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Introduction

This newsletter reports the classification of 615 meteorites collected on the bare ice field near Yamato, Belgica, and Sør Rondane Mountains. Yamato (Y)-79, Y-92, Y-98, Y00 meteorites were collected by JARE (Japanese Antarctic Research Expedition)-29 (1987-1989), JARE-33 (1992), JARE-39 (1998-1999), and JARE-41 (1999-2001), respectively, and Belgica (B)-98 meteorites by JARE-39. Asuka (A)-87 and A-88 meteorites were collected by the JARE-29, A-90 meteorites by JARE-30 (1989-1991) on the bare ice field around the Sør Rondane Mountains. This newsletter includes 1 CM and 2 CR chondrites, 1 ureilite, 1 acapulcoite, 1 winonaite, 18 HED meteorites, and 2 shergottites.

Classification

Classification was made with visual inspection of meteorites and petrographic observations of polished thin sections as well as compositions of major minerals (olivine, pyroxene, and plagioclase) obtained by an electron microprobe analyzer (EPMA) (JEOL JXA 8800 at NIPR). Typical numbers of olivine analysis for ordinary chondrites are ~20-30. Table 1 presents the results of classifications (groups, averages and ranges of Fs and Fa values, fracturing and weathering degrees). Figure 1 presents descriptions and photomicrographs of selected meteorites. Macroscopic descriptions were made by H. Kojima, H. Kiso, and T. Ojima.

Sample requests

We welcome requests for samples from research scientists from all over the world. All sample requests will be reviewed in a timely manner. Please use the request form (<http://yamato.nipr.ac.jp>) and send it to the curators by email (curator@nipr.ac.jp).

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Table 1. List of meteorites classified in this volume.

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y-790045	H5	22.98	20.0	18.6-23.9	18.0	16.2-21.3	B/C	A/B	
Y-790129	H4	12.11	19.1	17.7-22.8	16.8	16.1-18.4	C	A	
Y-790134	H5	51.20	19.3	17.9-21.0	17.2	15.4-19.5	C	A/B	
Y-790136	L3	16.76	23.9	22.5-26.2	20.4	18.3-24.3	B	A	Shock vein
Y-790137	L4	27.68	23.8	22.8-25.3	20.0	17.2-21.5	B	A	Shock vein
Y-790139	H5	29.77	19.1	18.3-20.9	17.0	15.7-19.2	B/C	A	
Y-790140	H5	13.51	19.3	18.2-22.0	17.2	16.4-18.7	B/C	A	
Y-790141	H6	25.78	19.6	18.4-21.1	17.6	13.7-24.1	B	A/B	
Y-790145	H5	18.69	19.2	17.1-21.8	17.0	15.1-18.8	B/C	A	
Y-790147	L4	54.26	23.9	22.3-26.8	20.3	18.4-24.3	A/B	A	
Y-790163	L3	15.42	23.6	11.6-31.2	15.7	1.9-25.7	C	A/B	
Y-790170	LL	65.95	31.3	28.6-34.2	24.8	24.2-26.0	B	A/B	Melt breccia
Y-790176	H5	43.75	19.4	17.6-21.5	17.4	16.2-19.8	C	A/B	
Y-790183	H5	18.71	19.4	18.5-21.4	17.3	16.2-19.2	B	A/B	
Y-790193	H5	71.35	19.8	18.1-22.4	17.0	16.0-18.0	B	A/B	
Y-790196	H5	17.34	19.6	18.7-21.6	17.8	15.8-23.0	A/B	A/B	
Y-790197	H5	11.14	19.2	18.2-19.8	17.1	15.8-19.2	B	A	
Y-790200	H5	20.15	19.6	18.0-23.7	17.5	15.9-22.0	B	A/B	
Y-790201	H5	18.30	19.0	17.4-20.5	16.8	15.3-18.7	B	A/B	
Y-790204	H5	18.07	19.5	17.7-22.4	17.2	15.5-21.5	B	A/B	
Y-790246	H5	18.40	19.4	18.7-21.8	17.4	15.4-21.4	B	A/B	Shock vein
Y-790252	H5	19.43	18.5	17.4-20.1	17.5	15.8-20.1	B	A	
Y-790255	H6	51.27	20.4	19.2-24.5	18.5	15.7-22.5	A/B	A/B	
Y-790259	H5	18.93	19.7	17.9-23.1	17.4	15.9-23.0	B/C	A	
Y-790392	LL	21.99	29.1	26.3-31.1	23.4	22.0-25.4	A/B	A	Melt breccia
Y-790414	LL	67.01	29.1	27.6-21.2	24.8	21.9-29.1	A/B	A/B	Melt breccia
Y-790451	H3	23.31	18.6	6.7-22.0	16.8	11.4-27.9	A/B	A	
Y-790457	H5	10.86	19.2	18.0-21.7	17.2	15.0-22.5	B/C	A	
Y-790945	L6	78.53	25.4	24.3-26.4	21.3	20.1-22.3	B	A	Melt pocket
A-881048	H	2726.0	20.3	19.0-21.3	17.1	16.4-19.6	B	A	Melt breccia
A-881060	LL6	3089.0	30.7	24.3-33.7	24.6	23.1-25.6	A	B	Breccia
A-881094	L5	1767.2	24.9	23.6-26.2	21.0	20.0-23.8	A	B	
A-9008	H3	11.94	19.7	11.3-23.0	16.3	6.0-22.0	B	A	Genomict breccia
A-9010	L6	50.49	26.2	23.7-28.8	22.2	21.0-26.4	B	A/B	Shock vein, maskelynite
A-9011	L6	31.15	25.4	23.7-26.4	21.8	19.9-25.3	A	A/B	Shock vein, maskelynite
A-9015	H5	10.94	19.9	18.7-24.0	17.7	16.0-21.7	B	A	
A-9016	L6	15.92	25.7	23.3-30.6	21.3	19.2-22.1	B	A	Shock vein, maskelynite

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
A-9017	L6	41.73	25.6	23.2-29.5	21.9	20.2-26.4	B	A	Shock vein, maskelynite
A-9018	H5	38.06	19.3	18.4-20.5	17.6	16.0-22.4	B	A/B	
A-9019	H5	19.69	19.8	17.7-23.7	17.7	15.8-21.9	C	A/B	
A-9020	H4	10.62	19.3	18.6-20.7	17.6	16.5-23.5	B	A	
A-9022	L6	10.58	25.5	24.0-27.4	22.6	21.3-24.5	A	A	Maskelynite
A-9024	L6	17.06	25.4	23.5-27.9	22.1	20.3-24.1	B	A	Shock vein, maskelynite
A-9025	L6	15.59	25.6	23.1-27.0	22.8	21.2-24.9	B	A	Shock vein, maskelynite
A-9026	L6	21.47	25.4	24.3-28.4	21.8	20.6-23.0	B/C	A	Maskelynite
A-9028	H5	112.2	18.7	17.6-19.8	16.9	16.0-23.1	B/C	A	
A-9032	H5	128.9	19.2	18.1-21.1	16.9	15.2-20.0	C	B	
A-9033	H4	69.39	19.3	17.9-21.5	17.2	16.1-19.3	B/C	B	
A-9035	H3	128.7	19.8	15.8-25.1	17.1	12.4-22.2	B	A/B	
A-9036	H3	23.37	19.7	6.3-30.6	17.6	10.3-30.3	A/B	A/B	
A-9037	H3-4	14.35	19.3	9.9-21.7	16.0	5.5-20.1	A	A/B	Genomict breccia
A-9039	H3-5	61.74	19.2	12.6-22.5	16.7	9.5-19.4	A/B	A	Genomict breccia, shock vein
A-9040	H3	42.57	19.4	9.6-31.4	16.3	6.0-20.8	C	B	
A-9041	H5	20.20	19.5	18.4-20.9	17.8	16.4-20.7	B/C	A	
A-9042	H3	20.25	20.4	18.2-24.5	16.5	7.0-21.6	A/B	A	
Y-9201	H6	53.06	18.8	17.7-19.6	16.6	15.4-17.2	C	A	
Y-9203	L6	524.7	25.6	24.9-27.8	21.4	20.7-23.1	A/B	A	
Y 980727	Euc	13.56					-	A	Unbrecciated, Wo6.3-36.2Fs35.9-5.
Y 981658	CM	4.113	3.0	0.2-53.8	0.8	0.5-1.2	-	A	
Y 982691	H6	6.969	18.8	18.0-20.8	17.1	16.0-21.2	B/C	A	
Y 982694	L6	3.712	25.5	24.3-28.8	21.4	20.7-24.4	B	A	Maskelynite
Y 983160	LL	19.89	30.4	26.8-32.5	24.4	23.2-25.1	A	A	Melt breccia
Y 983248	Win	9.809	5.3	2.2-8.2	4.4	2.0-11.1	A	A	Shock vein, maskelynite
Y 983294	L5	5.039	25.5	24.3-28.6	22.1	20.4-27.0	A	A	
Y 983295	LL3	61.88	27.3	26.0-29.0	22.5	21.2-24.7	B	B	
Y 983296	LL3	6.809	27.6	26.3-29.7	22.8	22.0-24.5	B	A/B	
Y 983297	H4	48.96	18.6	17.1-22.3	16.4	15.0-17.6	B/C	A	
Y 983299	H4	75.19	17.9	16.9-20.6	15.9	14.5-18.2	B/C	A	
Y 983300	LL6	44.51	31.5	29.7-34.5	25.2	23.7-26.7	A	B	
Y 983353	Euc	72.59			59.2	56.8-61.0	-	A	Unbrecciated, An74.3-84.5
Y 983763	H4/5	7.177	18.8	17.4-22.0	16.4	15.0-19.5	C	A/B	
Y 984117	Dio	27.77			24.4	22.4-26.3	-	A	Type A
B 9801	L6	18.25	25.4	24.3-27.2	21.6	20.6-23.5	A	A	Maskelynite
B 9804	LL5	64.74	27.5	26.9-27.9	22.5	21.3-23.3	A/B	B	Breccia, shock vein

