ISSN 2433-2232(Online)
JAXA-SP-23-006E

JAXA Special Publication

Hayabusa Asteroid Sample Catalog 2023

January 2024

Japan Aerospace Exploration Agency

JAXA-SP-23-006E

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Hayabusa-returned sample catalog 2023

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Here, we present the catalog of the picked-up particles from the sample catcher of Hayabusa until November 2023 (Table 1).

1. Curatorial sample handling work

Our database now lists a total of 1,344 Itokawa particles that have been made public, with 605 originating from Room A, 404 from Room B, 86 from Room C (Rotational Cylinder), and 249 from Room X, which is a mixture of samples from Rooms A and B due to their undefined origin. This total number only accounts for Category 1 and 2 particles, omitting Category 3 and 4. Additionally, the count includes not only particles in storage but also those lost, consumed, and those currently on loan and, therefore, not in storage. The catalog of these particles has remained static over the last two and a half years. This interruption is due to the halting of the pick-up of new particles on glass slides, alongside their preliminary categorization, a consequence of the COVID-19 pandemic's restrictive measures and the prioritization of Ryugu sample management. After the Itokawa samples curation work resumed in mid-2021, the focus shifted toward relocating archived samples from the glass slides to an alternative containment system, with the principal objective being to shield the samples from potential displacement by natural calamities. The total number of samples designated for this transfer is 1,094, representing the current number of particles in storage. As of November 2023, we have securely stored 718 particles. 346 samples are remained to be transferred to the new

container (Table 2).

Transferring the samples from glass slides to individual containers bears an intrinsic risk of loss, amplified by the difficulties inherent in manipulating particularly small samples, e.g., those smaller than 50 μm. We report the loss of 30 samples during this operation. Despite the risks, the utilization of individual containers for each Itokawa particle substantially enhances the samples' long-term preservation, precludes the confusion of samples and IDs, and facilitates their uncontaminated distribution to the scientific community. We aim to transfer all particles from the glass slides to the new containers within one to two years.

We have been transferring the Itokawa particles to the new containers, although this operation has been slowed down due to intermittent maintenance of the curatorial facilities and prioritized Ryugu sample curation activities. A current challenge is handling the samples using the electrostatic control manipulator because the samples tend to resist adherence to the manipulator due to electrostatic forces. During our operations, 26 samples have been identified as particularly troublesome to collect and have, therefore, been postponed for future efforts. Approximately half of these obstinate samples are categorized under Category 4, encompassing particles with potentially artificial constituents, including but not limited to aluminum, quartz glass, and stainless steel, among others. (Table 3).

2. History of sample distribution and the international announcement of opportunity (AO)

Prior to the first international Announcement of Opportunity (AO), 69 particles were allocated for preliminary examination (initial analysis), and an additional 15 particles were distributed for NASA examination. A summary of the sample distributions to research communities through the AO, as well as to NASA, is described in Table 4. During the 2023 AO program, as of November 2023, we have received two applications. One application has been reviewed, resulting in the decision to distribute three particles. The other application is currently under review.

Statement for Data Availability:

We provide the catalog data of the Hayabusa samples in two formats (web interface, and data storage) as below:

Web interface at Astromaterials Science Research Group (ASRG) site: https://curation.isas.jaxa.jp/curation/hayabusa/index.html

Data storage at Data Archives and Transmission System (DARTS) site: https://data.darts.isas.jaxa.jp/pub/curation/hayabusa/

Table 1a. Remarks of the Itokawa, Hayabusa-returned sample list.

Remarks
transfer transfer history **Analysis** Analytical methods applied to each particle
Phase Determined by SEM at Curation facility or determined by preliminary examinations (with [ ]). Abbreviations ol: olivine, lpx: low calcium pyroxene, hpx: high calcium pyroxene, pl: plagioclase, fld: feldspar, chm: chromite, ap: apatite
Status SG##xx: name of the glass slide sample holder (##) and location on the glass slide (xx) at the curation center S##-xx: address of a sample container storage at the curation center. ## is S/N of the storage, and xx is the position in the storage. glovebox2: Glove box storage at curation center N2-SP3: N2 desiccator storage at curation center DSLG: dimple glass slide PS : polished section PB : potted butt of TEM mold UTS : Ultra thin section UM : Ultramicrotome FIB : Focused Ion Beam CONSUMED: consumed during initial analysis (not available) BROKEN: broken into several pieces unexpectedly (not available) DIVIDED: sliced or divided in initial analysis (not available) (Others) provided to analysis (currently not available)
label PE : provided to preliminary examinations AO#_ : provided to International AO NASA# : provided to NASA AO CO : Samples allocated to JAXA for consortium study CU1 : Samples allocated to JAXA's research CU2 : Samples allocated to JAXA for opening to public CAT3 : provided to preliminary examinations for category 3 EXTRA : Extra particles unexpectedly found on sample holders RENAMED : renamed to RA or RB particle name ND : no data NI : not identified. The particle might lost NOSEM : No SEM data for initial description
Category 1. particles showing only ferromagnesian silicate compositions 2. particles showing ferromagnesian silicate and other mineral such as metals, sulfides and oxides etc. 3. particles showing mainly carbon 4. particles possible artificial material compositions such as Al, quartz glass, stainless steel and etc.

* Samples listed in gray shade rows of the table are currently not curated in the curation center.

Table 1b. Itokawa, Hayabusa-returned sample list.

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0003	Curation S27-529	30	1	ol,hpx	-
RA-QD02-0004	Curation S27-530	23	1	lpx,pl	-
RA-QD02-0007	LOST	50	4	Al	-
RA-QD02-0008	CONSUMED, pressed on indium plate	50	3	(C,O),(C,N,O),Al	PE
RA-QD02-0009	CONSUMED	70	1	[lpx, ol, pl]	PE, AO2_Noguchi
RA-QD02-0009-01	JAXA, FIB-UTS		1	-	-
RA-QD02-0010	CONSUMED	188	1	[ol, pl, lpx, hpx, FeS, FeNi]	PE,AO1_Kita,AO1_Nishiizumi,AO3_Jourdan
RA-QD02-0011	BROKEN	70	2	ol,lpx,FeS	-
RA-QD02-0011-01	Curation glovebox2, PS with Au coat, almost consumed		1	[hpx,ol,pl]	PE
RA-QD02-0011-02	Curation glovebox2, PS		1	[ol,pl,hpx,FeS,FeNi]	PE,AO3_Boonsue
RA-QD02-0012	NASA	100	3	CO,FeS	AO3_Chan
RA-QD02-0013	CONSUMED	91	2	[ol, pl, hpx, lpx, FeNi]	PE,AO1_Jourdan
RA-QD02-0014	Curation glovebox2, PS	131.2	1	[ol, lpx, pl]	PE,AO1_Kita,AO4_Trigo
RA-QD02-0015	CONSUMED	47	1	lpx	PE
RA-QD02-0016	Curation glovebox2, PS	63	1	[ol, lpx, hpx, pl, FeS, FeNi]	PE
RA-QD02-0017	ASU, PS	53	1	ol	PE,AO1_Kita,AO7_Bose
RA-QD02-0018	Curation S25-496	80.4	4	Zn,Cl,C,O,N,Al,ol?	-
RA-QD02-0019	Physical Research lab., PS	77	1	[ol, pl, FeS]	PE, AO2_Fujiya, AO4_Marhas
RA-QD02-0020	LOST	50	1	lpx,pl	-
RA-QD02-0021	CONSUMED	45	1	[lpx, hpx, FeS]	PE
RA-QD02-0022	Curation glovebox2, PS	50	1	lpx, ol, FeS	PE
RA-QD02-0022-01_03	Curation glovebox2, UTS by UM, maybe consumed		1	-	PE,AO1_Noguchi
RA-QD02-0023	ASU, PS	163	2	[ol, FeS]	PE,AO1_Kita,AO1_Nishiizumi,AO4_Trigo,AO7_Bose
RA-QD02-0024	Open Univ, PS	82	2	[ol, hpx, lpx, pl, FeS, FeNi]	PE,AO1_Grady
RA-QD02-0024-01	Curation glovebox2, UTS by FIB		2	-	PE
RA-QD02-0025	BROKEN	50	1	pl	-
RA-QD02-0025-01	Tohoku Univ, PS	61	1	[pl,hpx]	PE, AO2_Gucsik
RA-QD02-0025-02	Tohoku Univ, PS with C-coat, almost consumed	61	1	[pl]	PE, AO2_Gucsik
RA-QD02-0026	LOST	70	1	lpx,chm	-
RA-QD02-0027	Curation glovebox2, PS with partially Au-coat	91	2	[FeS, pl, lpx]	PE
RA-QD02-0028	Curation glovebox2, PS	52	2	[ol, lpx, FeS, FeNi]	PE,AO3_Zolensky
RA-QD02-0029	LOST	40	2	ol,pl,lpx,FeS	-
RA-QD02-0030	CONSUMED	194	2	[lpx, ol, pl, FeNi, hpx, FeS]	PE,AO1_Kita,AO1_Jourdan

