	0.1	1.3	1.7	35.1	47.3	12.9	100.0
Augite late composition(?) 1/7	51.85	0.76	1.07	0.00	0.00	13.36	0.33	13.93	17.87	0.27	99.45	13.36	1.964	0.022	0.048	0.000	0.000	0.423	0.011	0.787	0.725	0.020	4.000	37.3	40.4	22.3	64.5	2.3	0.0	0.0	1.4	0.0	3.5	35.7	39.5	21.4	99.6
Augite 2/4	51.85	0.68	2.80	0.19	1.34	6.53	0.31	16.41	19.60	0.30	100.02	7.74	1.910	0.019	0.122	0.006	0.037	0.201	0.010	0.901	0.773	0.021	4.000	40.2	46.9	12.9	78.4	2.1	0.0	1.9	0.3	1.9	3.1	35.1	45.1	10.5	100.0
Augite 2/5	52.16	0.60	2.72	0.20	0.44	6.84	0.29	16.37	19.70	0.29	99.61	7.24	1.925	0.017	0.118	0.006	0.012	0.211	0.009	0.901	0.779	0.021	4.000	40.7	47.1	12.2	79.5	2.1	0.0	0.6	0.3	1.7	3.2	36.1	45.1	11.0	100.0
304-U1309D-16R-5, 48–50 cm (thin section 127): granulite-facies shear zone cutting gabbro																																									
Granular clinopyroxene 1/1	51.28	0.88	3.14	0.27	0.96	5.64	0.15	14.57	22.30	0.38	99.56	6.50	1.903	0.024	0.137	0.008	0.027	0.175	0.005	0.806	0.887	0.027	4.000	46.7	42.4	10.9	79.6	2.7	0.0	1.3	0.4	2.4	3.1	40.7	40.3	9.0	100.0
Granular clinopyroxene 1/2 ?lighter	51.57	0.82	3.18	0.30	1.39	5.43	0.19	14.68	22.33	0.43	100.33	6.68	1.900	0.023	0.138	0.009	0.039	0.167	0.006	0.806	0.881	0.031	4.000	46.4	42.5	11.2	79.2	3.1	0.0	1.9	0.4	2.3	3.1	40.2	40.3	8.7	100.0
Granular clinopyroxene 1/3 ?darker	52.27	0.41	1.89	0.19	1.73	4.86	0.21	15.31	22.52	0.36	99.74	6.41	1.933	0.012	0.082	0.005	0.048	0.150	0.007	0.844	0.892	0.026	4.000	46.0	43.5	10.6	80.5	2.6	0.0	2.4	0.3	1.2	1.7	41.9	42.2	7.8	100.0
Granular clinopyroxene 1/4	51.46	0.88	3.24	0.34	1.05	5.43	0.22	14.60	22.51	0.38	100.10	6.37	1.900	0.024	0.141	0.010	0.029	0.168	0.007	0.803	0.890	0.027	4.000	46.9	42.3	10.7	79.8	2.7	0.0	1.5	0.5	2.4	3.2	40.7	40.2	8.7	100.0
Granular clinopyroxene 1/5 ?lighter	49.72	1.41	4.67	0.41	2.29	4.89	0.18	13.91	22.36	0.46	100.35	6.96	1.838	0.039	0.203	0.012	0.064	0.144	0.006	0.769	0.885	0.033	4.000	47.2	41.0	11.8	77.7	3.3	0.0	3.2	1.2	3.9	4.6	38.1	38.4	7.8	100.0
Granular clinopyroxene 1/6 ?darker	53.02	0.30	1.60	0.20	0.88	5.51	0.26	15.61	22.00	0.41	99.78	6.30	1.956	0.008	0.069	0.006	0.024	0.170	0.008	0.859	0.870	0.029	4.000	45.0	44.5	10.5	80.9	2.9	0.0	1.2	0.3	0.8	1.2	41.7	42.9	8.9	100.0
Host clinopyroxene 2/1	52.31	0.60	2.28	0.20	0.42	5.71	0.19	14.95	22.50	0.38	99.53	6.09	1.938	0.017	0.100	0.006	0.012	0.177	0.006	0.826	0.893	0.027	4.000	46.7	43.2	10.2	80.9	2.7	0.0	0.6	0.3	1.7	2.0	42.4	41.3	9.3	100.0
Host rock clinopyroxene 2/2	52.12	0.73	2.56	0.22	0.95	5.58	0.19	15.03	22.42	0.37	100.17	6.43	1.921	0.020	0.111	0.007	0.026	0.172	0.006	0.826	0.885	0.026	4.000	46.2	43.1	10.7	80.2	2.6	0.0	1.3	0.3	2.0	2.2	41.3	41.3	8.9	100.0