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
B 9806	LL4-5	16.66	28.2	27.4-30.7	23.2	22.1-24.2	A/B	A/B	Genomict breccia
B 9807	LL3-5	12.37	27.6	26.7-28.6	23.2	22.0-24.8	A	A/B	Genomict breccia, shock vein
B 9808	LL4-5	14.92	28.0	26.5-28.6	23.2	22.6-23.7	A	A/B	Genomict breccia
B 9809	LL5	10.74	28.1	27.6-29.2	23.1	21.8-21.8	A/B	A	Breccia, shock vein
B 9810	LL5	11.61	28.2	27.3-30.5	23.1	22.1-24.3	A/B	A/B	Breccia, shock vein
B 9811	LL5	9.477	28.0	27.0-29.2	23.2	22.0-25.0	A	A	Breccia
B 9812	LL5	4.709	27.7	26.4-28.9	23.2	22.1-24.0	A	A/B	Breccia
B 9814	LL4	4.460	28.0	27.3-28.9	23.0	21.9-24.1	A/B	A	Breccia
B 9815	LL5	4.554	28.0	26.7-28.7	23.1	22.3-23.9	A	A	Breccia
B 9816	LL5	4.406	27.8	26.9-28.8	23.0	21.6-23.8	A/B	A	
B 9817	LL5	3.446	28.0	27.3-28.7	23.1	22.6-24.0	A/B	A	
B 9818	LL5	3.830	27.9	26.6-28.6	23.2	22.1-24.0	B	A	Shock vein
B 9820	L6	8.073	25.5	24.4-28.0	21.9	20.6-23.1	B	A	Shock vein, maskelynite
B 9821	L6	8.685	25.6	24.6-28.4	21.9	19.9-24.9	B	A	Shock vein
B 9822	L6	295.5	25.1	23.4-26.4	21.3	20.1-24.6	B	A	Shock vein
B 9823	H4	9.590	19.1	17.8-22.4	16.8	14.7-21.4	B/C	A	
B 9825	H5	98.66	19.4	18.2-20.7	16.8	15.2-18.1	B/C	A	
B 9826	L5	959.2	24.4	23.6-25.5	20.3	19.4-20.9	A	A	
B 9827	L5	415.8	24.5	23.6-25.2	20.4	18.7-21.3	A	A	
B 9828	H4	11.06	18.3	16.3-25.5	16.1	14.8-19.8	B/C	A	
B 9829	H4	49.46	17.8	16.7-20.0	15.7	14.7-17.9	B/C	A	
Y 000541	H5-6	14.21	20.6	18.2-28.1	18.2	16.6-21.8	A/B	A	Genomict breccia
Y 001946	H4	10.95	18.9	18.2-19.7	16.7	15.9-18.9	B	A	
Y 001949	H5	6.525	19.1	18.6-19.6	17	15.6-19.6	C	A	
Y 001951	H3	6.763	18.3	17.2-20.5	16.6	14.4-18.8	B	A	
Y 001952	H	90.41	18.8	17.6-19.7	16.2	14.1-17.6	B	B	Melt breccia, darkened
Y 001953	H3-5	17.92	18.6	16.3-32.7	15.1	4.8-22.7	B	A	Genomict breccia
Y 001955	H3	13.40	17.9	16.9-19.0	16.1	14.9-19.3	B	A/B	
Y 001961	L4	5.511	25.9	24.3-29.7	21.9	20.2-25.3	B	A	
Y 001964	H4	97.57	18.4	17.6-19.2	16.1	15.1-17.0	A	A	Darkened
Y 001966	H4	88.93	18.7	17.6-20.4	17.2	15.9-20.7	B	A/B	
Y 001967	H5	42.98	19.5	18.3-20.1	16.8	16.2-17.2	C	A/B	
Y 001970	L6	7.779	25.4	22.9-27.8	22	20.8-24.4	B	A	Shock vein, maskelynite
Y 001983	L6	22.08	24.6	23.4-29.0	20.7	19.8-24.3	B	A/B	
Y 001984	H4	14.10	18.9	18.2-20.6	16.6	15.4-19.1	B	A	
Y 001997	LL4	13.97	27.3	26.5-28.5	22.4	20.2-26.1	A	A/B	
Y 002000	Euc	22.39			61.3	59.7-62.8	-	A/B	Breccia

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 002001	H5	5.791	18.7	17.5-20.3	16.7	15.9-19.7	C	A	
Y 002003	H3-5	8.282	16.8	1.3-20.7	16.1	7.8-21.2	B	A/B	Genomict breccia
Y 002006	H4	21.38	19.0	17.2-27.0	16.7	14.8-19.8	A	A	
Y 002009	H5	11.07	20.2	19.2-21.7	17.4	16.4-18.1	B	A/B	
Y 002017	L6	5.014	25.6	24.5-28.9	21.9	20.1-25.2	B	A	Shock vein, maskelynite
Y 002042	H4	7.813	18.8	17.3-20.9	16.5	12.8-21.2	B	A/B	
Y 002043	H	6.151	19.1	17.8-20.2	17.5	14.7-22.5	B	A/B	Melt breccia
Y 002049	H6	6.102	18.6	18.0-19.4	16.7	15.7-18.9	B	A	
Y 002052	H4	10.35	18.8	18.1-20.7	16.3	15.2-18.0	B	A/B	
Y 002056	H4	6.852	17.8	16.4-19.7	15.6	7.8-21.8	B	A/B	
Y 002063	H4	5.373	19.5	17.9-22.7	16.9	15.0-18.7	B	A	
Y 002065	H4	15.04	19.3	18.1-21.4	16.8	15.3-19.2	B	A	
Y 002066	H	5.503	17.1	11.3-20.1	14.7	10.1-17.2	B	A	Melt breccia
Y 002070	H3	71.57	18.7	17.8-19.4	16.3	15.1-17.5	B/C	A/B	
Y 002071	L6	18.43	24.8	23.6-25.9	21.5	19.4-23.7	B	A	Shock vein, maskelynite
Y 002074	H6	8.591	18.6	17.7-21.0	16.6	15.9-20.2	B	A/B	Breccia
Y 002075	L6	6.271	25.4	24.1-27.3	21.4	20.7-22.8	B	A	
Y 002077	H4	15.01	19.1	18.0-22.4	17.0	15.9-21.6	B	A/B	
Y 002081	H6	119.1	18.3	17.3-19.2	16.3	15.7-17.1	B/C	A	
Y 002084	L5	6.554	25.2	24.0-27.5	21.0	20.4-22.5	B	A	
Y 002088	H4	9.787	19.0	17.8-20.2	16.9	16.0-17.7	B	A	
Y 002090	L6	44.87	24.9	24.4-26.3	20.8	20.1-21.6	A	A/B	
Y 002092	L6	5.058	25.9	24.2-30.0	21.5	20.1-24.2	B	A	
Y 002093	L6	8.663	24.9	22.9-26.2	20.9	20.3-21.6	B	A	
Y 002096	H4	6.911	19.7	17.9-22.1	16.9	15.7-18.2	B	A	
Y 002097	L3	5.697	25.9	22.3-30.0	19.1	15.5-23.1	B	A	
Y 002101	H5	7.482	19.0	18.0-20.1	17.1	16.1-20.3	A/B	A	
Y 002102	H4	6.604	19.8	18.7-23.3	17.2	16.5-17.9	B/C	A	
Y 002103	H4	6.752	18.2	9.6-19.3	16.5	10.6-18.1	B	A/B	
Y 002105	H4	5.933	19.3	18.3-19.9	17.0	15.3-18.1	A/B	A/B	
Y 002116	L6	12.58	24.6	23.1-27.9	20.5	19.4-23.4	A	A	
Y 002136	L4	8.075	23.2	21.7-25.2	19.8	18.2-23.4	A	A	
Y 002140	H4	9.504	18.8	17.9-20.6	16.8	16.0-18.4	B	A/B	
Y 002141	H4	7.999	19.8	18.1-24.5	16.9	11.4-20.8	B	A	
Y 002145	L4	5.016	25.5	20.7-28.0	19.1	10.9-22.6	B	A	
Y 002146	L4	7.525	24.9	23.8-27.5	21.0	20.3-22.0	B	A	
Y 002150	H5	6.778	18.9	17.7-21.0	17.0	15.8-19.9	B	A	Shock vein

