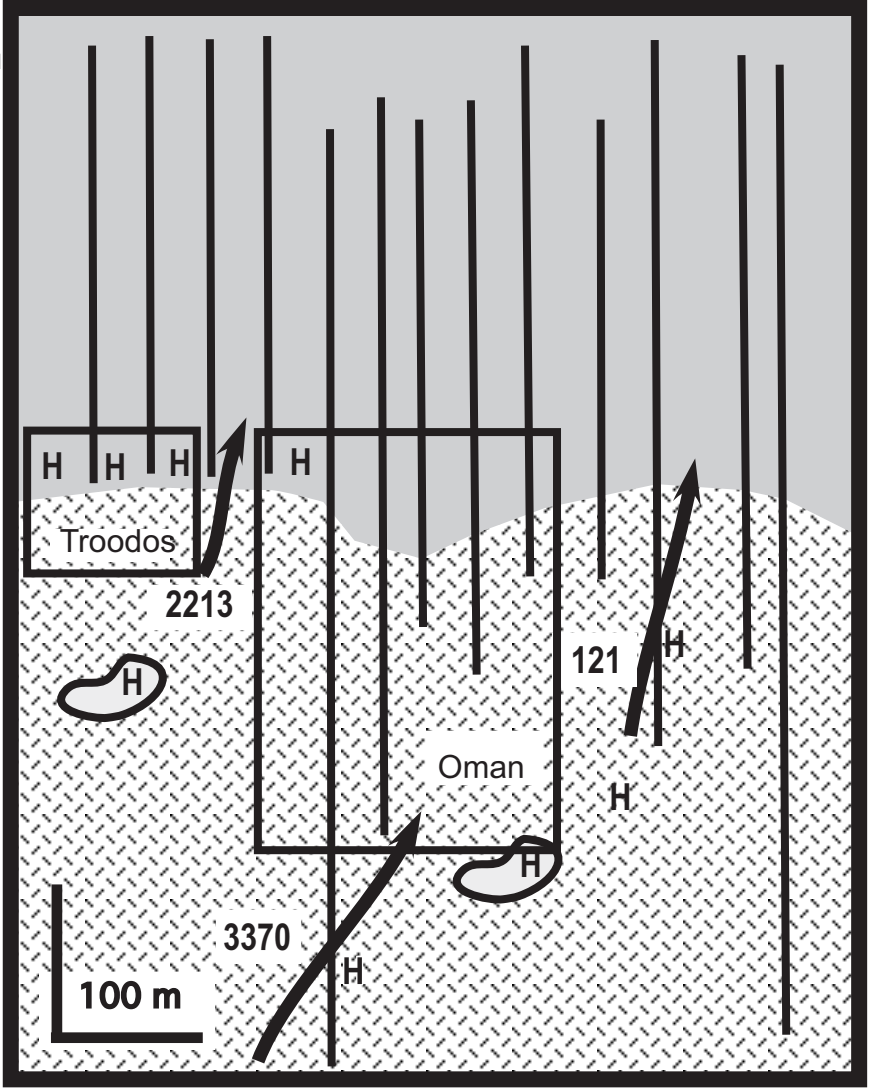
DR2008071



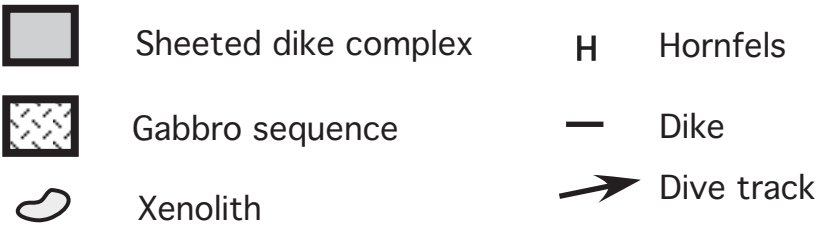


Figure DR1. Schematic illustration of field relations in the vicinity of the sheeted dike-gabbro transition for each field area. H identifies the location of hornfels within thin layers at the sheeted dike - gabbro transition and dikes hosted within the uppermost gabbros. The bold lines with an arrow depict the probable location of the submersible dive tracks for Hess Deep (2213, 3370) and Pito Deep (121). The bold rectangles identify the location of the Troodos (Gillis and Roberts, 1999) and Oman (K. Gillis, unpubl. map, 2002) ophiolites.