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0031	Curation glovebox2, PS	192	2	[ol, pl, FeS, hpx or lpx, chm]	PE, AO2_Terada
RA-QD02-0032	Curation glovebox2, PB with C-coat, almost consumed	47	1	[ol, hpx, pl, lpx]	PE
RA-QD02-0032-01_04	Univ. Lille, UTS by UM		1	-	PE, AO1_Leroux
RA-QD02-0032-05_06	Curation glovebox2, UTS by FIB		1	-	PE
RA-QD02-0032-07	Curation glovebox2, needle for TEM tomography by FIB		1	-	PE
RA-QD02-0033	Curation glovebox2, PS	68	2	[ol,lpx,pl]	PE,AO3_Terada
RA-QD02-0033-01_03	Curation glovebox2, UTS by UM		2	-	PE_Noguchi,AO1_Noguchi
RA-QD02-0034	NASA, PB with C-coat	56	1	[ol, lpx, hpx, FeS]	PE,AO3_Zolensky
RA-QD02-0034-01_04	Curation glovebox2, UTS by UM		1	-	PE, AO1_Noguchi
RA-QD02-0035	CONSUMED	68	2	ol,pl,FeS	PE, AO1_Busemann
RA-QD02-0035-01_03	Curation glovebox2, UTS by UM		2	-	PE,AO1_Noguchi
RA-QD02-0036	Physical Research Lab., PS, almost consumed	42	2	[ol, pl]	PE,AO1_Mikouchi,AO4_Marhas
RA-QD02-0037	LOST	60	3	(C,O),lpx,ol	-
RA-QD02-0038	Physical Research Lab., PS, partially consumed	63	2	[lpx, ol, pl, FeS or chm]	PE,AO1_Kita,AO4_Marhas
RA-QD02-0039	CONSUMED	59	1	[ol, lpx, hpx, pl, FeS]	PE, AO2_Busemann
RA-QD02-0040	BROKEN		-	-	-
RA-QD02-0040-01	LOST	30	3	CO,lpx	-
RA-QD02-0040-02	LOST	50	4	Al	-
RA-QD02-0041	Curation glovebox2, PS	95	1	[ol, pl, hpx]	PE, AO1_Mikouchi
RA-QD02-0041-01_03	Curation glovebox2, UTS by UM		1	-	PE
RA-QD02-0042	Physical Research Lab., PS	103	2	[lpx, pl, ol, hpx, FeS, FeNi]	PE,AO4_Marhas
RA-QD02-0042-01	Curation glovebox2, UTS by UM		2	-	PE, AO1_Zega
RA-QD02-0042-01_03	Curation glovebox2, UTS by UM		2	-	PE, AO1_Zega
RA-QD02-0042-02	Curation glovebox2, UTS by UM		2	-	PE, AO1_Zega
RA-QD02-0042-03	Curation glovebox2, UTS by UM		2	-	PE, AO1_Zega
RA-QD02-0043	Curation glovebox2, PS with large hole	96	1	[ol, hpx, pl, FeS]	PE
RA-QD02-0044	CONSUMED	50	1	ol,pl	PE
RA-QD02-0045	LOST	80	2	lpx,hpx,FeS,chm	-
RA-QD02-0046	LOST	100	4	Al	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0047	Curation glovebox2, PS	121	1	[ol, lpx, hpx]	PE,AO1_Kita, AO4_Trigo
RA-QD02-0048	Curation glovebox2, PS with Au coat, almost consumed	58	1	[ol, hpx, pl, lpx, FeS]	PE,AO3_Boonsue
RA-QD02-0048-01	Curation glovebox2, UTS by FIB		1	-	PE
RA-QD02-0049	BROKEN	180	2	ol,pl	PE
RA-QD02-0049-01	CONSUMED		2	-	PE,AO1_Busemann
RA-QD02-0049-02	JAXA N2-SP4 on glass fiber with crystal bond		2	[ol,lpx,pl,FeS]	PE,AO1_Mikouchi
RA-QD02-0049-03	LOST		-	-	PE
RA-QD02-0049-04	CONSUMED		2	-	PE,AO1_Busemann
RA-QD02-0049-05	JAXA N2-SP2 DSLG-05		2	-	PE
RA-QD02-0050	Curation glovebox2, PB with C-coat, almost consumed	71	1	[ol, hpx, pl]	PE
RA-QD02-0050-01_05	Curation glovebox2, UTS by UM		1	-	PE
RA-QD02-0050-06_07	Curation glovebox2, UTS by FIB		1	-	PE
RA-QD02-0051	CONSUMED	63	2	lpx,ol,chm	PE,AO1_Busemann
RA-QD02-0051-01_05	Curation glovebox2, UTS by UM		2	-	PE
RA-QD02-0052	LOST	40	1	[cal]	-
RA-QD02-0053	CONSUMED	45	2	ol,FeS	PE
RA-QD02-0054	Curation glovebox2, PS	32	1	[ol, FeS]	PE
RA-QD02-0054-01_05	Curation glovebox2, UTS by UM		1	-	PE, AO1_Noguchi
RA-QD02-0055	Curation glovebox2, PS, almost consumed	51	1	pl,hpx	PE,AO1_Kita
RA-QD02-0056	Curation glovebox2, PS	55	1	lpx,ol,pl	PE, AO2_Terada
RA-QD02-0056-01_03	Curation glovebox2, UTS by UM		1	-	PE,AO1_Noguchi
RA-QD02-0057	Curation glovebox2, PS	50	1	[lpx]	PE,AO4_Bose
RA-QD02-0058	Curation glovebox2, PS	54	2	[ol, pl, hpx, lpx, FeS]	PE,AO4_Bose
RA-QD02-0059	LOST	40	1	hpx,pl	-
RA-QD02-0060	Curation glovebox2, PS with Au coat	54	1	[ol, lpx(cpx), pl, hpx]	PE, AO3_Zolensky
RA-QD02-0060-01					
RA-QD02-0060-01_02	JAXA, UTS by FIB		1	-	PE, AO1_Noguchi
RA-QD02-0061	Curation glovebox2, PS	58	2	[lpx, ol, pl, FeS, FeNi]	PE,AO4_Bose
RA-QD02-0062	BROKEN		-	-	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0062-01	Curation glovebox2, PS	35	1	[ol, lpx]	PE,AO4_Bose
RA-QD02-0062-02	CONSUMED	21	1	lpx	PE
RA-QD02-0063	Curation glovebox2, PS with C-coat, almost consumed	69	1	[lpx, ol, pl, hpx, FeS]	PE
RA-QD02-0064	Kyoto Univ	65	1	ol	PE
RA-QD02-0065	CONSUMED	82	1	ol	PE
RA-QD02-0066	Curation glovebox2, PS	64	1	[ol]	PE, AO2_Fujiya,AO4_Bose
RA-QD02-0067	Curation glovebox2, PS	50	1	[ol, pl]	PE
RA-QD02-0068	CONSUMED	95	1	[ol, pl, hpx, FeS, lpx, FeNi]	PE, AO2_Busemann
RA-QD02-0069	LOST	84	-	-	RENAMED
RA-QD02-0070	Tohoku Univ	69	1	hpx,lpx,pl	AO2_Nakamura
RA-QD02-0071	Curation SG13c4	33	1	lpx	-
RA-QD02-0073	LOST	50	-	-	RENAMED
RA-QD02-0074	LOST	50	-	-	RENAMED
RA-QD02-0076-02	Curation S27-531	28	1	ol	-
RA-QD02-0077	LOST	40	-	-	RENAMED
RA-QD02-0078	NASA	100	3	CO,Cl,CFO,Mg	AO3_Chan
RA-QD02-0079	ASU	50	1	hpx	AO7_Bose
RA-QD02-0080	LOST	20	-	-	RENAMED
RA-QD02-0081	Curation S25-497	50	4	Al,CFO	-
RA-QD02-0083	Curation S25-498	40	4	Al,CO	-
RA-QD02-0084	NASA	149	2	ol,FeS	NASA2
RA-QD02-0087	LOST	80	-	-	RENAMED
RA-QD02-0088	US Naval Research Lab.	49	2	ol,Fe	AO3_Stroud
RA-QD02-0089	Kyushu Univ.	84	2	ol,lpx,FeS	AO3_Noguchi-1
RA-QD02-0090	LOST	85	2	ol,pl,FeS	-
RA-QD02-0091	Curation SG05c0	30	3	CO,Si,Cl	-
RA-QD02-0092	LOST	148	1	ol	RENAMED
RA-QD02-0093	DIVIDED	99	1	ol,pl,chm	PE
RA-QD02-0093-02_05	Curation glovebox2, polished slab with Au coat		1	ol,pl	PE
RA-QD02-0094	Curation glovebox2, PS with carbon coating	71	2	ol,pl,FeS	AO2_Komatsu
RA-QD02-0095	DIVIDED	71	1	hpx,pl,chm	PE
RA-QD02-0095-01_03	Curation glovebox2, polished slab with Au coat		1	hpx,pl	PE
RA-QD02-0096	LOST	68	1	ol	-
RA-QD02-0097	CONSUMED	112	2	ol,pl,chm	AO4_Park
RA-QD02-0098	LOST	85	1	lpx,Fe	RENAMED
RA-QD02-0099	LOST	62	1	ol,lpx	RENAMED
RA-QD02-0100	Curation glovebox2, PS	32	1	pl	AO1_Mikouchi
RA-QD02-0101	LOST	80	-	-	RENAMED
RA-QD02-0102	LOST	60	-	-	RENAMED
RA-QD02-0103	CONSUMED	188	2	ol,pl,FeS	AO4_Park