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 002152	H3	14.70	18.3	17.2-19.4	17.8	10.6-27.9	C	B	
Y 002156	H4	24.20	15.8	14.8-16.7	14.4	13.2-16.1	C	A	
Y 002158	H4	46.98	18.1	17.2-19.6	15.8	14.9-16.5	B	A/B	
Y 002159	LL6	26.68	29.5	28.2-30.1	24.2	24.0-24.6	A	A/B	
Y 002160	LL6	427.4	29.4	28.5-30.1	23.8	23.6-24.1	A	B	
Y 002163	H4	16.57	19.2	17.1-21.8	16.5	15.3-17.9	B/C	A	
Y 002164	H4	6.254	18.8	17.1-19.8	17.0	15.8-19.5	C	A/B	
Y 002165	H6	8.479	19.6	18.6-20.8	17.2	15.6-18.1	C	A	
Y 002166	H5	10.82	18.6	17.9-19.5	16.7	14.8-19.3	C	A	
Y 002167	H4	38.96	18.6	17.7-21.0	16.2	14.9-17.4	B/C	A	
Y 002175	H4	15.61	18.5	17.4-21.0	16.3	14.5-17.3	C	A	
Y 002176	H6	5.434	20.2	18.2-22.0	17.6	15.0-20.2	B	A/B	Breccia
Y 002189	H4	10.01	19.3	17.9-21.6	16.6	15.5-19.0	C	A	Shock vein
Y 002192	Sher	32.07					-	A/B	Wo10.2-35.2Fs22.1-50.4, An42.8-5
Y 002199	L4	14.58	23.0	21.4-26.4	20.1	18.0-22.7	B	A	
Y 002202	H4	7.947	19.2	16.4-21.4	17.3	15.7-23.0	C	A	
Y 002203	H4	11.22	19.4	18.1-21.6	17.2	15.5-20.0	B	A	
Y 002204	H4	217.9	17.9	17.3-18.5	15.8	14.7-18.4	A/B	B	
Y 002205	H4	113.8	19.3	18.4-20.1	17.3	16.6-19.5	B	A/B	
Y 002206	H5	116.6	19.3	18.3-22.7	17.3	16.5-19.6	B/C	A	
Y 002207	H4	16.53	19.6	18.9-21.0	17.2	16.3-18.5	B/C	A	Shock vein
Y 002210	H4	7.094	18.8	17.7-21.7	17.0	15.9-20.5	B	A	
Y 002212	L4	7.918	23.4	22.5-24.7	19.9	19.0-21.6	A	A	
Y 002213	L6	18.97	24.4	23.1-26.5	20.9	19.6-23.5	B	A	Breccia
Y 002214	L6	105.1	25.1	24.1-25.9	21.0	19.8-22.4	A	A/B	
Y 002217	L6	16.65	25.6	24.0-27.3	21.6	21.0-23.7	B	A	Shock vein
Y 002218	H4	6.046	19.8	17.5-25.6	17.3	16.2-21.1	C	A	
Y 002219	H4	26.59	19.2	17.7-23.0	17.1	16.0-18.8	B/C	A	
Y 002220	H4	47.58	18.5	17.0-20.8	16.6	15.1-20.2	C	A	
Y 002221	H4	15.22	18.5	17.1-21.2	16.5	14.7-21.6	C	A	
Y 002222	H4	469.0	18.8	18.1-20.2	17.1	15.3-21.0	B/C	B	
Y 002223	H5	68.43	20.2	18.9-22.2	17.5	16.2-19.8	B	A	
Y 002225	H5	30.38	18.8	17.3-21.9	16.6	15.1-19.0	B/C	A	
Y 002227	H4	7.862	20.1	18.5-24.3	17.7	16.0-20.0	C	A/B	
Y 002231	L5-6	10.73	25.2	22.7-28.3	20.7	15.0-22.6	A/B	A	Genomict breccia
Y 002232	H4	18.78	18.8	17.8-21.6	16.7	15.4-18.1	B	A	
Y 002242	H4	9.399	20.0	19.2-22.0	17.5	16.7-19.5	B	A	

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 002243	H4	82.58	19.0	18.1-20.9	16.6	15.7-18.6	A/B	A/B	
Y 002244	L4	6.668	23.4	21.7-25.2	20.3	19.0-23.3	B	A	
Y 002246	H5	18.49	19.9	18.8-23.0	17.7	16.1-22.2	C	A	
Y 002247	H4	10.52	19.9	19.1-21.7	17.5	16.5-19.1	B	A	
Y 002251	H4	5.670	18.7	17.5-20.1	16.8	15.0-19.0	B	A	
Y 002256	LL	6.843	30.4	29.2-31.9	23.7	23.6-23.8	A	A	Breccia, recrystallized
Y 002257	H4	42.76	18.0	17.1-21.7	16.0	13.8-20.6	A	A/B	Shock vein
Y 002259	H5	7.638	18.7	16.9-20.1	16.7	15.7-21.0	B	A	
Y 002260	H4	9.928	19.7	18.6-22.6	17.4	15.2-20.3	B	A	
Y 002261	L4	12.88	25.2	23.8-29.0	21.5	21.1-22.0	B	A	
Y 002263	H4	5.729	19.0	17.8-22.7	16.6	14.8-20.2	B	A	
Y 002264	L5	74.98	26.6	25.5-29.1	20.8	19.3-21.9	B	A/B	
Y 002270	H4	8.198	18.4	17.1-19.4	16.9	13.8-20.4	B	A	
Y 002271	H4	5.072	18.8	17.8-21.3	16.8	14.7-21.3	B	A	
Y 002272	H4	9.271	18.7	17.4-22.5	16.7	14.8-19.8	B	A	
Y 002284	H4	8.817	19.4	17.6-21.5	17.7	16.6-19.1	B/C	A	
Y 002293	H6	8.115	20.3	18.7-23.6	18.3	16.5-22.7	B	A	
Y 002294	L5	13.74	25.5	23.9-27.7	21.9	20.9-24.7	C	A	
Y 002295	H4	9.961	19.2	18.4-20.3	17.3	15.7-19.8	B	A	
Y 002298	H6	11.95	18.6	17.2-19.9	16.5	15.4-17.2	B/C	A	
Y 002309	H4	28.71	18.9	17.9-22.0	16.4	14.8-21.0	B	A/B	
Y 002310	H4	13.93	18.9	18.0-19.6	16.4	15.4-17.4	B	A/B	
Y 002311	H4	10.84	19.2	18.2-22.1	16.7	15.5-18.1	B	A/B	
Y 002313	H4	218.0	19.0	17.9-20.9	16.7	15.2-19.5	B	B	
Y 002314	H4	8.779	19.4	18.5-21.8	17.1	16.3-19.9	B	A/B	
Y 002315	H4	50.87	19.1	17.7-21.4	16.7	15.7-19.0	B	B	
Y 002316	H4	12.15	19.3	17.9-22.2	16.6	15.8-18.4	B	A/B	
Y 002317	H4	10.44	18.8	17.9-19.7	16.9	16.1-20.1	B	A/B	
Y 002318	H4	5.925	19.6	18.5-23.9	17.4	16.4-20.8	B	A	
Y 002321	H4	5.058	19.4	17.8-23.7	16.9	16.1-17.7	B	A/B	
Y 002322	H6	36.08	19.8	18.7-21.1	17.3	16.3-19.0	A/B	A	
Y 002334	H6	5.220	19.5	18.6-22.0	16.8	15.1-17.8	A/B	A	
Y 002336	H4	11.75	19.4	17.9-23.1	17.6	15.5-20.7	B	A	
Y 002346	H4	14.69	19.1	17.5-21.9	16.8	15.0-18.5	B	B	
Y 002347	H4	5.673	19.3	17.7-22.0	17.4	15.0-21.4	B	A/B	
Y 002349	H5	5.674	20.0	18.7-21.0	17.5	15.7-19.5	B	A	
Y 002350	H6	20.86	19.7	18.4-24.3	17.1	16.5-18.1	B	A/B	