Table DR 1. Clinopyroxene and orthopyroxene compositions and calculated temperatures of recrystallization[1]

Location	Sample no.[2]	Mineral pair	Outcrop occurrence	SiO_2	Al_2O_3	TiO_2	FeO	MnO	MgO	Cr_2O_3	CaO	Na_2O	Total	Temp (°C)
Pito Deep	021705-2035	1	Massive outcrop	51.25	0.68	0.15	12.23	0.29	12.29	0.01	21.28	0.19	98.37	805
Pito Deep	021705-2035	1	Massive outcrop	50.34	0.30	0.14	29.30	0.67	16.88	0.00	0.99	0.02	98.63	
Pito Deep	021705-2035	2	Massive outcrop	51.81	0.74	0.16	12.51	0.32	12.42	0.00	21.54	0.23	99.73	815
Pito Deep	021705-2035	2	Massive outcrop	50.53	0.55	0.15	29.63	0.64	16.63	0.00	1.06	0.06	99.25	
Pito Deep	021705-2035	3	Massive outcrop	51.80	0.69	0.15	12.02	0.31	12.60	0.00	22.02	0.21	99.80	805
Pito Deep	021705-2035	3	Massive outcrop	50.69	0.37	0.11	29.64	0.62	16.90	0.04	1.03	0.02	99.42	
Pito Deep	021705-2035	4	Massive outcrop	51.36	0.80	0.33	12.39	0.29	12.83	0.00	20.52	0.19	98.70	800
Pito Deep	021705-2035	4	Massive outcrop	49.49	0.60	0.11	29.12	0.63	16.18	0.00	0.94	0.01	97.07	
Pito Deep	021705-2035	5	Massive outcrop	51.45	0.65	0.14	11.57	0.28	12.47	0.00	22.12	0.37	99.06	756
Pito Deep	021705-2035	5	Massive outcrop	50.70	0.34	0.12	29.56	0.70	16.80	0.00	0.83	0.02	99.06	
Pito Deep	021705-2035	6	Massive outcrop	50.53	0.74	0.20	12.45	0.33	12.04	0.03	20.77	0.21	97.31	828
Pito Deep	021705-2035	6	Massive outcrop	49.48	0.84	0.11	28.66	0.69	16.47	0.00	1.06	0.04	97.36	
Pito Deep	021705-2035	7	Massive outcrop	51.06	0.76	0.18	12.41	0.28	12.28	0.04	21.63	0.22	98.87	799
Pito Deep	021705-2035	7	Massive outcrop	49.36	0.35	0.12	29.01	0.61	16.11	0.00	0.97	0.03	96.56	
Hess Deep	3370-1328	1	Massive dike in gabbros	52.69	0.56	0.21	24.58	0.35	20.65	0.00	1.43	0.02	100.49	934
Hess Deep	3370-1328	1	Massive dike in gabbros	52.04	1.29	0.40	11.33	0.17	14.21	0.03	20.38	0.27	100.12	
Hess Deep	3370-1328	2	Massive dike in gabbros	52.61	0.58	0.17	24.64	0.34	20.57	0.00	1.34	0.01	100.25	942
Hess Deep	3370-1328	2	Massive dike in gabbros	52.47	0.83	0.25	11.11	0.17	14.41	0.04	20.51	0.26	100.06	
Hess Deep	3370-1328	3	Massive dike in gabbros	52.58	0.62	0.23	24.67	0.32	20.62	0.01	1.19	0.00	100.24	890
Hess Deep	3370-1328	3	Massive dike in gabbros	51.81	1.36	0.39	11.14	0.18	13.79	0.05	20.52	0.33	99.57	
Hess Deep	3370-1328	4	Massive dike in gabbros	52.02	0.59	0.24	25.85	0.37	19.69	0.00	1.26	0.02	100.05	898
Hess Deep	3370-1328	4	Massive dike in gabbros	52.36	1.25	0.45	12.06	0.22	13.69	0.04	20.38	0.29	100.72	
Hess Deep	3370-1328	5	Massive dike in gabbros	51.97	0.61	0.27	25.97	0.43	19.73	0.00	1.49	0.01	100.47	928
Hess Deep	3370-1328	5	Massive dike in gabbros	51.98	1.13	0.36	11.76	0.18	13.75	0.01	20.35	0.26	99.78	
Hess Deep	3370-1328	6	Massive dike in gabbros	52.01	0.57	0.24	26.12	0.37	19.74	0.03	1.28	0.02	100.38	912