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0104	LOST	120	4	Al	RENAMED
RA-QD02-0105	LOST	60	-	-	RENAMED
RA-QD02-0106	LOST	50	-	-	RENAMED
RA-QD02-0107	LOST	75	1	ol,pl	-
RA-QD02-0108	Kyushu Univ.	61	2	ol,pl,FeS	AO3_Noguchi-1
RA-QD02-0109	Curation S7-139	50	1	ol,pl,Al	-
RA-QD02-0110	LOST	71	2	ol,pl,FeS	RENAMED
RA-QD02-0111	LOST	40	1	hpx	-
RA-QD02-0112	LOST	70	1	pl	-
RA-QD02-0113	LOST	70	4	FeNiCr,Al	-
RA-QD02-0114	US Naval Research Lab.	61	2	hpx,ol,pl,FeS	AO3_Stroud
RA-QD02-0115	DIVIDED	63	2	ol,FeS	AO1_Langenhorst
RA-QD02-0115-01	Curation glovebox2, UTS by FIB		2	-	AO1_Langenhorst
RA-QD02-0115-02	Curation glovebox2, UTS by FIB		2	-	AO1_Langenhorst
RA-QD02-0115-03	Curation glovebox2, UTS by FIB		2	-	AO1_Langenhorst
RA-QD02-0115-04	Curation glovebox2, UTS by FIB		2	-	AO1_Langenhorst
RA-QD02-0115-05	Curation glovebox2, UTS by FIB		2	-	AO1_Langenhorst
RA-QD02-0115-06	Curation glovebox2, UTS by FIB		2	-	AO1_Langenhorst
RA-QD02-0115-07	Curation glovebox2, UTS by FIB		2	-	AO1_Langenhorst
RA-QD02-0115-08	Curation glovebox2, UTS by FIB		2	-	AO1_Langenhorst
RA-QD02-0116	Curation glovebox2, particle with C-coat on the Mo plate	56	1	lpx,FeS	PE
RA-QD02-0117	LOST	100	1	ol,FeNi,FeS	RENAMED
RA-QD02-0118	DIVIDED	60	1	lpx	PE
RA-QD02-0118-01_03	Curation glovebox2, slab with C-coat		1	lpx	PE
RA-QD02-0119	Curation S7-140	37	4	SiO	-
RA-QD02-0120	Curation glovebox2, large FIB hole, pressed on Au plate	26	3	CO,Fe,Cr	PE
RA-QD02-0120-01_04	Curation glovebox2,UTSs by FIB		3	[C,N,O,CaCO3]	PE
RA-QD02-0121	DIVIDED	52	1	ol,lpx	PE
RA-QD02-0121-01_03	Curation glovebox2, slab with C-coat		1	ol,lpx	PE
RA-QD02-0122	Curation S8-141	58	4	SiO	-
RA-QD02-0123	LOST	20	1	hpx	-
RA-QD02-0124	NASA	57	1	ol,pl	NASA
RA-QD02-0125	Curation glovebox2, PB with C-coat	40	2	ol,FeS	AO1_Keller
RA-QD02-0125-01_07	Curation glovebox2, UTS by UM		2	-	AO1_Keller
RA-QD02-0125-08	Curation glovebox2, UTS by FIB		2	-	AO1_Keller

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0125-09	Curation glovebox2, UTS by FIB		2	-	AO1_Keller
RA-QD02-0125-10	Curation glovebox2, UTS by FIB		2	-	AO1_Keller
RA-QD02-0125-11	Curation glovebox2, UTS by FIB		2	-	AO1_Keller
RA-QD02-0126	BROKEN	41	-	-	-
RA-QD02-0126-01	NASA	41	2	lpx,FeS	NASA
RA-QD02-0126-02	BROKEN	25	2	lpx,ol,FeS	AO2_Cipriani
RA-QD02-0126-02-01	ESA ESTEC		2	-	AO2_Cipriani
RA-QD02-0126-02-02	ESA ESTEC		2	-	AO2_Cipriani
RA-QD02-0126-02-03	ESA ESTEC		2	-	AO2_Cipriani
RA-QD02-0126-03	Curation S8-142	9	2	ol,hpx,Fe	-
RA-QD02-0127	ASU,PS	60	1	lpx	AO2_Komatsu,AO3_Zolensky,AO7_Bose
RA-QD02-0128	Univ. Hawaii	38	1	hpx	AO6_Ishii
RA-QD02-0129	Curation SG05a0	37	1	pl,NaCl	-
RA-QD02-0130	NASA	45	1	lpx,FeS	NASA
RA-QD02-0131	Tohoku UNIV	54	1	ol,pl	AO2_Nakamura
RA-QD02-0132	LOST	53	4	Fe,Cr	-
RA-QD02-0133	BROKEN	53	-	-	-
RA-QD02-0133-01	Curation glovebox2, PS	56	1	ol,pl	AO1_Mikouchi
RA-QD02-0133-02	LOST	9	1	pl	-
RA-QD02-0134	Curation S8-143	21	3	KCl	-
RA-QD02-0135	LOST	52	1	ol,pl	RENAMED
RA-QD02-0136	BROKEN	310	-	-	-
RA-QD02-0136-01	AuMU	324	2	hpx,lpx,ol,pl,FeS	CO
RA-QD02-0136-02	Curation SG03g5	13	1	hpx	-
RA-QD02-0136-03	LOST	8	1	hpx,pl	AO2_Cipriani
RA-QD02-0136-07	Curation S8-148	22	1	hpx	-
RA-QD02-0136-13	Curation SG03h7	8	1	ol	-
RA-QD02-0136-14	ESA ESTEC	12	1	ol,pl	AO2_Cipriani
RA-QD02-0136-16	Curation S8-150	8	1	pl,ol	-
RA-QD02-0136-18	Curation S8-149	14	1	lpx,K-fld	-
RA-QD02-0137	NASA	22	1	ol,lpx,pl	NASA
RA-QD02-0138	Curation glovebox2, PS	54	1	ol,pl	AO1_Mikouchi
RA-QD02-0139	LOST	40	1	ol,lpx	RENAMED
RA-QD02-0140	LOST	64	1	ol,pl	RENAMED
RA-QD02-0141	LOST	32	1	lpx,FeS	RENAMED