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 002352	How	31.25			38.8	22.6-62.3	A	A	
Y 002354	H4	37.41	18.9	18.3-19.9	16.4	15.9-17.4	B	B	
Y 002355	H4	280.0	18.7	18.0-19.6	16.7	15.3-18.6	B	B/C	
Y 002358	H4	20.56	19.0	17.6-19.7	17.0	16.0-19.2	A/B	A/B	
Y 002359	H4	193.9	19.0	18.3-20.5	16.7	15.3-18.2	B	B	
Y 002360	H6	5.219	18.9	18.0-19.6	16.9	15.3-17.5	A/B	A	
Y 002361	H4	84.06	18.9	17.6-20.2	17.1	15.7-20.6	B	A/B	
Y 002362	H4	56.39	18.9	17.9-20.9	16.8	15.1-19.3	A/B	B	
Y 002364	H4	31.48	19.2	18.1-21.1	16.7	16.0-17.3	A/B	A/B	
Y 002365	How	86.15			30.0	22.7-41.2	A	A/B	
Y 002370	H6	23.07	19.3	18.7-21.3	17.1	16.1-19.4	A	A	
Y 002379	H4	7.833	19.5	17.8-22.8	17.8	16.0-20.9	B	A/B	
Y 002382	H4	6.727	19.9	17.8-23.6	17.4	15.3-23.6	B	A	
Y 002389	L4	5.000	25.5	23.5-28.1	21.7	19.8-26.2	B	A	Shock vein
Y 002393	H5	29.68	19.1	17.6-27.0	16.3	15.0-18.9	B	A/B	
Y 002394	H5	12.38	18.7	17.5-21.3	16.5	15.2-17.6	B	A	
Y 002396	H5	38.42	18.6	17.4-21.4	16.5	15.3-22.1	B	A/B	
Y 002403	Aca	10.50	11.1	9.7-14.0	10.5	9.6-11.3	B	A/B	An13.8-23.4
Y 002404	L3	6.877	25.3	9.6-33.7	15.3	5.6-28.8	B	A	
Y 002406	H4	5.446	19.5	18.4-22.3	17.6	16.4-21.1	B	A	
Y 002407	L3	26.09	24.3	23.4-25.2	19.8	18.4-20.7	B	A/B	
Y 002410	H4	15.49	19.4	18.6-20.8	17.3	16.2-20.7	A	A	
Y 002411	H4	6.665	18.7	17.2-21.3	16.5	15.2-17.3	A	A	
Y 002413	L6	7.237	26.3	25.4-28.8	22.3	20.9-23.7	B	A	
Y 002416	H5	7.242	19.8	18.4-23.4	17.7	16.8-18.8	B	A	
Y 002418	L6	5.635	26.0	24.2-32.1	21.8	20.1-23.0	B	A	Shock vein, melt pocket
Y 002426	L6	45.44	24.7	23.6-26.2	21.5	19.3-24.3	A	A	
Y 002429	H4	33.95	18.9	17.3-22.0	16.6	16.0-18.2	B	A	
Y 002430	H4	10.70	18.4	17.8-19.5	16.9	15.6-21.7	B	A	
Y 002431	H4	120.4	19.6	18.3-24.2	16.7	15.5-18.9	B	A/B	
Y 002435	H4	12.47	18.8	18.0-20	16.5	14.9-18.9	B	A	
Y 002436	H4	15.84	17.8	17.1-18.5	15.8	14.5-18.6	B	A	
Y 002440	H4-6	32.21	19.2	16.7-20.2	17.0	14.8-17.8	B	A	Genomict breccia
Y 002441	Euc	29.65	43.5		34.3	21.4-59.5	-	A/B	Polymict, An87.9-95.2
Y 002442	H4	14.64	19.2	18.0-20.1	17.1	16.6-17.8	B	A/B	
Y 002446	H4	61.92	18.8	18.1-21.3	16.7	15.1-21.2	B	A/B	
Y 002447	H5	13.63	19.7	19.0-22.6	17.1	16.3-19.8	B	A	

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 002448	Euc	133.1			56.0	44.7-64.6	-	A	Polymict, An84.1-93.4
Y 002449	H4	159.5	18.7	16.9-19.5	16.5	14.0-17.6	B	A/B	
Y 002450	H4	17.43	19.4	18.8-20.0	17.1	15.0-19.8	B	A	
Y 002451	H5	11.44	19.6	17.6-21.7	17.2	16.4-17.7	B	A	
Y 002453	H6	8.193	19.4	18.3-20.1	17.5	16.1-20.7	B	A	
Y 002454	L6	37.26	25.5	24.2-29.2	21.8	20.5-25.8	B	A/B	Shock vein, maskelynite
Y 002455	L6	19.96	25.7	24.3-27.8	21.1	20.1-21.6	B	A/B	Shock vein, maskelynite
Y 002459	L6	12.46	25.8	23.6-27.7	21.4	20.0-23.3	B	A	Shock vein, maskelynite
Y 002473	H4	230.7	19.2	18.0-21.1	17.0	15.9-18.5	B	B	
Y 002474	H4	347.7	19.3	18.0-21.5	16.9	15.4-2.0	B	B	
Y 002475	H4	91.41	19.3	17.8-21.7	17.1	16.0-19.7	B	A	
Y 002476	H4	42.78	19.2	18.6-19.9	17.0	14.5-20.0	B	A/B	
Y 002477	H4	26.09	19.3	17.2-21.3	17.3	16.4-20.8	B	A/B	
Y 002479	L5	6.812	25.7	24.4-28.3	21.5	17.0-25.8	A	A	
Y 002483	H4	352.4	18.7	17.1-22.1	16.4	15.1-19.2	B	A/B	
Y 002484	H4-6	7.998	20.1	18.8-20.9	17.5	16.1-21.0	C	A	Genomict breccia
Y 002485	H4	6.384	19.2	17.3-22.4	17.0	16.0-20.5	C	A	
Y 002486	LL6	37.29	29.8	28.5-30.5	24.3	23.3-24.7	A	A	
Y 002487	H5	10.71	20.2	18.9-23.2	17.7	16.5-20.7	B	A	
Y 002490	H4	7.331	18.9	17.8-20.8	16.8	14.7-20.1	B	A	
Y 002493	H4	8.398	19.1	17.6-24.3	16.5	14.6-22.9	B	A	
Y 002496	H4	17.10	18.4	17.5-19.9	16.5	15.6-19.3	A	A	
Y 002500	H4	17.29	19.0	17.8-23.4	17.3	15.2-20.4	B	A/B	
Y 002508	H4	190.7	19.9	18.1-31.4	16.9	15.8-21.3	B	B	
Y 002509	H6	122.3	19.6	18.8-20.4	17.4	15.7-20.4	B/C	A	
Y 002511	H4	8.319	19.6	18.6-24.7	17.3	15.2-21.1	B	A	
Y 002514	H4	44.72	19.0	18.0-20.6	16.6	15.1-18.5	C	A/B	
Y 002516	H4	5.355	19.2	17.9-20.9	17.2	16.3-19.2	B/C	A	
Y 002517	H4	11.71	19.0	17.4-20.7	16.7	15.2-17.6	B	A/B	
Y 002518	L5	6.851	26.1	24.8-26.9	21.5	19.5-23.0	A	A	
Y 002519	L6	5.413	25.8	24.9-28.9	21.8	21.1-23.4	B	A	
Y 002520	H5	314.2	19.5	18.6-22.9	16.4	15.5-17.1	C	A	
Y 002521	H4	175.7	19.1	17.0-21.6	17.0	14.4-19.8	B	B	
Y 002522	H4	70.66	19.1	17.7-22.3	17.0	15.9-19.0	B	A/B	
Y 002523	H4	177.7	18.9	17.6-19.8	16.9	15.0-20.1	B	A/B	
Y 002524	H4	86.71	19.0	17.0-21.1	16.7	15.9-20.9	B	A/B	
Y 002525	H4	47.95	19.0	17.8-21.4	16.9	14.0-20.2	B	A/B	