Hess Deep	3370-1328	6	Massive dike in gabbros	51.81	1.29	0.35	12.85	0.19	13.56	0.00	19.16	0.25	99.46	
Hess Deep	3370-1328	7	Massive dike in gabbros	52.02	0.62	0.24	26.43	0.42	19.00	0.01	1.32	0.03	100.07	902
Hess Deep	3370-1328	7	Massive dike in gabbros	52.08	1.22	0.40	12.44	0.20	13.57	0.00	20.14	0.26	100.31	
Hess Deep	3370-1328	8	Massive dike in gabbros	51.95	0.54	0.25	26.84	0.46	19.08	0.00	1.34	0.01	100.47	902
Hess Deep	3370-1328	8	Massive dike in gabbros	52.04	1.15	0.35	12.27	0.20	13.62	0.01	20.23	0.25	100.10	
Hess Deep	3370-1328	9	Massive dike in gabbros	51.80	0.55	0.24	26.96	0.45	19.00	0.01	1.35	0.01	100.36	905
Hess Deep	3370-1328	9	Massive dike in gabbros	52.13	1.14	0.39	12.72	0.22	13.33	0.03	20.08	0.28	100.31	
Hess Deep	3370-1328	10	Massive dike in gabbros	52.17	1.25	0.48	11.41	0.22	13.81	0.04	20.27	0.32	99.98	910
Hess Deep	3370-1328	10	Massive dike in gabbros	52.28	0.55	0.22	24.81	0.30	20.70	0.01	1.25	0.00	100.10	
Hess Deep	3370-1328	11	Massive dike in gabbros	51.71	1.21	0.44	11.65	0.18	13.96	0.03	20.39	0.30	99.86	903
Hess Deep	3370-1328	11	Massive dike in gabbros	52.01	0.54	0.24	24.61	0.36	20.86	0.02	1.16	0.04	99.84	
Hess Deep	3370-1328	12	Massive dike in gabbros	51.71	0.92	0.25	11.45	0.24	14.24	0.04	20.29	0.28	99.44	905
Hess Deep	3370-1328	12	Massive dike in gabbros	52.14	0.63	0.20	24.41	0.37	21.07	0.05	1.16	0.02	100.06	
Hess Deep	3370-1328	13	Massive dike in gabbros	50.78	1.23	0.41	11.04	0.18	13.78	0.03	20.40	0.29	98.14	921
Hess Deep	3370-1328	13	Massive dike in gabbros	52.13	0.62	0.25	24.65	0.40	20.70	0.03	1.34	0.02	100.14	
Hess Deep	3370-1328	14	Massive dike in gabbros	49.72	1.06	0.34	12.79	0.28	13.20	0.01	19.69	0.30	97.39	936
Hess Deep	3370-1328	14	Massive dike in gabbros	50.48	0.51	0.22	26.74	0.49	19.11	0.00	1.37	0.05	98.97	
Hess Deep	3370-1328	15	Massive dike in gabbros	50.65	1.01	0.35	12.62	0.28	13.25	0.02	20.04	0.31	98.52	920
Hess Deep	3370-1328	15	Massive dike in gabbros	51.00	0.50	0.31	27.07	0.47	19.15	0.00	1.34	0.04	99.87	

Hess Deep	3370-1328	16	Massive dike in gabbros	50.45	0.92	0.32	13.22	0.33	13.32	0.01	19.98	0.29	98.85	917
Hess Deep	3370-1328	16	Massive dike in gabbros	50.96	0.50	0.28	26.17	0.52	18.90	0.00	1.33	0.02	98.67	
Hess Deep	3370-1328	17	Massive dike in gabbros	49.92	1.58	0.25	13.18	0.26	12.90	0.01	18.83	0.28	97.22	927
Hess Deep	3370-1328	17	Massive dike in gabbros	51.30	0.50	0.25	26.37	0.52	19.07	0.02	1.34	0.01	99.38	
Hess Deep	3370-1311	18	Massive dike in gabbros	51.81	0.59	0.26	27.10	0.49	18.83	0.03	1.48	0.00	100.57	825
Hess Deep	3370-1311	18	Massive dike in gabbros	51.94	1.17	0.31	12.82	0.34	13.60	0.01	19.95	0.23	100.36	
Hess Deep	3370-1311	19	Massive dike in gabbros	51.83	0.68	0.28	27.20	0.56	18.77	0.02	1.46	0.02	100.80	920