Host rock clinopyroxene 2/3	51.04	0.98	3.21	0.22	1.61	5.17	0.20	14.64	22.15	0.44	99.66	6.62	1.893	0.027	0.140	0.006	0.045	0.160	0.006	0.809	0.880	0.032	4.000	46.3	42.6	11.1	79.3	3.2	0.0	2.2	0.3	2.7	2.7	40.0	40.5	8.3	100.0
Host rock clinopyroxene 2/4	52.22	0.57	2.13	0.13	1.10	5.37	0.20	15.28	22.11	0.39	99.50	6.36	1.935	0.016	0.093	0.004	0.031	0.166	0.006	0.844	0.877	0.028	4.000	45.6	43.8	10.6	80.6	2.8	0.0	1.5	0.2	1.6	1.7	41.4	42.2	8.6	100.0
304-U1309D-26R-2, 21–24 cm (thin section 151): corona-textured olivine gabbro																																									
Host clinopyroxene core 1/1	52.37	0.43	3.23	0.64	0.00	5.55	0.16	15.34	22.09	0.34	100.15	5.55	1.922	0.012	0.140	0.018	0.000	0.170	0.005	0.839	0.869	0.024	3.999	46.1	44.6	9.3	82.7	2.4	0.0	0.0	0.9	1.2	4.6	40.1	42.0	8.8	99.9
Host clinopyroxene rim 1/2	53.04	0.48	1.72	0.28	0.00	5.26	0.18	15.71	22.43	0.32	99.42	5.26	1.959	0.013	0.075	0.008	0.000	0.162	0.006	0.865	0.887	0.023	3.998	46.2	45.0	8.7	83.7	2.3	0.0	0.0	0.4	1.3	1.3	43.0	43.3	8.4	99.9
Clinopyroxene veins 2/1	53.48	0.02	0.66	0.01	0.00	8.38	0.39	12.69	23.92	0.21	99.77	8.38	2.002	0.001	0.029	0.000	0.000	0.262	0.012	0.708	0.959	0.016	3.990	49.4	36.5	14.2	72.0	1.6	0.0	0.0	0.0	0.1	0.6	48.1	35.8	13.9	99.3
Normal clinopyroxene 2/2	52.40	0.56	2.39	0.34	0.00	5.31	0.19	15.54	22.32	0.39	99.15	5.31	1.940	0.016	0.104	0.010	0.000	0.165	0.005	0.858	0.877	0.023	3.998	46.0	45.0	9.0	83.4	2.5	0.0	0.0	0.6	1.6	2.5	41.6	43.0	8.5	99.9
Host clinopyroxene at random 1 core	51.88	0.40	3.38	0.61	0.15	5.47	0.18	14.91	22.16	0.39	99.52	5.60	1.918	0.011	0.147	0.018	0.004	0.169	0.006	0.822	0.878	0.028	4.000	46.7	43.8	9.5	82.1	2.8	0.0	0.2	0.9	1.1	4.9	40.3	41.1	8.7	100.0
Host clinopyroxene at random 1 rim	52.52	0.56	2.29	0.41	0.00	5.39	0.20	15.31	22.66	0.30	99.63	5.39	1.939	0.016	0.099	0.012	0.000	0.167	0.006	0.843	0.897	0.022	4.000	46.9	44.1	9.0	83.0	2.2	0.0	0.0	0.6	1.6	2.3	42.6	42.1	8.6	100.0
Host clinopyroxene once more core to make sure	52.74	0.32	2.49	0.47	0.00	5.00	0.14	15.46	22.73	0.28	99.63	5.00	1.943	0.009	0.108	0.014	0.000	0.154	0.004	0.849	0.897	0.020	3.997	47.1	44.6	8.3	84.3	2.0	0.0	0.0	0.4	1.2	3.5	42.4	42.5	7.9	99.8
304-U1309D-64R-1, 85–88 cm (thin section 226): late leucocratic magmatic dikelet cutting gabbro																																									
Large clinopyroxene in host, core region/1	52.13	0.55	3.07	0.24	0.62	5.38	0.22	15.28	21.98	0.40	99.87	5.94	1.920	0.015	0.133	0.007	0.017	0.168	0.007	0.839	0.867	0.028	4.000	45.7	44.3	10.0	81.6	2.8	0.0	0.9	0.4	1.5	3.7	40.1	42.0	8.6	100.0
Large clinopyroxene in host, rim	52.11	0.97	2.45	0.21	0.16	6.09	0.24	14.97	22.23	0.38	99.75	6.24	1.928	0.027	0.107	0.006	0.005	0.188	0.005	0.826	0.881	0.027	4.000	46.3	43.3	10.4	80.7	2.7	0.0	0.2	0.3	2.7	1.3	41.8	41.3	9.7	100.0