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0142	LOST	42	2	ol,pl,FeS	NASA
RA-QD02-0143	NASA	52	1	lpx,ol	NASA
RA-QD02-0144	CONSUMED	49	1	ol	AO1_Nagao
RA-QD02-0145	LOST	55	1	ol,lpx,hpx,pl	RENAMED
RA-QD02-0146	LOST	39	1	ol	RENAMED
RA-QD02-0147	LOST	62	1	ol,lpx,pl,K-fld,FeS	NASA
RA-QD02-0148	Curation glovebox2, particle	121	2	ol,chm	AO8_Yesiltas
RA-QD02-0149	CONSUMED	53	1	ol	AO3_Yabuta
RA-QD02-0150	Curation S8-144	31	1	ol	-
RA-QD02-0151	NASA	92	1	ol,pl	NASA
RA-QD02-0152	Curation glovebox2,UTS by FIB	55	1	ol,hpx	AO2_Noguchi
RA-QD02-0153	Curation S25-499	50	4	Al	-
RA-QD02-0154	LOST	40	-	-	-
RA-QD02-0155	NASA	44	1	lpx	NASA
RA-QD02-0156	Curation glovebox2, attached to carbon fiber using acetone-soluble bond	37	1	ol,pl	AO1_Nakamura,AO4_Brunetto
RA-QD02-0157	NASA	44	2	pl,FeS	AO3_Keller
RA-QD02-0158	CONSUMED	66	1	ol	AO1_Busemann
RA-QD02-0159	LOST	35	1	ol	-
RA-QD02-0160	CONSUMED	39	1	ol	AO1_Nagao
RA-QD02-0161	Curation S1-1	43	1	ol	-
RA-QD02-0162	Open Univ	62	1	lpx,ol	AO1_Grady
RA-QD02-0163	IPAG-PLANETO	27	1	hpx,ol,Al	AO1_England, AO1_Fueri
RA-QD02-0164	CONSUMED	47	2	lpx,hpx,FeNi	AO4_Langenhorst
RA-QD02-0165	Curation glovebox2, attached to carbon fiber using acetone-soluble bond	26	1	ol	AO1_Tsuchiyama
RA-QD02-0166	Curation S25-500	54	4	Al	-
RA-QD02-0167	CONSUMED	55	1	ol	AO1_Fujiya
RA-QD02-0168-01	Curation S1-2	39	1	ol,pl	-
RA-QD02-0168-02	Curation S1-3	27	1	ol	-
RA-QD02-0169	CONSUMED	52	1	ol	AO2_Yurimoto
RA-QD02-0170	Curation glovebox2, UTS by FIB	40	1	ol	AO2_Noguchi
RA-QD02-0171	CONSUMED	62	2	ol,hpx,FeNi	AO3_Noguchi-1
RA-QD02-0172	Curation S26-501	35	4	SiO	-
RA-QD02-0173	Curation S1-4	62	1	lpx	-
RA-QD02-0174	CRPG-CNRS	55	1	ol	AO1_Fueri
RA-QD02-0175	LOST	42	1	pl,lpx	-
RA-QD02-0176	CONSUMED	33	1	ol,lpx,hpx	AO1_Nakamura
RA-QD02-0177	BROKEN	35	1	ol	-
RA-QD02-0178	Curation glovebox2, mounted on Au coated carbon tape	35	1	ol	AO2_Yurimoto
RA-QD02-0179	Curation glovebox2, PS	55	1	ol,pl	AO1_Mikouchi

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0180	Curation glovebox2, large FIB hole, pressed on In disk	55	3	CO,KCl,NaCl	PE
RA-QD02-0180-01_03	Curation glovebox2,UTSs by FIB		3	[C,N,O,NaCl,KCl]	PE
RA-QD02-0181	Kyushu Univ.	55	3	CNO,NaCl,KCl	AO4_Naraoka
RA-QD02-0182	Curation SG05b7	46	3	CNO,NaCl,KCl	-
RA-QD02-0183	Curation SG05b4	38	3	CNO,KCl,NaCl	-
RA-QD02-0184	JAXA	127	2	ol,pl,FeNi	CU1_Yada
RA-QD02-0185	NMNS	57	1	ol	CU2
RA-QD02-0186	LOST	127	2	ol,chm,ap	CO
RA-QD02-0187	CONSUMED	62	1	ol	AO1_Busemann
RA-QD02-0188	CONSUMED	182	2	ol,FeNi,FeS	AO2_Nishiizumi
RA-QD02-0189	Curation glovebox2, attached to fiber using resin	54	2	ol,pl,FeS,FeNi	CU1_Karouji
RA-QD02-0191	JAXA ICF70-V004-KA04	60	1	ol	CU2
RA-QD02-0192	NASA	47	2	ol,pl,hpx,FeS	NASA
RA-QD02-0193	NASA	51	1	ol,hpx,pl	NASA
RA-QD02-0194	CONSUMED	125	2	ol,FeS	AO2_Busemann
RA-QD02-0195	NASA	85	2	ol,FeS	NASA2
RA-QD02-0196	ASU, PS	73	1	ol	AO1_Kita,AO7_Bose
RA-QD02-0196-01_02	Curation glovebox2, UTS by UM		1	-	AO1_Kita
RA-QD02-0197	CONSUMED	62	1	ol,pl	AO1_Busemann
RA-QD02-0198	LOST	70	2	ol	CU1_Uesugi
RA-QD02-0199	CONSUMED	145	2	ol,pl,chm	AO2_Park
RA-QD02-0200	Curation glovebox2, attached to fiber using resin	82	2	ol,FeNi,pl	CU1_Karouji
RA-QD02-0201	NASA	59	1	ol,hpx	NASA
RA-QD02-0202	BROKEN		-	-	-
RA-QD02-0202-01	NASA	59	1	ol,pl	NASA
RA-QD02-0202-02	Curation S2-31	25	1	ol,pl	-
RA-QD02-0203	JAXA N2-SP3	46	1	ol,pl	CU1_Uesugi
RA-QD02-0204	Tohoku Univ	87	1	lpx,pl,K-fld	AO2_Nakamura
RA-QD02-0205	Univ. Jena	55	1	lpx,hpx	AO4_Langenhorst
RA-QD02-0206	Curation S2-29	25	1	ol,lpx	-
RA-QD02-0207	LOST	54	1	ol,pl	-
RA-QD02-0208	BROKEN	43	-	ol,(Ca,Cl)	AO1_Nakamura
RA-QD02-0208-01	Curation glovebox2, attached to carbon fiber using acetone-soluble bond	31	2	ol,(Ca,Cl)	AO1_Nakamura
RA-QD02-0208-02	Curation glovebox2, attached to carbon fiber using acetone-soluble bond		2	ol,(Ca,Cl)	AO1_Nakamura
RA-QD02-0209	CONSUMED	41	1	ol	AO1_Fujiya
RA-QD02-0210	Curation S2-32	37	2	ol,(Mg,Ca,Na)	-
RA-QD02-0211	Curation glovebox2, PB with C-coat	47	2	ol,FeS	AO1_Keller