Hess Deep	3370-1311	19	Massive dike in gabbros	52.22	1.22	0.41	12.74	0.27	13.67	0.01	20.01	0.29	100.83	
Hess Deep	3370-1311	20	Massive dike in gabbros	52.04	0.61	0.30	27.00	0.56	18.78	0.00	1.46	0.01	100.76	935
Hess Deep	3370-1311	20	Massive dike in gabbros	51.55	1.28	0.39	13.76	0.30	13.77	0.00	18.78	0.22	100.05	
Hess Deep	3370-1311	21	Massive dike in gabbros	51.64	0.62	0.28	27.23	0.53	18.71	0.01	1.52	0.02	100.57	928
Hess Deep	3370-1311	21	Massive dike in gabbros	51.67	1.16	0.28	12.74	0.31	13.46	0.00	20.05	0.21	99.90	
Hess Deep	3370-1311	22	Massive dike in gabbros	51.79	0.65	0.31	27.24	0.51	18.73	0.02	1.48	0.02	100.75	919
Hess Deep	3370-1311	22	Massive dike in gabbros	51.66	1.39	0.47	12.39	0.30	13.23	0.02	20.18	0.25	99.87	
Hess Deep	3370-1311	23	Massive dike in gabbros	51.81	0.62	0.25	27.08	0.51	18.47	0.00	1.39	0.00	100.12	906
Hess Deep	3370-1311	23	Massive dike in gabbros	51.87	1.28	0.47	12.75	0.31	13.41	0.00	20.12	0.26	100.48	
Hess Deep	3370-1311	24	Massive dike in gabbros	51.74	0.62	0.20	27.21	0.48	19.00	0.00	1.24	0.00	100.49	880
Hess Deep	3370-1311	24	Massive dike in gabbros	52.08	1.35	0.41	12.03	0.26	13.23	0.03	20.67	0.29	100.34	
Hess Deep	3370-1311	25	Massive dike in gabbros	51.85	0.73	0.23	27.14	0.53	18.71	0.01	1.33	0.00	100.53	892
Hess Deep	3370-1311	25	Massive dike in gabbros	52.20	1.32	0.39	11.78	0.28	13.66	0.03	20.64	0.26	100.58	
Hess Deep	3370-1311	26	Massive dike in gabbros	51.82	0.73	0.21	27.42	0.51	18.46	0.02	1.32	0.01	100.51	899
Hess Deep	3370-1311	26	Massive dike in gabbros	52.06	1.37	0.48	13.00	0.30	13.63	0.02	19.87	0.26	100.99	
Hess Deep	3370-1311	27	Massive dike in gabbros	51.86	0.62	0.20	27.20	0.51	18.93	0.01	1.27	0.02	100.63	873
Hess Deep	3370-1311	27	Massive dike in gabbros	52.77	1.02	0.22	11.13	0.23	13.82	0.03	21.28	0.21	100.71	
Hess Deep	2213-1351	28	Sheeted dike	50.51	1.15	0.53	13.19	0.34	13.80	0.00	18.78	0.26	98.57	1008
Hess Deep	2213-1351	28	Sheeted dike	50.53	0.57	0.31	24.91	0.54	19.63	0.03	1.70	0.04	98.25	
Hess Deep	2213-1351	29	Sheeted dike	50.95	1.08	0.41	11.74	0.35	13.37	0.01	20.54	0.25	98.71	968
Hess Deep	2213-1351	29	Sheeted dike	51.32	0.54	0.32	25.24	0.52	19.97	0.04	1.62	0.04	99.61	
Hess Deep	2213-1351	30	Sheeted dike	51.24	0.99	0.36	12.66	0.37	13.47	0.02	19.30	0.30	98.71	1024
Hess Deep	2213-1351	30	Sheeted dike	50.43	0.61	0.33	25.26	0.56	19.67	0.00	1.86	0.00	98.72	
Hess Deep	2213-1351	31	Sheeted dike	51.04	1.16	0.46	12.27	0.32	13.50	0.01	20.14	0.30	99.19	1000
Hess Deep	2213-1351	31	Sheeted dike	51.31	0.55	0.25	25.06	0.62	19.89	0.04	1.80	0.02	99.53	
Hess Deep	2213-1351	32	Sheeted dike	50.59	1.20	0.45	13.23	0.32	13.81	0.04	18.99	0.25	98.87	1009
Hess Deep	2213-1351	32	Sheeted dike	51.30	0.53	0.29	25.43	0.53	19.59	0.00	1.80	0.00	99.47	