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 002528	H4	10.76	19.1	17.9-20.6	16.6	15.5-17.8	B	A	
Y 002529	H4	7.724	19.4	18.5-21.0	17.0	16.1-17.9	B	A	
Y 002530	H4	6.378	19.3	18.4-20.8	17.0	15.6-18.5	B	A	
Y 002531	H4	13.09	19.1	18.0-20.0	16.7	16.1-17.7	B	A	
Y 002532	H4	27.29	19.2	17.9-23.1	16.7	16.0-17.9	B	A/B	
Y 002534	Euc	122.6			47.1	36.0-60.9	-	B	Polymict, An67.6-95.3
Y 002536	Euc	85.58	42.2		42.3	24.4-61.4	-	A	Polymict, An80.0-96.6
Y 002537	L5	26.56	25.7	23.9-30.1	21.9	19.9-25.0	B	A/B	
Y 002540	CR	17.50	2.5	0.9-11.2	2.6	1.1-5.5	A	A/B	
Y 002541	CR	17.50	1.5	0.2-3.5	2.7	1.4-5.2	B	A/B	
Y 002542	H4	17.32	19.0	18.3-21.1	17.2	16.2-20.0	B	A	
Y 002544	H4	6.072	19.4	17.6-22.5	17.3	15.3-19.0	B	A	Shock vein
Y 002545	H4	8.782	18.6	17.2-20.0	16.8	15.9-21.8	C	A	
Y 002548	H4	6.666	19.4	18.6-20.7	16.9	15.7-20.9	B	A	
Y 002549	L3	5.574	24.3	9.0-29.4	14.2	2.7-23.5	B	A	
Y 002550	LL6	27.65	30.3	29.3-31.1	24.8	24.0-25.7	A	A	Breccia, recrystallized
Y 002555	H4	15.89	20.2	19.3-21.9	17.8	16.3-23.2	B	A	
Y 002557	L5	13.69	24.5	22.9-26.9	20.9	19.8-23.3	A	A	
Y 002558	H4	116.2	18.2	17.5-18.8	16.3	15.3-19.1	B	A	
Y 002559	H4	10.80	18.9	16.7-20.6	16.6	14.5-18.3	B	A	
Y 002561	H4	55.58	19.5	18.3-22.1	17.7	16.3-21.3	B	A	
Y 002562	LL	34.27	29.8	28.4-30.7	24.3	23.8-24.8	A	A/B	Breccia
Y 002563	H3	8.602	18.5	16.3-23.3	15.9	9.1-23.4	B	A	
Y 002564	H4	7.423	20.6	19.6-22.0	17.8	16.1-22.3	B	A	
Y 002566	L6	64.40	25.2	24.3-26.6	21.6	20.5-23.7	B	A/B	Shock vein
Y 002567	H4	262.0	18.4	17.1-19.4	16.6	15.7-17.4	C	A/B	
Y 002573	L3	10.95	24.3	11.9-26.9	20.8	18.2-22.2	B	A	
Y 002574	H5	13.64	18.6	17.5-20.2	16.6	15.3-19.8	B	A	
Y 002577	H5	6.499	19.3	17.7-24.1	17.0	14.0-21.1	B	A/B	
Y 002587	L6	69.82	25.0	23.8-25.8	21.1	20.1-22.3	A/B	A/B	
Y 002590	H6	12.63	18.6	18.0-20.2	16.5	14.9-19.7	B	A	Shock vein
Y 002593	H6	10.78	19.5	18.5-20.1	17.1	15.9-17.6	C	A/B	
Y 002597	H6	9.489	20.1	18.6-22.3	17.7	16.4-21.4	B	A/B	
Y 002598	H6	6.525	20.3	19.1-23.8	17.9	14.8-24.1	A/B	A	
Y 002601	H4	9.802	19.5	4.1-24.5	17.8	15.1-32.5	B	A	
Y 002602	H4	35.76	18.3	17.0-19.6	16.3	15.3-17.7	A/B	A	
Y 002603	H6	5.844	20.1	19.0-21.7	17.7	16.3-19.1	A	A/B	

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 002604	H6	5.230	20.2	19.1-23.2	18.0	16.5-21.8	A	A/B	
Y 002605	H6	5.677	18.9	18.1-20.6	16.2	8.5-17.5	B	A	
Y 002606	H3	10.37	17.2	12.5-18.5	12.9	5.5-34.6	B	A	
Y 002610	H3	24.08	19.9	18.3-24.7	16.5	6.0-23.3	A/B	A	
Y 002611	L6	24.86	26.0	25.2-26.7	21.4	20.4-22.6	A	A	
Y 002621	H5	20.84	19.1	18.2-19.9	16.6	15.0-17.9	A	A	
Y 002622	H6	8.461	20.9	19.5-22.5	17.9	16.7-18.8	A/B	A/B	
Y 002624	L6	6.822	26.1	24.1-31.4	21.9	21.1-22.9	A/B	A	
Y 002628	H4	16.43	18.4	16.5-22.0	16.5	15.2-20.2	A/B	A	
Y 002631	L4	21.38	22.7	21.5-24.1	19.7	18.4-22.9	A	A	
Y 002634	H4	16.04	19.3	18.2-20.4	16.8	16.0-17.5	A/B	A/B	
Y 002635	H4	6.923	19.3	18.2-20.7	17.3	16.5-18.6	A/B	A	
Y 002636	L6	124.9	25.6	24.5-27.8	21.8	20.7-23.6	A/B	A	
Y 002637	L6	14.86	25.3	24.0-27.7	21.3	20.3-23.2	A/B	A	
Y 002638	H5	106.5	18.3	16.7-19.1	16.4	15.3-17.2	A	A	
Y 002640	H5	41.26	19.4	18.0-23.0	16.8	14.7-22.2	A/B	A/B	
Y 002644	H5	6.898	19.5	17.8-21.5	17.1	16.1-18.4	A/B	A	
Y 002645	H5	10.91	18.7	17.5-21.4	16.5	15.8-18.1	B/C	A	
Y 002653	H5	14.58	18.2	17.1-20.1	16.3	15.4-19.4	B	A	
Y 002655	H4	10.08	19.2	18.2-22.0	16.9	15.4-19.5	B	A	
Y 002657	L6	98.98	25.3	24.1-26.2	21.2	20.2-24.0	A	A/B	
Y 002659	H4	5.009	18.8	17.6-20.5	16.4	14.1-19.1	A	A	
Y 002666	L6	7.362	26.6	25.4-27.3	22.2	21.4-22.8	A	A	
Y 002677	H4	7.743	18.7	17.5-20.4	16.4	15.4-17.1	A/B	A	
Y 002693	L4	18.21	25.2	24.4-25.9	21.0	19.8-22.0	A	A	
Y 002700	Euc	20.38			50.4	28.1-64.1	-	A	
Y 002702	H4	8.999	19.2	18.1-19.9	17.3	15.3-23.3	A	A/B	
Y 002703	H4	17.77	18.4	17.1-22.4	15.9	14.9-17.7	A/B	A/B	
Y 002706	L4	82.24	24.8	23.1-25.1	21.3	19.9-23.2	A	A/B	
Y 002707	L6	9.154	25.7	24.8-27.5	21.9	21.2-22.7	A	A	
Y 002709	L3	171.3	22.8	21.0-24.1	18.9	15.9-21.1	A	B	
Y 002710	H4	5.884	19.2	18.7-20.1	17.0	16.1-20.2	B	A	
Y 002711	H6	6.496	20.0	18.4-20.6	17.7	17.2-19.8	B	A	
Y 002712	Sher	72.93					-	A	Wo10.9-35.2Fs21.9-52.8, An43.9-6
Y 002715	H4	5.564	19.5	18.6-20.6	17.2	15.2-20.9	A/B	A	
Y 002716	H5	8.749	19.0	18.1-20.6	16.6	15.6-17.9	B	A/B	
Y 002717	H5	11.89	18.9	18.2-20.1	16.7	15.1-19.3	B	A	

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 002721	L6	16.45	25.5	24.5-28.3	22.0	20.4-24.9	A	A	
Y 002726	H3	5.540	19.4	7.0-21.9	16.5	2.3-26.2	B	A	
Y 002731	H5	44.03	18.4	17.4-19.8	16.7	15.6-19.6	B/C	A	
Y 002738	LL6	6.729	29.0	27.9-30.3	24.2	23.7-24.8	A	A/B	
Y 002739	LL6	30.19	28.7	26.5-29.5	23.5	21.9-24.3	A	A	
Y 002742	H5	7.385	18.8	18.0-19.5	17.0	15.9-20.0	A/B	A	
Y 002745	H4	9.624	19.1	10.5-20.4	17.8	15.6-24.4	A/B	A	
Y 002746	L6	34.78	25.0	23.3-26.4	21.2	20.5-22.7	A/B	A	
Y 002747	How	11.50			47.4	24.2-65.0	A	A	
Y 002750	Dio	12.38	28.6	28.6-28.6	27.0	21.9-40.1	A	A/B	Type B
Y 002754	H5	7.881	19.3	18.4-20.6	17.3	15.5-20.2	A	A	
Y 002755	H5	11.12	19.7	17.7-21.6	17.4	15.5-20.9	A/B	A	
Y 002757	H5	39.03	19.7	18.8-20.9	17.6	15.6-20.4	A/B	A	
Y 002758	L4	5.477	23.3	22.1-24.9	19.8	18.2-20.9	A	A	
Y 002759	L6	6.409	25.9	24.3-28.1	22.1	22.1-24.3	A	A	
Y 002760	L6	253.3	24.8	23.9-25.9	20.8	19.0-23.3	A	A/B	
Y 002762	H4	5.581	19.7	18.8-23.1	17.3	15.6-19.3	A/B	A	
Y 002765	H4	6.815	19.7	18.2-22.4	16.9	14.9-18.6	A/B	A	
Y 002766	L6	46.97	24.4	22.1-26.2	21.0	18.7-23.4	A/B	A	Shock vein
Y 002768	H4	48.60	18.7	17.6-19.5	16.3	15.2-17.2	B	A/B	
Y 002769	H4	72.01	18.8	17.0-19.6	16.5	15.9-17.4	A/B	B	
Y 002770	H4	31.42	18.8	17.9-20.5	16.6	14.7-19.8	B	B	
Y 002771	H4	40.18	18.7	17.6-22.2	16.7	15.4-18.6	B	B	
Y 002772	H4	69.86	18.9	18.2-20.5	16.7	15.8-18.3	B	A/B	
Y 002773	H4	60.04	18.9	18.2-20.0	16.5	15.5-18.2	A/B	B	
Y 002774	H4	29.42	18.7	17.9-19.9	16.4	15.4-17.5	B	B	
Y 002775	H4	12.92	19.2	17.8-22.0	17.0	16.4-18.0	B	A	
Y 002776	H4	5.355	19.5	17.6-21.3	17.6	16.0-21.9	A/B	A	
Y 002777	H4	15.48	19.2	18.2-20.6	16.7	16.1-18.0	A/B	A	
Y 002780	H4	5.287	19.1	17.7-22.1	16.9	15.8-18.0	A/B	A	
Y 002783	H4	10.64	19.0	18.3-21.5	16.7	15.3-19.1	A/B	A	
Y 002784	H4	20.43	18.9	17.7-20.2	16.8	15.6-20.2	B	A/B	
Y 002785	H4	6.396	19.2	16.9-20.1	17.2	16.2-19.1	B	A	
Y 002786	H4	5.170	19.4	18.7-20.3	17.4	14.7-19.5	A/B	A	
Y 002795	H6	26.17	18.7	17.8-19.8	16.3	14.8-17.0	B	A/B	
Y 002797	How	20.94			44.7	23.5-63.7	A	A	
Y 002798	How	80.56			33.5	22.7-49.4	A	A	