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0211-01_09	Curation glovebox2, UTS by UM		2	-	AO1_Keller
RA-QD02-0211-10	Curation glovebox2, UTS by FIB		2	-	AO1_Keller
RA-QD02-0211-11	Curation glovebox2, UTS by FIB		2	-	AO1_Keller
RA-QD02-0211-12	Curation glovebox2, UTS by FIB		2	-	AO1_Keller
RA-QD02-0211-13	Curation glovebox2, UTS by FIB		2	-	AO1_Keller
RA-QD02-0211-14	Curation glovebox2, UTS by FIB		2	-	AO1_Keller
RA-QD02-0211-15	Curation glovebox2, UTS by FIB		2	-	AO1_Keller
RA-QD02-0211-16	Curation glovebox2, UTS by FIB		2	-	AO1_Keller
RA-QD02-0212	Curation S26-502	58	4	SiO	-
RA-QD02-0213	CRPG-CNRS	58	1	ol	AO1_Fueri
RA-QD02-0214	Curation glovebox2, attached to carbon fiber using acetone-soluble bond	35	2	hpx,FeS	AO1_Nakamura,AO4_Brunetto
RA-QD02-0215	NASA	32	1	ol	NASA2
RA-QD02-0216	NASA	39	1	ol,Al	NASA
RA-QD02-0217	Curation SG07b0	50	4	Al,CFO	-
RA-QD02-0218	Curation S26-503	57	4	Al	-
RA-QD02-0219	Curation S2-33	42	1	ol	-
RA-QD02-0220	Curation S26-504	67	4	Al	-
RA-QD02-0221	Curation S27-532	22	1	hpx	-
RA-QD02-0222	Curation SG05b9	121	3	(C,O),lpx	-
RA-QD02-0223	Hokkaido Univ., attached to carbon fiber using acetone-soluble bond	51	1	lpx,Fe	AO1_Tsuchiyama,AO4_Brunetto, AO8_Bajo
RA-QD02-0224	LOST	35	1	ol	-
RA-QD02-0225	Curation S26-505	42	4	Al	-
RA-QD02-0226	Curation S27-533	40	1	ol	-
RA-QD02-0227	Curation SG07b2	62	4	Al	-
RA-QD02-0228	Curation S28-553	33	2	hpx,ol,pl,(Mg,Na,Ca)	-
RA-QD02-0229	Curation S27-534	20	1	pl,ol	-
RA-QD02-0231	LOST	30	1	ol,pl	-
RA-QD02-0232	Hokkaido Univ., attached to carbon fiber using acetone-soluble bond	36	1	pl,lpx	AO1_Nakamura,AO4_Brunetto,AO8_Bajo
RA-QD02-0233	Curation SG07b3	19	4	Al	-
RA-QD02-0234	Curation S2-35	37	1	ol,lpx	-
RA-QD02-0235	CONSUMED	79	2	ol,pl,FeS	AO2_Busemann
RA-QD02-0236	JAXA	60	1	lpx,ol	CU1_Yada
RA-QD02-0237	Curation SG13a2	42	1	lpx,hpx	-
RA-QD02-0238	Curation SG13a3	56	1	ol,pl	-
RA-QD02-0239	US Naval Research Lab.	59	2	lpx,FeS	AO3_Stroud
RA-QD02-0240	CONSUMED	66	1	ol,Al	AO3_Noguchi-1
RA-QD02-0241	CONSUMED	96	2	lpx,FeS,Fe	AO2_Busemann

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0242	Tohoku Univ	102	1	ol,pl	AO2_Nakamura
RA-QD02-0243	JAXA	70	2	ol,lpx,FeS	AO2_Noguchi
RA-QD02-0244	Curation glovebox2, UTS by FIB	60	2	ol,lpx,FeS	AO2_Noguchi
RA-QD02-0245	container-K006	42	2	FeS,ol,lpx	CO,CU2
RA-QD02-0246-01	Curation SG13e3	26	1	ol	-
RA-QD02-0246-02	Tohoku Univ	26	1	pl	AO2_Gucsik
RA-QD02-0247	CONSUMED	59	1	lpx,K-fld	AO2_Nakamura
RA-QD02-0248	NASA	150	2	ol,hpx,pl,FeS	NASA2
RA-QD02-0249	LOST	25	1	ol	-
RA-QD02-0250	Curation glovebox2, embedded in indium with Au coat	76.5	1	lpx	AO5_Liu
RA-QD02-0251	Curation S27-536	34.5	1	ol,pl,hpx	-
RA-QD02-0252	Curation S27-537	29.9	1	ol,lpx	-
RA-QD02-0253	IPAG	33	1	ol	AO3_Bonal
RA-QD02-0254	BROKEN	59	-	lpx,Al	-
RA-QD02-0254-01	Curation S27-538	55	1	lpx	-
RA-QD02-0254-02	Curation S27-539	18	1	lpx	-
RA-QD02-0255	Curation S26-506	186	4	Al	-
RA-QD02-0256	LOST	38	1	ol	AO2_Noguchi
RA-QD02-0257	JAXA	44.2	2	ol,pl,FeS	AO3_Noguchi-1
RA-QD02-0258	Curation S27-540	29.5	1	ol,hpx	-
RA-QD02-0259	CONSUMED	72.4	1	pl,ol	AO3_Yabuta
RA-QD02-0260	Curation S28-552	39.1	1	ol,hpx	-
RA-QD02-0261	Curation SG10c3	22.9	1	lpx	-
RA-QD02-0261-01	Curation S28-555		-	-	-
RA-QD02-0261-02	Curation S28-556		-	-	-
RA-QD02-0262	Curation SG10d0	36.1	1	ol,lpx	-
RA-QD02-0263	Curation S28-541	31.6	1	hpx	-
RA-QD02-0264	LOST	28.3	1	ol	lost during manipulation
RA-QD02-0265	DIVIDED	26	2	[hpx,pl,ol,FeS]	CU1_Yakame,CU1_Uesugi,EXTRA
RA-QD02-0265-01	Curation glovebox2		2	-	AO1_Langenhorst
RA-QD02-0265-02	Curation glovebox2, UTS by FIB		2	-	AO1_Langenhorst
RA-QD02-0265-03	Curation glovebox2, UTS by FIB		2	-	AO1_Langenhorst
RA-QD02-0271	Kyushu Univ.	169	2	ol,pl,FeNi	AO4_Noguchi
RA-QD02-0272	Hokkaido Univ.	149	2	ol,lpx,hpx,FeS	AO8_Bajo
RA-QD02-0273	CONSUMED	228	1	ol,hpx,K-fld	AO7_Jourdan
RA-QD02-0274	Kyushu Univ.	179	1	hpx,ol,lpx,pl	AO4_Noguchi
RA-QD02-0275	Kyushu Univ.	140	1	ol,Al	CU1_Matsumoto, AO6_Matsumoto-2
RA-QD02-0276	Kyoto Univ.	117	2	ol,hpx,ap,lpx,pl,FeS	AO11_Igami
RA-QD02-0277	Kyushu Univ.	217	2	hpx,lpx,ol,pl,FeS,chm,Al,F	AO6_Matsumoto-2
RA-QD02-0278	Univ. Glasgow	94.4	1	ol	AO5_Daly
RA-QD02-0279	Univ. Glasgow	164	1	ol.pl	AO5_Daly