Hess Deep	2213-1351	33	Sheeted dike	50.73	1.00	0.32	11.49	0.31	13.64	0.00	20.53	0.19	98.21	956
Hess Deep	2213-1351	33	Sheeted dike	50.99	0.58	0.31	25.12	0.56	19.35	0.03	1.61	0.03	98.60	
Hess Deep	2213-1351	34	Sheeted dike	51.21	1.14	0.48	12.17	0.34	13.30	0.04	20.14	0.32	99.15	995
Hess Deep	2213-1351	34	Sheeted dike	51.51	0.59	0.32	25.10	0.57	19.63	0.00	1.86	0.01	99.61	
Hess Deep	2213-1351	35	Sheeted dike	50.58	1.13	0.42	13.36	0.30	13.75	0.00	18.71	0.24	98.49	1014
Hess Deep	2213-1351	35	Sheeted dike	51.16	0.58	0.30	25.29	0.57	19.58	0.00	1.79	0.04	99.32	
Oman Ophiolite	45KG01	1	Dike in contact aureole	52.17	1.12	0.32	12.91	0.29	13.63	0.06	20.86	0.28	101.70	960
Oman Ophiolite	45KG01	1	Dike in contact aureole	52.69	0.58	0.21	25.91	0.47	19.70	0.01	1.59	0.02	101.18	
Oman Ophiolite	45KG01	2	Dike in contact aureole	52.07	1.32	0.40	12.62	0.28	13.66	0.02	20.97	0.29	101.61	959
Oman Ophiolite	45KG01	2	Dike in contact aureole	52.98	0.75	0.20	26.43	0.46	19.71	0.00	1.70	0.03	102.33	
Oman Ophiolite	45KG01	3	Dike in contact aureole	51.77	1.25	0.44	13.07	0.26	13.23	0.01	20.73	0.25	101.01	996
Oman Ophiolite	45KG01	3	Dike in contact aureole	52.65	0.66	0.27	25.26	0.49	19.85	0.04	1.86	0.05	101.19	
Oman Ophiolite	45KG01	4	Dike in contact aureole	52.91	1.08	0.26	12.70	0.33	13.75	0.03	21.17	0.30	102.53	956
Oman Ophiolite	45KG01	4	Dike in contact aureole	52.98	0.33	0.15	26.19	0.41	19.56	0.02	1.73	0.01	101.41	

Oman Ophiolite	45KG01	5	Dike in contact aureole	52.34	0.57	0.21	25.16	0.52	19.57	0.04	1.84	0.03	100.27	989
Oman Ophiolite	45KG01	5	Dike in contact aureole	51.54	1.29	0.43	12.69	0.25	13.45	0.02	20.31	0.25	100.24	
Oman Ophiolite	45KG01	6	Dike in contact aureole	51.85	1.37	0.46	13.11	0.27	13.55	0.04	20.42	0.27	101.36	938
Oman Ophiolite	45KG01	6	Dike in contact aureole	52.18	0.62	0.23	25.59	0.52	19.34	0.02	1.75	0.03	100.28	
Oman Ophiolite	45KG01	7	Dike in contact aureole	52.57	1.18	0.40	13.72	0.29	13.47	0.02	20.71	0.31	102.67	987
Oman Ophiolite	45KG01	7	Dike in contact aureole	52.77	0.58	0.26	26.55	0.47	19.65	0.01	1.82	0.01	102.17	
Oman Ophiolite	46KG01	8	Dike in contact aureole	52.25	1.01	0.30	12.78	0.23	13.55	0.03	20.94	0.24	101.32	969
Oman Ophiolite	46KG01	8	Dike in contact aureole	52.07	0.61	0.20	26.31	0.42	18.98	0.00	1.79	0.04	100.43	
Oman Ophiolite	46KG01	9	Dike in contact aureole	52.42	0.81	0.17	12.99	0.26	13.17	0.00	22.53	0.19	102.56	935
Oman Ophiolite	46KG01	9	Dike in contact aureole	52.43	0.62	0.27	26.15	0.47	19.28	0.04	1.60	0.03	100.90	
Oman Ophiolite	46KG01	10	Dike in contact aureole	51.72	1.06	0.21	14.12	0.26	12.50	0.00	21.38	0.22	101.49	939
Oman Ophiolite	46KG01	10	Dike in contact aureole	52.52	0.49	0.11	26.61	0.47	19.18	0.02	1.51	0.03	100.98	