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 002802	L3	15.75	24.9	10.5-26.7	19.5	7.1-32.2	A	A	
Y 002804	H6	10.31	20.0	18.7-22.8	18.2	17.1-21.5	A/B	A	
Y 002807	Euc	73.64			56.6	43.6-63.4	-	A	An80.2-92.0
Y 002808	L6	18.76	24.8	23.6-26.0	21.1	19.6-22.8	A	A	
Y 002810	H4	16.86	19.1	17.6-23.0	16.2	15.5-17.6	B	A	
Y 002816	H6	7.822	19.2	17.7-21.8	16.6	15.9-17.1	B/C	A	
Y 002817	LL5	6.677	27.6	26.5-31.0	23.3	22.7-24.0	B	A	
Y 002818	H4	87.31	19.0	17.9-21.0	16.9	15.0-20.9	B	A/B	
Y 002819	H4	95.53	19.4	17.7-22.3	17.2	15.4-20.3	B	A	
Y 002820	L6	372.0	25.2	23.1-29.0	21.2	20.3-21.9	B	A	
Y 002822	H5	9.909	19.5	18.2-20.6	17.0	16.4-17.5	C	A	
Y 002825	L4	6.993	25.3	24.0-27.7	21.2	20.3-22.0	B	A	
Y 002829	L6	27.99	25.6	24.6-28.2	21.4	20.2-25.4	B	A	
Y 002831	L6	35.08	25.1	23.8-26.9	21.9	19.5-25.0	B	A	
Y 002833	H4	63.04	19.0	17.9-19.8	16.6	15.5-18.1	C	B	
Y 002834	H4	69.24	18.9	18.0-20.7	16.5	14.3-17.5	C	A/B	
Y 002855	H4-5	14.15	19.0	17.3-21.8	15.5	5.5-18.2	C	A	Genomict breccia
Y 002874	H4	31.16	18.7	17.8-19.4	16.5	14.7-19.4	B	A/B	
Y 002893	L6	6.806	25.6	24.5-28.2	22.0	20.1-25.4	B	A	Shock vein
Y 002898	H5	5.127	20.1	18.5-22.9	18.1	16.9-23.2	B	A	
Y 002900	H6	15.37	19.7	18.4-21.9	17.4	16.4-19.3	B	A	
Y 002909	H4	11.18	19.7	18.9-20.5	17.6	16.8-19.9	B	A	
Y 002916	L4	7.536	25.5	24.6-26.4	21.1	20.0-21.9	B	A	
Y 002917	H4	6.675	18.9	17.8-19.7	16.5	12.9-18.0	B	A	
Y 002919	L4	11.45	25.3	24.2-28.2	21.3	19.8-23.0	B	A	
Y 002921	H5	6.978	19.1	17.7-21.9	16.9	15.7-19.3	B	A	
Y 002926	L6	8.038	25.6	24.1-27.2	21.5	20.8-22.1	B	A/B	Shock vein
Y 002930	H4	9.531	18.2	16.2-21.4	16.0	15.2-18.0	B	A	
Y 002937	H6	5.996	20.1	19.1-22.2	17.2	16.2-19.1	B	A	
Y 002938	H4	24.91	18.9	18.1-20.6	16.5	15.2-17.5	B	A	
Y 002939	H4	5.227	19.2	18.5-22.1	16.6	15.4-19.3	B	A	
Y 002940	H4	6.168	20.0	18.4-23.3	17.7	15.6-23.2	C	A	
Y 002942	H4	9.301	17.9	16.6-20.0	15.9	14.5-18.5	B	A	Darkened
Y 002943	H4	11.75	17.4	16.4-18.5	15.2	13.3-17.6	B	A	Darkened
Y 002944	H5	8.575	19.0	18.2-20.5	17.1	15.9-19.0	B	A	
Y 002945	H4	6.798	19.7	18.5-22.8	17.0	15.6-19.0	B	A	
Y 002950	H5	18.07	17.1	14.6-18.8	15.2	14.0-16.3	B	B	Darkened

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 002954	H4	66.42	18.1	16.9-19.3	16.2	14.9-20.2	B	A	
Y 002958	H4	5.932	19.5	18.5-21.1	17.4	16.2-21.1	B	A	
Y 002959	L6	8.240	25.4	24.2-27.6	21.5	20.5-23.7	B	A	Shock vein, maskelynite
Y 002960	L6	6.123	25.5	24.1-30.2	22.2	21.0-24.1	B	A	Shock vein, maskelynite
Y 002961	H4	7.603	19.5	18.5-23.7	17.0	15.8-18.0	B	A	
Y 002962	H6	6.191	20.2	18.7-21.9	17.6	16.9-18.2	B	A	
Y 002963	H4	14.16	19.2	18.4-19.8	16.6	15.5-17.4	C	A	
Y 002965	H4	14.10	19.4	18.5-20.4	16.9	16.0-21.9	C	A	
Y 002970	H4	83.36	19.3	18.3-21.3	16.9	16.0-17.4	B	B	
Y 002972	H4	8.872	20.0	18.5-29.8	17.1	15.8-20.5	B	A	
Y 002973	H4	10.76	19.4	18.3-21.4	16.6	14.5-19.6	B	A	
Y 002975	H5	5.560	19.2	18.1-21.2	16.9	15.1-17.7	B	A	
Y 002976	H5	7.471	19.3	18.1-21.9	17.5	15.4-22.0	B	A	
Y 002977	H4	5.594	19.9	18.1-21.7	17.4	16.1-22.7	B	A	
Y 002979	H5	9.007	19.1	18.3-21.6	16.8	15.2-22.7	B	A	
Y 002980	H5	157.7	18.6	16.0-20.7	16.7	14.6-22.8	B	B	
Y 002981	H5	9.090	19.4	18.1-24.5	17.1	15.8-19.7	B	A	
Y 002982	H5	5.146	19.1	17.9-22.5	16.5	15.5-21.1	C	A	
Y 002988	H5	6.139	19.0	18.2-22.8	16.8	15.1-19.0	B	A	
Y 002990	H5	7.143	19.5	17.3-24.4	16.8	15.9-18.0	B	A	
Y 002993	H5	5.179	19.1	17.4-23.7	16.8	16.4-17.1	B	A	
Y 002996	H5	52.59	18.5	17.8-19.5	16.6	15.2-18.4	B	B	
Y 002998	H4	5.991	19.4	17.8-21.0	16.6	15.4-18.5	B	A	
Y 002999	H4	17.55	17.1	15.9-17.7	15.1	13.9-15.9	C	A/B	Darkened
Y 003000	H4	11.98	17.1	16.2-18.0	15.1	14.2-15.9	C	A	Darkened
Y 003011	H4	11.02	18.6	17.3-21.0	16.1	14.7-19.3	B	A	
Y 003012	H4	10.97	18.6	17.4-23.4	15.9	14.1-17.1	B	A/B	
Y 003021	H4	19.94	18.1	16.9-23.0	15.8	14.8-17.6	B	A	
Y 003024	H3	5.668	21.1	14.5-27.4	16.3	4.0-24.1	B	A	
Y 003028	Dio	19.57	32.0	31.7-32.3	26.5	24.0-27.5	-	A	Type B
Y 003030	H4	9.056	19.3	18.5-20.4	16.8	15.3-18.8	C	A	
Y 003032	H4	109.3	17.3	16.1-19.2	15.4	14.0-21.0	B	A	
Y 003034	H4	128.4	19.0	17.9-21.6	16.7	15.9-18.1	B	A	
Y 003035	H4	108.0	19.2	18.4-20.0	16.6	15.6-17.4	B/C	A	
Y 003037	H4	5.314	19.3	17.7-22.2	16.6	15.9-17.1	B	A	
Y 003042	H4	7.181	19.2	18.2-21.4	17.0	16.0-17.7	C	A	
Y 003044	H5-6	21.18	20.0	18.2-22.9	17.4	16.0-21.8	B	A	Genomict breccia, shock vein