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0280	Curation S13-247	88.9	2	ol,FeS	-
RA-QD02-0281	Curation S13-248	88.5	2	ol,chm	-
RA-QD02-0282	Kyushu Univ. UTS by FIB	243	2	ol,chm	CU1_Matsumoto
RA-QD02-0283	Kyushu Univ.	185	1	ol	CU1_Matsumoto, AO6_Matsumoto-2
RA-QD02-0284	Curation S13-249	106	1	ol,hpx	-
RA-QD02-0285	Kyushu Univ.	141	2	ol,chm	AO4_Noguchi
RA-QD02-0286	Curation glovebox2, embedded carbon tape	200	2	pl,ol,hpx,FeS	CU1_Matsumoto
RA-QD02-0287	Kyushu Univ.	121	1	ol,hpx,pl	AO4_Noguchi
RA-QD02-0288	CONSUMED	169	1	hpx,pl,lpx	AO3_Jourdan
RA-QD02-0289	CONSUMED	172	1	ol,hpx,pl	AO2_Nishiizumi
RA-QD02-0290	Curation S13-251	57.3	2	pl,ol,FeNi	-
RA-QD02-0291	CONSUMED	96	1	ol	AO5_Liu
RA-QD02-0292	Curation glovebox2, embedded carbon tape	79.9	2	ol,pl,lpx,FeS	CU1_Matsumoto
RA-QD02-0293	Curation S26-507	104	4	Al	-
RA-QD02-0294	Curation S28-542	30.9	1	ol	-
RA-QD02-0295	Curation S28-554	40.6	1	ol	-
RA-QD02-0296	Curation S14-266	78.9	2	pl,FeS	-
RA-QD02-0297	Curation S13-252	115	2	ol,FeNi,chm	-
RA-QD02-0298	Curation SG07g4	63.9	4	Al	-
RA-QD02-0299	Kyushu Univ.	119	2	lpx,ol,chm	AO4_Noguchi
RA-QD02-0300	Tohoku Univ.	190	2	ol,lpx,pl,chm,hpx	AO7_Jourdan
RA-QD02-0301	Curation S35-696	255	2	FeS,pl,ol	-
RA-QD02-0302	Curation S13-253	129	2	FeS,lpx	-
RA-QD02-0303	Curation S13-254	107	2	ol,pl,chm	-
RA-QD02-0304	Curation S13-255	98.3	2	lpx,FeS	-
RA-QD02-0305	Curation S14-272	270	1	ol	-
RA-QD02-0306	Tohoku Univ.	160	2	pl,ol,lpx,chm	AO7_Jourdan
RA-QD02-0307	Hokkaido Univ.	100	2	ol,lpx,Fe	AO8_Bajo
RA-QD02-0308	Curation glovebox2, particle	102	1	lpx,ol,pl	AO8_Yesiltas
RA-QD02-0309	Curation S14-276	49.3	1	lpx,pl	-
RA-QD02-0310	ASU	127	2	ol,pl,FeS	AO5_Schrader
RA-QD02-0311	Tohoku Univ.	108	2	ol,lpx,pl,K-fld,Fe	AO7_Jourdan
RA-QD02-0312	Curation SG15a0	126	1	ol,pl	-
RA-QD02-0313	Curation SG15a1	50.6	1	ol,pl	-
RA-QD02-0314	CONSUMED	71.6	1	ol	AO5_Liu
RA-QD02-0315	Curation SG15a3	116	1	ol,pl,lpx	-
RA-QD02-0316	ASU	117	2	ol,chm,Al	AO7_Davidson
RA-QD02-0317	Curation SG15a5	116	1	ol,pl	-
RA-QD02-0318	Curation SG05g8	48.4	3	C,Fe,Si,Al,Mg	-
RA-QD02-0319	Curation SG15b0	61.9	1	ol,lpx	-
RA-QD02-0325	Curation glovebox2, embedded carbon tape	182	2	ol,pl,FeS,lpx	CU1_Matsumoto, AO6_Matsumoto-3
RA-QD02-0326	Curation SG15b2	63.4	1	ol,pl,hpx	-
RA-QD02-0327	Curation SG15b3	88.3	1	ol	-
RA-QD02-0328	Curation SG15b4	51.7	1	lpx,pl	-
RA-QD02-0329	Curation SG15b5	65.5	1	ol	-
RA-QD02-0330	Curation SG15c0	46.1	1	ol	-
RA-QD02-0331	Curation SG15c2	157	2	FeS,pl,lpx,ol,SiO	-
RA-QD02-0332	Univ. Hawaii	47.9	1	ol	AO6_Ishii
RA-QD02-0333	Curation SG15c4	34.4	1	pl	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0334	Curation SG15c5	88.2	1	lpx,ol	-
RA-QD02-0335	Curation S13-256	21.6	1	lpx,ol,K-fld	-
RA-QD02-0336	Curation S13-257	48.2	1	ol,lpx	-
RA-QD02-0337	Curation S13-258	38.1	1	ol	-
RA-QD02-0338	Curation S13-259	28.9	1	lpx,pl	-
RA-QD02-0339	Curation S13-260	37	2	ol,hpx,FeS	-
RA-QD02-0340	Curation S14-269	28.4	1	ol	-
RA-QD02-0341	Curation S14-278	34.5	1	ol,pl	-
RA-QD02-0342	Curation SG14c4	31.6	2	ol,FeS,Al	-
RA-QD02-0343	Curation S14-270	40	1	lpx,ol	-
RA-QD02-0344	Curation S14-271	28.3	1	lpx,ol	-
RA-QD02-0345	Curation S14-273	26.8	1	ol	-
RA-QD02-0346	Curation S14-274	20.3	1	lpx,pl	-
RA-QD02-0347	Curation S14-275	27.4	1	ol,pl	-
RA-QD02-0348	Curation SG15d2	24.2	2	pl,ol,chm	-
RA-QD02-0349	Curation SG15a2	23.9	1	lpx,pl,K-fld	-
RA-QD02-0350	Curation SG15b1	16.9	1	ol	-
RA-QD02-0351	Curation SG15c3	22.8	1	lpx,ol	-
RA-QD02-0352	Curation SG15d3	52.9	1	lpx,ol,hpx	-
RA-QD02-0353	Curation SG15d4	24.7	1	ol	-
RA-QD02-0354	Curation SG15d5	47.1	1	ol,pl	-
RA-QD02-0355	Curation SG15e0	28.8	1	hpx,lpx,pl	-
RA-QD02-0356	Curation SG15e1	37.6	2	ol,FeS	-
RA-QD02-0357	Curation SG15e2	58.8	1	ol,Pt	-
RA-QD02-0358	Curation SG15e3	47.3	2	ol,lpx,FeS	-
RA-QD02-0359	Curation SG15e4	34.5	2	ol,lpx,chm	-
RA-QD02-0360	Curation SG15e5	32.7	1	lpx,ol	-
RA-QD02-0361	Curation SG15f0	35	2	ol,FeS	-
RA-QD02-0362	Curation SG15f1	41	1	ol,Al	-
RA-QD02-0363	Curation SG15f2	45.1	2	lpx,Fe	-
RA-QD02-0364	Curation SG15f3	41.2	1	ol	-
RA-QD02-0365	Curation SG15f4	45.6	2	ol,lpx,hpx,FeS	-
RA-QD02-0366	Curation SG15f5	54.1	1	ol	-
RA-QD02-0367	Curation SG13a0	57.8	1	lpx,pl,K-fld	-
RA-QD02-0368	Curation SG13a1	41	2	ol,chm	-
RA-QD02-0369	Curation SG13a4	34.9	1	ol	-
RA-QD02-0370	Curation SG13a5	44.4	1	SiO,pl,lpx	-
RA-QD02-0371	Curation SG13b0	41.6	1	ol,pl,Al,F	-
RA-QD02-0372	Curation SG13b1	41.1	2	ol,lpx,FeS	-
RA-QD02-0373	Curation SG13b2	32.2	1	lpx,hpx,pl	-
RA-QD02-0374	Curation SG13b3	89.9	1	lpx,ol	-
RA-QD02-0375	Curation SG13b4	33.9	1	ol,hpx	-
RA-QD02-0376	Curation SG13b5	35	1	hpx,lpx	-
RA-QD02-0377	Curation SG13c0	28.4	1	ol,hpx	-
RA-QD02-0378	Curation SG13c1	36.5	1	ol	-
RA-QD02-0379	Curation SG13c3	29.9	1	lpx	-
RA-QD02-0380	Curation SG13c5	30.6	1	ol	-
RA-QD02-0381	Curation SG13d0	34	1	ol,K-fld	-
RA-QD02-0382	Curation SG13d1	31.7	1	lpx,ol	-
RA-QD02-0383	Curation SG13d2	39.5	1	ol	-
RA-QD02-0384	Curation SG13d3	28.8	1	ol,hpx	-
RA-QD02-0385	Curation SG13e0	22.5	1	ol	-
RA-QD02-0386	Curation SG13e1	22.2	1	ol,Al	-
RA-QD02-0387	Curation SG13e2	42.6	1	ol,hpx	-