Oman Ophiolite	46KG01	11	Dike in contact aureole	51.90	0.98	0.20	13.53	0.24	12.57	0.00	21.79	0.24	101.46	870
Oman Ophiolite	46KG01	11	Dike in contact aureole	52.30	0.77	0.11	26.33	0.45	19.57	0.02	1.09	0.06	100.71	
Oman Ophiolite	48KG01	12	Basaltic xenolith	52.05	1.29	0.43	13.09	0.30	13.46	0.03	20.71	0.26	101.64	891
Oman Ophiolite	48KG01	12	Basaltic xenolith	52.75	0.37	0.09	25.30	0.50	20.30	0.00	1.15	0.00	100.49	
Oman Ophiolite	48KG01	13	Basaltic xenolith	52.07	0.83	0.25	12.90	0.28	13.59	0.00	20.71	0.25	100.95	946
Oman Ophiolite	48KG01	13	Basaltic xenolith	52.09	0.55	0.25	26.87	0.49	18.76	0.02	1.66	0.00	100.71	
Oman Ophiolite	48KG01	14	Basaltic xenolith	52.02	1.19	0.30	13.23	0.24	13.39	0.05	20.82	0.24	101.47	938
Oman Ophiolite	48KG01	14	Basaltic xenolith	51.96	0.65	0.15	26.65	0.54	18.70	0.04	1.56	0.01	100.30	
Oman Ophiolite	48KG01	15	Basaltic xenolith	52.22	1.04	0.21	12.38	0.22	13.29	0.06	21.36	0.29	101.07	955
Oman Ophiolite	48KG01	15	Basaltic xenolith	52.46	0.55	0.08	25.42	0.46	19.57	0.10	1.70	0.02	100.38	
Oman Ophiolite	51KG01	16	Dike in contact aureole	52.02	0.65	0.17	14.68	0.23	11.98	0.01	20.44	0.31	100.49	926
Oman Ophiolite	51KG01	16	Dike in contact aureole	51.28	0.38	0.17	28.18	0.47	16.47	0.02	1.62	0.01	98.61	
Oman Ophiolite	51KG01	17	Dike in contact aureole	51.11	0.96	0.24	15.31	0.25	11.69	0.00	19.36	0.30	99.24	950
Oman Ophiolite	51KG01	17	Dike in contact aureole	50.97	0.37	0.14	29.49	0.42	16.23	0.00	1.78	0.01	99.42	
Oman Ophiolite	51KG01	18	Dike in contact aureole	51.51	1.00	0.13	14.27	0.22	11.63	0.00	20.84	0.34	100.00	906
Oman Ophiolite	51KG01	18	Dike in contact aureole	51.33	0.38	0.17	29.47	0.43	16.61	0.00	1.60	0.02	100.02	
Oman Ophiolite	51KG01	19	Dike in contact aureole	51.62	0.53	0.18	14.47	0.20	11.54	0.03	21.28	0.29	100.16	964
Oman Ophiolite	51KG01	19	Dike in contact aureole	51.23	0.36	0.06	29.23	0.51	16.40	0.00	1.66	0.04	99.51	
Oman Ophiolite	51KG01	20	Dike in contact aureole	51.86	0.76	0.16	14.68	0.28	11.81	0.01	20.83	0.26	100.68	927
Oman Ophiolite	51KG01	20	Dike in contact aureole	51.54	0.15	0.10	29.25	0.46	16.50	0.00	1.72	0.02	99.73	
Oman Ophiolite	51KG01	21	Dike in contact aureole	50.51	0.84	0.09	14.90	0.25	11.06	0.04	20.75	0.23	98.76	963
Oman Ophiolite	51KG01	21	Dike in contact aureole	51.11	0.46	0.15	28.39	0.45	16.38	0.00	1.92	0.02	98.92	
Oman Ophiolite	75KG01	22	Dike cutting gabbro	52.95	0.50	0.09	12.16	0.33	12.94	0.00	22.45	0.27	101.72	862
Oman Ophiolite	75KG01	22	Dike cutting gabbro	51.65	0.42	0.12	27.50	0.50	18.05	0.04	1.33	0.01	99.67	
Oman Ophiolite	75KG01	23	Dike cutting gabbro	52.67	0.50	0.12	11.40	0.18	13.22	0.04	22.36	0.36	100.85	846
Oman Ophiolite	75KG01	23	Dike cutting gabbro	51.97	0.23	0.05	27.30	0.55	18.66	0.00	1.22	0.02	100.02	
Oman Ophiolite	75KG01	24	Dike cutting gabbro	52.70	0.27	0.10	11.72	0.23	13.49	0.00	21.87	0.34	100.74	826