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 003045	H4	18.05	18.8	17.7-20.5	16.3	14.7-22.1	B	A/B	
Y 003049	L6	7.086	25.6	24.7-28.3	21.2	19.2-21.9	B	A/B	
Y 003050	L6	48.55	25.0	23.4-26.6	21.4	20.3-24.4	B	B	
Y 003057	Ure	8.488	21.5	19.0-25.1			-	A	
Y 003058	H4	5.843	18.3	17.0-18.9	16.2	15.2-17.9	B	A	Darkened
Y 003059	H4	37.35	18.9	17.9-19.7	16.3	15.3-19.6	B	A	
Y 003060	L6	5.343	25.7	24.5-27.8	21.6	20.5-22.4	A	A/B	
Y 003068	H4	6.243	18.1	17.4-18.8	16.2	15.1-17.8	B	A	
Y 003072	H4	6.005	19.4	18.5-20.0	16.9	15.9-17.5	B	A	
Y 003073	L6	5.321	25.9	24.-27.9	21.6	19.8-23.0	C	A	
Y 003074	L5	5.449	25.5	24.4-27.4	22.1	20.8-25.5	B	A	
Y 003077	H4	6.348	17.7	16.2-18.5	16.2	14.5-19.0	B	A	
Y 003078	H5	11.91	18.5	17.9-19.5	16.2	14.8-16.9	C	A	
Y 003085	H4	37.91	19.1	17.2-21.5	16.8	15.5-19.2	B	A	
Y 003087	L4	7.451	25.4	24.2-26.8	21.4	20.3-22.7	B	A	
Y 003089	H5	41.25	20.1	19.0-25.8	17.2	15.9-18.3	C	A/B	
Y 003092	L6	5.062	25.6	24.7-28.5	21.5	20.6-22.6	B	A	Shock vein, maskelynite
Y 003097	H5	10.66	20.1	18.4-23.4	17.8	16.4-20.7	C	A	
Y 003102	H5	5.440	18.1	15.7-26.8	15.8	14.8-17.7	B	A	
Y 003104	L6	9.369	25.6	24.1-27.4	21.6	20.0-23.1	B	A	
Y 003107	L6	5.167	25.6	24.4-29.7	22.1	19.9-26.1	B	A	Shock vein, maskelynite
Y 003109	H5	5.763	19.7	18.5-20.8	17.4	15.6-18.1	C	A	Igneous clast
Y 003114	H4	6.504	19.3	18.4-21.5	18.3	15.0-31.0	B	A	
Y 003117	H3	5.907	19.5	18.6-22.2	16.4	13.2-19.8	C	A	darkened
Y 003125	How	191.3			34.1	25.3-50.4	-	A/B	
Y 003127	H4	5.311	19.7	18.3-23.1	17.2	15.0-19.6	B	A	
Y 003130	H6	9.859	19.8	18.9-20.4	17.6	16.4-21.3	C	A	
Y 003131	H4	10.22	19.0	17.7-22.1	16.6	16.0-17.8	C	A	
Y 003132	H4	6.990	19.3	18.2-23.6	17.1	15.9-22.1	B	A	
Y 003135	H4	7.637	19.0	17.8-19.7	16.9	15.4-17.6	B	A	
Y 003138	LL5	5.871	28.2	26.4-29.8	23.6	22.4-25.2	A	A	
Y 003140	L6	167.9	25.4	23.8-26.5	22.3	20.7-25.3	A	A/B	Shock vein, maskelynite
Y 003149	H6	453.0	19.2	18.4-20.2	16.8	15.8-18.2	B	A/B	Breccia
Y 003155	LL3	6.735	24.7	4.5-27.9	14.0	2.0-32.2	B	A	
Y 003157	H4	5.341	19.9	18.1-21.5	17.0	16.2-18.7	B	A	
Y 003159	L6	160.0	25.3	24.2-26.2	21.1	19.9-21.9	A	A	
Y 003160	H4	5.446	19.2	17.7-20.2	17.3	15.9-19.2	B	A	

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 003162	H4	10.46	18.2	17.4-19.1	15.9	15.0-16.9	B	B	
Y 003163	H6	12.34	19.7	18.7-20.6	17.6	16.5-20.0	B	A	Shock vein
Y 003176	H6	388.4	19.6	18.1-21.0	17.2	16.0-19.0	A	B/C	Shock vein
Y 003178	H6	9.600	20.1	19.1-20.9	17.6	16.5-18.8	B	A	Shock vein
Y 003179	H6	7.859	20.4	19.3-23.4	17.8	17.2-18.5	B	A	Shock vein
Y 003181	H6	5.007	20.2	18.0-21.7	17.8	16.7-22.2	B	A	Shock vein
Y 003189	L6	19.75	25.1	24.1-26.7	21.1	19.5-21.9	A	A	
Y 003191	L6	9.154	25.9	24.7-28.6	21.4	20.4-22.2	A	A/B	
Y 003194	H4	10.31	17.8	15.9-22.6	15.4	14.5-16.9	B	A	
Y 003195	H4	5.243	18.4	16.8-20.6	16.5	15.2-17.8	B	A	
Y 003197	LL5	413.7	28.5	27.6-29.2	23.6	22.1-24.8	A	A/B	
Y 003206	H3	11.04	16.9	16.3-18.1	14.9	11.0-19.9	C	A	
Y 003207	H4	9.746	19.1	18.3-23.4	16.9	15.6-18.2	B	A	
Y 003208	L5	512.6	25.5	24.2-26.3	21.6	21.2-22.5	A	B	
Y 003209	L4	10.99	25.2	23.6-28.8	21.8	20.4-25.8	B	A	
Y 003211	H4	9.382	19.2	18.4-20.7	16.9	16.4-17.5	B	A	
Y 003213	H4	10.72	19.2	17.7-21.8	17.1	13.5-22.2	B	A	
Y 003214	H4	6.164	20.0	7.7-25.9	16.5	8.6-18.5	B	A	
Y 003219	H4	11.73	18.4	16.8-19.5	16.4	15.1-18.6	B	A	
Y 003220	H6	11.28	19.5	18.4-20.8	17.1	16.3-18.2	C	A	
Y 003222	H4	12.66	18.5	17.6-19.9	16.5	15.5-19.7	B	A	
Y 003224	H5	8.802	19.6	18.2-21.7	17.3	16.0-21.0	B	A	
Y 003229	H4	11.53	19.3	18.0-21.8	16.9	16.0-18.2	B	A	
Y 003232	H4	6.373	19.6	18.1-23.1	17.3	15.6-19.0	B	A	
Y 003233	L6	302.5	25.2	24.1-17.3	21.1	20.2-21.8	A	A/B	Shock vein
Y 003234	H5	105.4	18.7	17.4-19.5	16.5	15.3-17.7	C	A	
Y 003235	H4	11.87	18.8	7.0-20.9	16.8	15.8-17.5	B	A	
Y 003237	L5	5.806	25.6	24.5-26.5	21.5	20.4-22.9	B	A/B	
Y 003238	H4	7.880	19.6	18.2-21.2	17.2	16.0-19.7	B	A	
Y 003239	L5	15.37	24.6	22.9-26.5	20.7	19.8-21.7	B	A	Shock vein
Y 003240	H4	15.06	18.6	17.8-20.8	16.5	15.5-18.8	C	A	
Y 003241	H5	12.76	18.4	17.0-20.1	16.6	15.8-19.1	C	A	
Y 003243	L5	7.863	25.8	24.7-28.9	21.8	20.2-24.3	B	A	
Y 003248	H5	8.675	20.3	18.5-24.4	17.9	16.9-19.7	C	A	
Y 003249	H5	10.30	19.5	18.7-21.5	17.2	16.4-20.6	C	A	
Y 003251	L5	67.89	25.3	24.2-28.0	21.1	18.9-22.5	B	B	
Y 003252	L5	6.257	25.3	23.6-26.4	21.7	20.6-23.8	B	A	Shock vein