Relict clinopyroxene in host 5/1	52.77	0.80	2.43	0.48	0.00	5.67	0.11	15.64	21.84	0.35	100.10	5.67	1.936	0.022	0.105	0.014	0.000	0.174	0.003	0.856	0.859	0.025	3.995	45.4	45.2	9.4	82.8	2.5	0.0	0.0	0.7	2.2	1.8	40.8	43.0	8.9	99.6
Relict clinopyroxene in host 5/2	52.93	0.58	1.83	0.29	0.05	5.72	0.14	15.94	21.64	0.39	99.51	5.76	1.953	0.016	0.074	0.008	0.001	0.147	0.004	0.877	0.856	0.028	4.000	44.7	45.8	9.5	84.2	2.8	0.0	0.1	0.6	1.6	1.0	41.2	43.8	9.0	100.0
Relict clinopyroxene in leucocratic vein 1/1	51.61	1.15	3.15	0.24	0.00	6.07	0.21	14.59	22.02	0.46	99.49	6.07	1.913	0.032	0.137	0.007	0.000	0.178	0.006	0.807	0.875	0.033	3.999	46.6	43.0	10.4	80.6	3.3	0.0	0.0	0.4	3.2	2.0	41.0	40.4	9.7	99.9
Relict clinopyroxene in leucocratic vein 1/3	53.53	0.39	1.26	0.39	0.00	6.07	0.14	15.45	21.93	0.45	99.91	6.37	1.974	0.011	0.055	0.011	0.000	0.196	0.004	0.849	0.866	0.032	3.999	45.2	44.3	10.5	80.9	3.2	0.0	0.0	0.6	3.2	1.1	42.5	42.5	10.1	99.9
Relict clinopyroxene in leucocratic vein 1/4	52.19	0.44	2.89	0.44	0.00	7.78	0.17	14.13	21.64	0.44	99.80	7.78	1.939	0.025	0.107	0.009	0.000	0.242	0.005	0.783	0.854	0.032	3.995	43.3	41.5	13.1	76.0	3.2	0.0	0.0	0.4	2.5	1.3	40.8	39.3	12.4	99.6
304-U1309D-64R-3, 54–57 cm (thin section 227): serpentine and prehnite/hydrogarnet replacing olivine and plagioclase in olivine-rich trocto																																									
Pyroxene 2/1	52.74	0.76	2.50	0.81	0.35	3.07	0.09	16.88	22.40	0.39	99.99	3.38	1.923	0.021	0.107	0.023	0.010	0.094	0.003	0.917	0.875	0.028	4.000	46.1	48.3	5.6	89.7	2.8	0.0	0.5	1.2	2.1	1.9	40.9	45.9	4.8	100.0
Pyroxene 2/2	52.01	0.68	2.39	0.77	2.26	1.30	0.09	17.04	22.74	0.41	99.68	3.34	1.902	0.019	0.103	0.022	0.062	0.040	0.003	0.929	0.891	0.029	4.000	46.3	48.3	5.5	89.8	2.9	0.0	3.1	1.1	1.9	1.9	40.6	46.5	2.3	100.0
Pyroxene rim at random	52.76	0.54	2.10	0.67	1.32	1.98	0.14	16.97	23.06	0.36	99.90	3.17	1.925	0.015	0.090	0.019	0.036	0.061	0.004	0.923	0.902	0.025	4.000	46.8	47.9	5.3	90.1	2.5	0.0	1.8	1.0	1.5	1.8	42.1	46.2	3.2	100.0

Amphibole	Major element oxides (wt%)													Cations to 24 O, OH, F, Cl																Cation ratios, etc.																		
	SiO_2	TiO_2	Al_2O_3	Cr_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO	Na_2O	K_2O	H_2O	F	Cl	Total	Fe as FeO	O = F	O = Cl	Total	Si	Ti	Al	Cr	Fe^{3+}	Fe^{2+}	Mn	Mg	Ca	Na	K	OH	F	Cl	Total	Si	Al	Ti	Sum T	Al	Ti	Cr	Fe^{3+}	Mg	Fe^{2+}	Mn	Sum C	Mg	Fe^{2+}	Mn	Ca	Na	Sum B	Ca	Na	K	Total	Ca + Na on B	Ca on B	Na on B	Na + K on A	Sum L	Al(VI)	Mg/ Mg+Fe^{2+}
304-U1309D-16R-2, 68–81 cm (thin section 122): altered diabase																		