Oman Ophiolite	75KG01	24	Dike cutting gabbro	51.98	0.36	0.16	27.27	0.50	18.78	0.00	1.03	0.02	100.11	
Oman Ophiolite	75KG01	25	Dike cutting gabbro	52.22	0.62	0.11	12.89	0.27	13.14	0.00	20.97	0.33	100.58	911
Oman Ophiolite	75KG01	25	Dike cutting gabbro	52.38	0.20	0.12	26.55	0.50	18.91	0.00	1.45	0.03	100.12	
Oman Ophiolite	84KG01	26	Dike cutting gabbro	53.28	0.73	0.21	15.30	0.37	12.47	0.01	19.00	0.31	101.75	918
Oman Ophiolite	84KG01	26	Dike cutting gabbro	52.62	0.29	0.12	31.08	0.76	16.48	0.00	1.58	0.03	102.98	
Oman Ophiolite	84KG01	27	Dike cutting gabbro	52.86	0.17	0.02	13.43	0.38	11.78	0.04	23.36	0.14	102.19	875
Oman Ophiolite	84KG01	27	Dike cutting gabbro	51.94	0.32	0.27	31.03	0.77	16.12	0.00	1.72	0.05	102.24	
Oman Ophiolite	84KG01	28	Dike cutting gabbro	52.84	0.69	0.16	14.50	0.32	11.98	0.03	21.26	0.31	102.14	891
Oman Ophiolite	84KG01	28	Dike cutting gabbro	52.39	0.35	0.13	30.97	0.81	16.54	0.00	1.57	0.03	102.78	

Oman Ophiolite	84KG01	29	Dike cutting	gabbro	53.14	0.41	0.15	14.18	0.37	11.89	0.01	22.41	0.25	102.82	910
Oman Ophiolite	84KG01	29	Dike cutting	gabbro	52.29	0.30	0.13	29.96	0.72	16.90	0.03	1.75	0.04	102.11	
Oman Ophiolite	84KG01	30	Dike cutting	gabbro	53.17	0.47	0.10	14.24	0.44	12.06	0.00	21.56	0.30	102.34	881
Oman Ophiolite	84KG01	30	Dike cutting	gabbro	51.67	0.32	0.14	31.05	0.70	16.20	0.00	1.53	0.00	101.63	
Oman Ophiolite	84KG01	31	Dike cutting	gabbro	51.99	0.63	0.14	14.10	0.30	11.51	0.00	21.94	0.21	100.95	878
Oman Ophiolite	84KG01	31	Dike cutting	gabbro	52.06	0.33	0.24	30.71	0.69	16.51	0.00	1.55	0.01	102.10	
Oman Ophiolite	84KG01	32	Dike cutting	gabbro	50.72	0.95	0.20	14.16	0.27	11.68	0.01	19.55	0.29	97.84	901
Oman Ophiolite	84KG01	32	Dike cutting	gabbro	49.74	0.33	0.14	30.66	0.73	15.21	0.00	1.55	0.01	98.36	
Oman Ophiolite	84KG01	33	Dike cutting	gabbro	51.51	0.37	0.19	13.96	0.42	11.50	0.05	21.11	0.20	99.33	890
Oman Ophiolite	84KG01	33	Dike cutting	gabbro	49.71	0.33	0.20	31.54	0.78	15.37	0.00	1.58	0.02	99.53	
Oman Ophiolite	84KG01	34	Dike cutting	gabbro	51.03	0.23	0.06	13.33	0.40	11.14	0.00	21.88	0.16	98.22	864
Oman Ophiolite	84KG01	34	Dike cutting	gabbro	49.50	0.34	0.35	31.09	0.76	15.69	0.00	1.48	0.03	99.25	
Oman Ophiolite	84KG01	35	Dike cutting	gabbro	51.25	0.27	0.12	15.62	0.34	10.84	0.01	20.81	0.22	99.49	859
Oman Ophiolite	84KG01	35	Dike cutting	gabbro	50.32	0.22	0.16	31.14	0.86	15.31	0.00	1.31	0.02	99.35	

[1]Mineral compositions were collected using the electron microprobe facilities at the University of Leicester and University of British Columbia; mineral compositions and calculated temperatures for samples analyzed at both facilities show <5% difference.
[2]Pito Deep sample was recovered from Jason dive 121.