RA-QD02-0388	Curation SG13e4	31.3	1	ol,pl	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0389	Curation SG13e5	31.4	1	ol,hpx,K-fld	-
RA-QD02-0390	Curation SG13f0	27.6	1	lpx,pl,hpx	-
RA-QD02-0391	Curation SG13f1	26.8	1	ol,pl	-
RA-QD02-0392	Curation SG13f2	30.4	1	ol,hpx,lpx	-
RA-QD02-0393	Curation SG13f3	22.6	1	ol,hpx	-
RA-QD02-0394	Curation SG13f5	32.3	1	ol	-
RA-QD02-0395	Curation S11-220	25.5	2	ol,FeS,K-fld,hpx,pl	-
RA-QD02-0396	Curation S12-232	24.8	1	lpx,pl,ol,hpx	-
RA-QD02-0397	Curation S12-234	37	2	ol,lpx,chm	-
RA-QD02-0398	Curation S17-338	33.4	1	lpx	-
RA-QD02-0399	Curation S16-301	39.6	1	lpx,ol,hpx,pl	-
RA-QD02-0400	Curation S16-302	59.4	1	ol,pl	-
RA-QD02-0401	Curation S16-303	46.2	2	ol,lpx,hpx,FeS	-
RA-QD02-0402	Curation S16-304	34.1	1	hpx	-
RA-QD02-0403	Curation S16-305	30.5	1	ol	-
RA-QD02-0404	Curation S16-306	28.4	1	ol,pl	-
RA-QD02-0405	Curation S16-308	23.4	1	ol,lpx,pl	-
RA-QD02-0406	Curation S16-309	35.5	1	lpx,ol	-
RA-QD02-0407	Curation S16-310	24.3	1	ol,pl	-
RA-QD02-0408	Curation S16-312	38.5	1	lpx,pl	-
RA-QD02-0409	Curation S16-315	24.8	1	ol,hpx,pl	-
RA-QD02-0410	Curation S16-316	31.7	1	ol,hpx	-
RA-QD02-0411	Curation S16-317	29.1	1	ol	-
RA-QD02-0412	Curation S16-318	32.4	1	ol,pl	-
RA-QD02-0413	Curation S16-319	30.8	1	ol	-
RA-QD02-0414	Curation S16-320	30.8	1	ol,hpx,pl	-
RA-QD02-0415	LOST	25.8	1	lpx,pl,ol	-
RA-QD02-0416	Curation S17-321	65.3	1	ol	-
RA-QD02-0417	Curation S17-322	32.9	1	ol	-
RA-QD02-0418	Curation S17-324	40.7	1	ol,hpx	-
RA-QD02-0419	Curation S17-325	29.2	1	lpx,hpx,ol	-
RA-QD02-0420	Curation S17-326	32.3	1	ol	-
RA-QD02-0421	Curation S17-327	39.7	1	pl,ol,K-fld	-
RA-QD02-0422	Curation S17-328	27.4	1	ol	-
RA-QD02-0423	Curation S17-329	24.1	1	ol,pl	-
RA-QD02-0424	Curation SG34e5	29	1	pl,ol	-
RA-QD02-0425	Curation S17-330	19.6	2	ol,pl,FeS	-
RA-QD02-0426	Curation S17-331	24.5	2	ol,pl,chm	-
RA-QD02-0427	Curation S17-332	24.1	1	ol	-
RA-QD02-0428	Curation S17-333	31	1	ol,K-fld	-
RA-QD02-0429	Curation S17-335	22.4	1	ol	-
RA-QD02-0430	Curation S17-337	23.8	2	ol,pl,FeS,hpx	-
RA-QD02-0431	Curation S17-339	26.4	1	lpx	-
RA-QD02-0432	Curation SG35a1	47.9	1	lpx,ol	-
RA-QD02-0433	Curation S18-341	26.6	1	ol	-
RA-QD02-0434	Curation S18-342	65.4	1	ol	-
RA-QD02-0435	Curation S18-343	29.1	1	ol	-
RA-QD02-0436	Curation S18-346	23.3	1	pl,lpx,hpx	-
RA-QD02-0437	Curation S18-345	17.9	2	ol,FeS	-
RA-QD02-0438	Curation S18-347	28.2	1	ol,K-fld	-
RA-QD02-0439	LOST	17.2	2	ol,Fe	-
RA-QD02-0440	Curation S18-348	23.5	2	ol,hpx,pl,Fe	-
RA-QD02-0441	Curation S18-349	25.2	1	ol,K-fld	-
RA-QD02-0442	Curation S18-351	25.2	1	ol,pl	-
RA-QD02-0443	Curation S18-352	27.5	2	ol,FeS	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0444	Curation S18-355	31.7	1	ol	-
RA-QD02-0445	Curation S18-356	21.2	1	hpx	-
RA-QD02-0446	Curation S18-357	33.3	2	ol,lpx,pl,FeS	-
RA-QD02-0447	Curation S19-361	29.8	1	ol,pl	-
RA-QD02-0448	Curation S19-362	32.3	2	ol,FeS	-
RA-QD02-0449	Curation S19-363	30.1	1	ol	-
RA-QD02-0450	Curation SG05h2	38.9	3	C,O,KCl,NaCl	-
RA-QD02-0451	Curation SG05h3	33.8	3	C,O,N,NaCl,KCl	-
RA-QD02-0452	Curation SG05h4	34	3	C,O,Al,Mg,NaCl,KCl	-
RA-QD02-0453	Curation S19-364	32.5	2	FeS	-
RA-QD02-0454	Curation S19-365	41.8	1	ol,hpx,pl	-
RA-QD02-0455	Curation S19-366	39.5	1	ol	-
RA-QD02-0456	Curation S19-367	34.6	2	hpx,pl,ol,K-fld,FeS	-
RA-QD02-0457	Curation S19-368	52.2	1	ol,Al	-
RA-QD02-0458	Curation S19-369	27.9	1	ol	-
RA-QD02-0459	Curation S19-370	23.6	2	lpx,pl,hpx,FeS	-
RA-QD02-0460	Curation S19-372	36.3	2	ol,pl,FeS	-
RA-QD02-0461	Curation S20-383	25.4	2	ol,pl,Fe	-
RA-QD02-0462	Curation S19-373	22.7	2	ol,Al,Fe	-
RA-QD02-0463	Curation S19-374	35.1	2	FeS	-
RA-QD02-0464	Curation S19-376	51	2	FeS,hpx,ol	-
RA-QD02-0465	Curation S19-377	28.5	1	ol,pl	-
RA-QD02-0466	Curation S19-378	22.7	1	pl,ol	-
RA-QD02-0467	Curation S19-380	23.5	2	ol,pl,FeS	-
RA-QD02-0468	Curation S20-381	23.2	1	pl,K-fld,lpx	-
RA-QD02-0469	Curation S20-382	13	1	ol,hpx	-
RA-QD02-0470	Curation S37-736	48.1	1	ol,pl	-
RA-QD02-0471	BROKEN		-	-	-
RA-QD02-0471-01	Curation S37-737	24.1	2	pl,lpx,FeS	-
RA-QD02-0471-02	Curation S2-37	11.5	1	pl,lpx	-
RA-QD02-0472	Curation S37-738	33	1	ol	-
RA-QD02-0473	Curation S37-739	25	1	ol	-
RA-QD02-0474	Curation S37-740	31.6	1	pl	-
RA-QD02-0475	Curation S38-741	25.9	1	pl,ol	-
RA-QD02-0476	Curation S38-742	33.5	1	pl,Cu	-
RA-QD02-0477	Curation S38-743	27.8	1	ol	-
RA-QD02-0478	Curation S38-745	38.2	1	ol	-
RA-QD02-0479	Curation S38-746	32	1	ol,lpx,Al	-
RA-QD02-0480	Curation S38-747	25.6	1	ol,Fe,Al	-
RA-QD02-0482	Curation S38-748	20.1	2	ol,FeS,Al	-
RA-QD02-0483	Curation S38-749	25	1	lpx,hpx,ol,Cl	-
RA-QD02-0484	Curation S38-750	28	2	ol,FeS,hpx,Al	-
RA-QD02-0485	Curation S38-751	25.2	2	lpx,FeNi,FeS,ol	-
RA-QD02-0486	Curation S38-752	27.2	1	ol,hpx,pl	-
RA-QD02-0487	Curation S38-753	32.6	2	ol,FeS,lpx,Al	-
RA-QD02-0488	Curation S38-754	51.5	2	ol,lpx,hpx,FeS,pl,Al	-
RA-QD02-0489	Curation S38-755	25.7	1	ol,hpx,Al	-
RA-QD02-0490	Curation S38-756	27.6	1	lpx,ol	-
RA-QD02-0491	Curation S38-757	29.4	1	ol	-
RA-QD02-0492	Curation S38-758	27.5	1	ol	-