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 003253	L5	25.26	25.2	23.7-29.2	21.4	20.1-24.5	B	A	Shock vein
Y 003254	L5	28.02	25.4	24.3-28.4	21.7	20.5-24.6	B	A	
Y 003255	L5	21.65	25.1	23.8-26.8	21.6	19.9-24.8	B	A	
Y 003256	L5	5.836	25.8	24.5-28.3	21.8	20.7-23.5	B	A	
Y 003259	LL6	6.248	26.8	23.7-49.8	21.4	20.6-22.1	B	A	Shock vein
Y 003260	L5	5.525	25.6	24.0-30.1	21.9	20.8-23.6	B	A	
Y 003289	L5	5.365	25.8	24.2-27.5	21.5	20.8-22.2	B	A	
Y 003291	L5	23.06	25.3	23.9-27.4	21.3	19.2-23.4	B	A	
Y 003326	L5	287.3	25.3	24.5-26.6	21.0	20.4-22.1	B	B	
Y 003327	L5	38.61	25.4	24.1-28.6	21.4	19.9-26.1	B	A/B	
Y 003332	L5	6.307	25.7	23.7-28.6	21.7	20.2-24.7	B	A	
Y 003334	L5	10.39	25.5	24.6-27.3	21.5	20.5-23.6	B	A	
Y 003338	L5	8.798	25.4	16.4-35.0	21.5	20.4-22.7	B	A	
Y 003339	L5	5.256	25.1	21.1-27.2	21.0	20.2-22.5	B	A	
Y 003340	L5	6.868	25.4	23.7-27.4	21.9	20.5-26.1	B	A	
Y 003341	L5	7.413	25.9	23.3-31.4	21.9	20.5-26.1	B	A	
Y 003343	L5	5.567	25.8	24.3-30.7	22.3	20.9-26.5	B	A	
Y 003344	L5	11.51	25.2	23.8-26.5	21.8	20.3-23.5	B	A	
Y 003346	L5	5.382	25.6	23.7-27.9	21.8	19.7-23.1	B	A	
Y 003347	L5	14.07	25.6	24.5-29.0	21.3	20.3-21.8	B	A	Shock vein
Y 003348	L5	6.758	25.2	21.7-27.9	21.6	19.8-26.2	B	A	Shock vein
Y 003370	L5	7.198	25.6	24.4-27.4	21.4	19.3-24.0	B	A	Shock vein
Y 003375	L5	6.141	25.9	24.4-28.8	21.8	20.9-24.0	B	A	
Y 003419	L5	5.531	25.7	24.8-29.3	21.6	20.5-24.5	B	A	
Y 003436	L5	5.400	25.4	24.2-26.9	21.7	19.2-24.9	B	A	
Y 003438	L5	6.340	26.0	24.1-36.8	21.8	20.9-23.8	B	A	Shock vein
Y 003446	L5	6.047	25.6	24.4-28.3	21.9	21.0-23.1	B	A	
Y 003448	L5	6.862	25.4	24.0-28.1	22.0	20.3-27.4	B	A	Shock vein
Y 003455	L5	6.152	25.5	24.0-26.2	21.6	20.6-22.4	B	A	
Y 003458	L5	5.318	25.6	24.4-27.1	21.8	20.9-24.9	B	A	
Y 003472	L5	5.062	25.8	23.8-28.8	21.8	19.6-23.8	B	A/B	
Y 003475	L5	5.651	25.7	24.3-27.7	21.6	20.6-23.8	B	A	Shock vein
Y 003476	L5	5.268	25.7	23.9-29.3	22.0	20.5-26.0	B	A	
Y 003489	L5	11.38	25.3	23.6-27.7	21.6	20.6-25.2	B	A	Shock vein
Y 003500	L5	5.308	25.6	24.1-28.4	22.0	20.1-25.5	B	A	
Y 003520	L5	5.995	25.8	23.6-29.0	21.6	20.2-24.4	B	A	
Y 003525	L5	9.441	25.5	24.7-27.0	22.0	20.8-24.7	B	A	

Table 1. *Continued.*

Meteorite	Class	Wt. (g)	Fa	Range	Fs	Range	W	F	Comments
Y 003532	L5	14.49	25.3	24.4-27.3	21.0	19.9-22.2	B	A	Shock vein
Y 003533	L5	10.79	25.4	20.6-35.3	21.2	20.2-23.1	B	A	Shock vein
Y 003534	L5	15.42	25.2	24.4-27.5	21.3	20.7-22.0	B	A	
Y 003536	L5	5.827	25.7	24.0-28.6	22.4	20.9-23.7	B	A	
Y 003537	L5	14.13	25.5	24.1-28.8	22.0	20.1-24.5	B	A	
Y 003540	L5	5.367	25.8	23.3-28.5	22.0	19.6-24.7	B	A	
Y 003541	L5	10.66	25.5	24.3-28.3	21.3	20.3-22.7	B	A/B	
Y 003543	L5	5.684	25.8	24.1-28.7	21.7	19.8-22.8	B	A	Shock vein
Y 003544	L5	7.208	25.9	24.1-33.4	21.2	20.6-21.8	B	A	Shock vein
Y 003547	L5	5.264	26.2	24.5-29.2	22.1	20.5-25.1	B	A	
Y 003563	L5	8.899	26.3	24.5-28.8	22.9	21.9-25.6	B	A/B	
Y 003565	L5	21.92	25.0	21.4-26.9	21.1	19.9-23.0	B	B	
Y 003568	L5	19.17	24.9	23.6-26.4	21.1	19.3-24.3	B	A	Shock vein, melt pocket
Y 003570	H4	6.163	18.9	17.7-20.2	16.9	15.7-19.5	B	A	
Y 003572	L5	115.1	25.7	23.9-27.0	21.0	19.9-21.7	B	A	
Y 003574	H4	20.17	18.9	17.9-20.0	16.6	15.3-17.9	B	A	
Y 003575	H4	16.09	19.3	17.9-22.6	16.8	16.3-17.4	B	A	
Y 003576	H6	7.606	20.2	19.2-21.9	17.6	15.8-18.3	B	A	
Y 003577	L5	7.067	24.8	23.8-28.0	20.4	19.2-21.9	B	A	
Y 003578	H4	15.04	18.8	18.1-20.0	17.0	15.8-21.3	B	A	
Y 003579	H4	5.179	19.3	17.4-22.2	17.5	15.6-22.0	B	A	
Y 003580	L6	89.95	25.0	16.5-28.3	21.3	20.7-22.1	B	A/B	Shock vein
Y 003581	H6	6.455	20.3	19.4-22.5	17.8	16.8-21.0	B	A	

Notes for Table 1

Class.

br: breccia; melt br: melt breccia; poly: polymict; ano: anomalous; “-“ (e.g., H5-6): genomict breccia; “/” (e.g., H5/6): transitional.

F: fracturing index:

A: No or a few narrow cracks are visible.

B: Several cracks extend across exterior surface.

C: Severe cracks.

W: weathering index:

A: Limonite haloes on metal particles and limonite veins are minor.

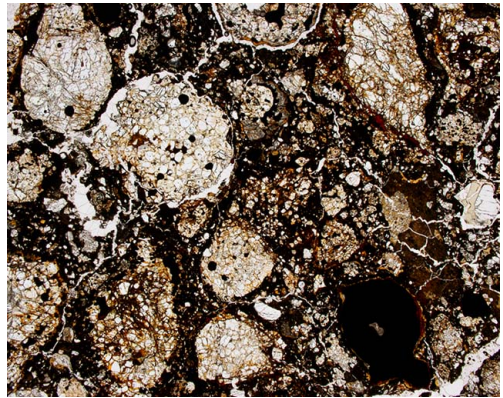
B: 7.5 to 35% of metal particles are weathered to limonite.

C: Most metal particles are weathered to limonite.

Figure 1. Descriptions and photomicrographs of selected meteorites.

Y 002541

The PTS is composed of chondrules (~0.5-2.5 mm diameter) with partly hydrated mesostasis, set in a dark matrix. Subrounded nodules of FeNi metals are highly abundant. Refractory inclusions are rarely encountered. This meteorite is a CR2 chondrite. Width = 4.67 mm.



Y 002712

The PTS displays a medium-grained (~0.1-0.3 mm) ophitic texture composed of pyroxene and maskelynite. Plagioclase is not found. Minor sulfide and oxide minerals (~50-200 μm) are scattered sparsely. There is a thin shock melt vein (the lower-left of the figure). Textural and compositional similarities indicate that Y 002712 may be paired with Y 002192. This meteorite is a Martian meteorite (shergottite). Width = 4.67 mm.



Y 003057

The PTS displays a coarse-grained (~0.6-1.5 mm) granular texture composed olivine and pyroxene. Dusty inclusions (FeNi, FeS) occur near the rims. Dark materials occur along grain boundaries. Olivine and pyroxene show a strong mottled extinction. This meteorite is an ureilite. Width = 4.67 mm.