Table DR2. Amphibole and plagoclase compositions and calculated temperatures of recrystallization

Location	Sample no.[2]	Outcrop	SiO_2	Al_2O_3	TiO_2	FeO	MnO	MgO	Cr_2O_3	CaO	Na_2O	K_2O	Total	X Ab[3]	Temp (°C)
Pito Deep	021705-1917	Massive outcrop	49.34	3.92	0.68	16.55	0.20	13.48	0.00	10.91	0.53	0.08	95.68	0.55	711
Pito Deep	021705-1917	Massive outcrop	49.20	4.83	0.82	16.57	0.26	13.37	0.00	11.14	0.63	0.09	96.90	0.43	753
Pito Deep	021705-1917	Massive outcrop	47.12	5.98	1.21	17.05	0.22	12.66	0.02	10.81	1.07	0.18	96.33	0.48	797
Pito Deep	021705-1917	Massive outcrop	47.03	5.40	1.21	16.21	0.24	12.96	0.00	10.95	0.99	0.15	95.16	0.44	771
Pito Deep	021705-1917	Massive outcrop	46.80	6.02	1.28	17.88	0.28	12.37	0.05	10.68	1.06	0.19	96.60	0.41	790
Pito Deep	021705-2035	Massive outcrop	46.41	6.15	1.05	16.83	0.23	12.54	0.03	11.01	1.03	0.14	95.42	0.38	828
Pito Deep	021705-2035	Massive outcrop	46.82	6.09	1.30	16.67	0.25	12.57	0.02	10.95	1.22	0.18	96.07	0.39	827
Pito Deep	021705-2353	Dike in gabbro	46.35	6.54	1.32	15.98	0.19	12.99	0.00	11.14	1.32	0.18	96.02	0.41	853
Pito Deep	021705-2353	Dike in gabbro	43.32	8.48	1.75	18.00	0.16	11.34	0.03	10.73	1.73	0.29	95.84	0.60	882
Pito Deep	021705-2353	Dike in gabbro	45.90	7.17	1.47	17.30	0.13	12.03	0.04	11.25	1.43	0.23	96.95	0.49	853
Pito Deep	021705-2353	Dike in gabbro	44.54	7.50	1.46	18.06	0.16	11.24	0.00	10.91	1.49	0.29	95.65	0.45	874
Pito Deep	021805-0008	Dike in gabbro	51.09	3.16	0.17	16.19	0.22	14.48	0.03	10.44	0.59	0.06	96.44	0.59	635
Pito Deep	021805-0008	Dike in gabbro	48.80	4.55	0.79	16.70	0.17	13.37	0.02	11.01	0.81	0.10	96.33	0.40	764
Pito Deep	021805-0008	Dike in gabbro	47.30	5.64	1.05	15.90	0.21	13.68	0.02	10.72	1.22	0.11	95.86	0.41	828
Pito Deep	021805-0008	Dike in gabbro	48.15	4.79	0.84	16.43	0.22	13.76	0.01	10.78	0.98	0.15	96.11	0.39	806
Hess Deep	3370-1311	Dike in gabbro	49.69	5.73	0.44	16.89	0.20	12.98	0.06	10.84	0.98	0.14	97.95	0.51	729
Hess Deep	3370-1311	Dike in gabbro	50.53	5.05	0.37	15.72	0.16	13.87	0.01	11.24	0.91	0.14	98.01	0.51	730
Hess Deep	3370-1311	Dike in gabbro	49.49	5.41	0.62	17.35	0.18	12.77	0.04	10.76	0.97	0.19	97.78	0.53	737
Hess Deep	3370-1311	Dike in gabbro	48.99	5.87	0.51	16.98	0.19	12.87	0.02	11.05	1.03	0.17	97.68	0.53	747
Hess Deep	3370-1311	Dike in gabbro	47.43	7.05	0.38	18.27	0.16	11.47	0.02	10.99	1.49	0.31	97.57	0.52	772
Oman ophiolite	45KG01	Dike in contact aureole	43.84	8.91	2.76	15.02	0.15	12.85	0.06	11.23	2.40	0.33	97.53	0.49	886
Oman ophiolite	45KG01	Dike in contact aureole	44.39	8.87	2.69	15.34	0.16	12.88	0.04	11.32	2.43	0.33	98.45	0.48	888
Oman ophiolite	46KG01	Dike in contact aureole	44.14	9.06	2.47	15.83	0.18	12.49	0.07	11.19	2.40	0.41	98.23	0.43	905
Oman ophiolite	46KG01	Dike in contact aureole	44.49	8.77	2.42	15.37	0.18	12.91	0.00	11.14	2.40	0.41	98.09	0.38	911
Oman ophiolite	48KG01	Basaltic xenolith	45.32	8.92	2.30	15.50	0.21	13.06	0.03	11.30	2.38	0.38	99.39	0.47	896
Oman ophiolite	48KG01	Basaltic xenolith	45.34	8.74	2.19	14.86	0.15	13.69	0.05	11.31	2.45	0.38	99.15	0.39	901
Oman ophiolite	48KG01	Basaltic xenolith	44.30	9.16	2.58	15.09	0.19	13.00	0.01	11.38	2.56	0.40	98.66	0.45	906
Oman ophiolite	48KG01	Basaltic xenolith	44.94	9.19	2.27	15.61	0.16	12.77	0.05	11.29	2.33	0.39	98.98	0.27	936
Oman ophiolite	84KG01	Dike cutting gabbro	46.61	5.82	1.09	18.27	0.23	11.96	0.02	10.84	1.31	0.48	96.62	0.79	672

[1]Mineral compositions were collected using the electron microprobe facilities at the University of Leicester and University of British Columbia; mineral compositions and calculated temperatures for samples analyzed at both facilities show <5% difference.
[2]Pito Deep samples are from Jason transect 121.
[3]Albite component of plagioclase.