RA-QD02-0493	Curation S38-759	32.8	1	ol	-
RA-QD02-0494	Curation S38-760	31.4	1	ol	-
RA-QD02-0495	Curation S21-419	26	1	ol	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0496	Curation S22-421	31.4	1	ol,lpx,Al	-
RA-QD02-0497	Curation S22-423	32.8	2	hpx,FeS,Na	-
RA-QD02-0498	Curation S23-441	29.1	1	ol	-
RA-QD02-0499	Curation S23-446	22.8	1	hpx,ol	-
RA-QD02-0500	Curation S24-463	33.9	2	pl,ol,hpx,FeS	-
RA-QD02-0501	Curation S24-467	32.8	1	ol,Al	-
RA-QD02-0502	Curation S25-483	52	1	ol,hpx,Cl	-
RA-QD02-0503	Curation S29-567	48.6	2	ol,FeS	-
RA-QD02-0504	Curation S31-619	37.1	1	ol,Al	-
RA-QD02-0505	Curation S31-620	31.9	1	ol	-
RA-QD02-0506	Curation S20-384	39.5	2	ol,pl,hpx,FeS	-
RA-QD02-0507	Curation S20-385	28.1	1	ol,pl,hpx	-
RA-QD02-0508	Curation S20-386	26.1	1	ol,hpx,lpx,Al	-
RA-QD02-0509	Curation S20-387	23.8	1	ol,hpx	-
RA-QD02-0510	Curation S20-388	34.9	1	ol,hpx	-
RA-QD02-0511	Curation S20-389	27	2	ol,lpx,chm,Al	-
RA-QD02-0512	Curation S20-391	29	1	ol	-
RA-QD02-0513	Curation S20-392	28.7	1	lpx,ol,pl	-
RA-QD02-0514	Curation S20-393	31.5	1	ol,lpx,Al	-
RA-QD02-0515	Curation S26-508	48.3	4	Si,O,C,lpx,	-
RA-QD02-0516	Curation S20-395	23.2	1	pl,hpx,ol	-
RA-QD02-0517	Curation S20-396	25.1	1	ol	-
RA-QD02-0518	Curation S20-397	29.5	1	lpx,hpx,ol,pl	-
RA-QD02-0519	Curation S20-398	26	1	ol,ap	-
RA-QD02-0520	Curation S20-399	30.6	1	ol	-
RA-QD02-0521	Curation S21-401	23.9	1	ol	-
RA-QD02-0522	Curation S21-402	33.3	1	K-fld,pl,ol	-
RA-QD02-0523	Curation S21-403	27.8	1	ol	-
RA-QD02-0524	Curation S21-404	19.8	1	ol	-
RA-QD02-0525	Curation S21-405	47.7	2	FeS	-
RA-QD02-0526	Curation S21-406	52.2	2	FeS,lpx,ol	-
RA-QD02-0527	Curation S21-407	35	2	FeS,ol,lpx	-
RA-QD02-0528	Curation S21-408	26.8	1	pl,ol	-
RA-QD02-0529	Curation S21-409	31.6	2	ol,FeS	-
RA-QD02-0530	Curation S21-410	33.5	1	ol	-
RA-QD02-0531	Curation S21-411	21.2	1	ol	-
RA-QD02-0532	Curation S21-413	30.8	1	ol,pl	-
RA-QD02-0533	Curation S22-424	51.3	2	FeS	-
RA-QD02-0534	Curation S21-415	52.3	2	FeS	-
RA-QD02-0535	Curation S21-416	24.7	1	ol	-
RA-QD02-0536	Curation S21-417	27.3	1	ol	-
RA-QD02-0537	Curation S21-418	35.6	2	FeS	-
RA-QD02-0538	Curation S21-420	20.5	1	pl	-
RA-QD02-0539	Curation S22-422	21.3	2	ol,chm	-
RA-QD02-0540	LOST	31.4	1	ol,Pt	
RA-QD02-0541	Curation S35-697	45.5	2	chm,Ti	-
RA-QD02-0542	BROKEN		-	-	-
RA-QD02-0542-01	Curation S35-698	19.4	1	lpx	-
RA-QD02-0542-02	Curation S35-699	13.9	1	hpx,lpx,Na	-
RA-QD02-0543	Curation S35-700	27.4	1	lpx	-
RA-QD02-0544	Curation S36-701	18.1	1	ol,lpx	-
RA-QD02-0545	Curation S36-702	17.7	1	ol,pl	-
RA-QD02-0546	Curation S36-703	26	1	hpx,ol,pl	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0547	Curation S36-704	18.4	1	ol,K-fld	-
RA-QD02-0548	Curation S36-705	27.2	1	ol,lpx	-
RA-QD02-0549	Curation S36-706	18.7	1	pl	-
RA-QD02-0550	Curation S36-707	22.3	1	lpx	-
RA-QD02-0551	Curation S36-710	86.1	2	FeS,pl,ol	-
RA-QD02-0552	Curation S36-711	25.6	1	pl,ol	-
RA-QD02-0553	Curation S36-712	17.9	1	ol,lpx	-
RA-QD02-0554	Curation S36-713	51.1	1	ol	-
RA-QD02-0555	Curation S36-714	27.2	1	ol,pl	-
RA-QD02-0556	Curation S36-715	20.8	1	lpx,ol,pl	-
RA-QD02-0557	Curation S36-716	21.2	1	ol	-
RA-QD02-0558	Curation S36-717	25	1	lpx	-
RA-QD02-0559	Curation S36-718	23.1	1	ol	-
RA-QD02-0560	Curation S36-720	16.7	1	ol	-
RA-QD02-0561	Curation S37-721	18.8	1	ol	-
RA-QD02-0562	Curation S37-722	82.7	1	ol	-
RA-QD02-0563	Curation S37-723	16.5	1	lpx,ol,pl	-
RA-QD02-0564	Curation S37-724	38.8	2	FeNiS	-
RA-QD02-0565	Curation S37-725	20.5	1	ol	-
RA-QD02-0566	Curation S37-726	18.5	1	hpx,ol	-
RA-QD02-0567	Curation S37-727	27	2	ol,FeNi	-
RA-QD02-0568	Curation S37-728	24.9	1	ol	-
RA-QD02-0569	Curation S37-730	35.4	1	ol,Al,pl	-
RA-QD02-0570	Curation S37-731	21.5	1	ol,pl,lpx	-
RA-QD02-0571	Curation S37-732	25.6	2	ol,FeS	-
RA-QD02-0572	Curation S37-733	22.2	1	ol	-
RA-QD02-0573	Curation S37-734	25.6	2	ol,pl,chm,lpx,K-fld,ap	-
RA-QD02-0574	Curation S37-735	19.7	2	pl,FeS,ol,hpx	-
RA-QD02-0575	Curation S26-509	52	4	Al,FeS,Ca,Cl	-
RA-QD02-0576	Curation SG05h7	43.4	3	C,F,O,Al,Ca,Mg	-
RA-QD02-0577	Curation S30-592	28.9	1	hpx	-
RA-QD02-0578	Curation S30-593	27.8	1	ol	-
RA-QD02-0579	Curation S30-594	38.2	1	ol	-
RA-QD02-0580	Curation S30-595	80.3	2	FeS	-
RA-QD02-0581	Curation S30-596	25.1	1	ol	-
RA-QD02-0582	Curation S30-597	18.4	1	ol,pl,lpx,Pt	-
RA-QD02-0583	Curation S30-598	36.1	2	pl,ol,Cr,Fe	-
RA-QD02-0584	Curation S30-599	22.3	1	ol,pl,Ca	-
RA-QD02-0585	Curation S30-600	34.5	2	FeS	-
RA-QD02-0586	Curation S31-601	29.2	2	FeS	-
RA-QD02-0587	Curation S31-602	32.5	2	lpx,pl,ol,FeS	-
RA-QD02-0588	Curation S31-603	81.4	2	chm,Mg,Ti,ap,pl	-
RA-QD02-0589	Curation S31-604	27.3	1	ol	-
RA-QD02-0590	Curation S31-605	59.9	2	FeS	-
RA-QD02-0591	Curation S31-606	23.2	1	ol,Al	-
RA-QD02-0592	Curation S31-607	28.5	2	FeS	-
RA-QD02-0593	Curation S31-608	28.4	2	FeS,pl,lpx	-
RA-QD02-0594	Curation S31-609	24	1	pl,K-fld	-
RA-QD02-0595	Curation S31-610	15.8	1	ol	-
RA-QD02-0596	Curation S31-611	20	1	ol,pl,lpx	-
RA-QD02-0597	Curation S31-612	19	1	ol	-
RA-QD02-0598	Curation S32-626	25.5	1	lpx	-
RA-QD02-0599	Curation S31-613	22.1	1	ol,K-fld	-
RA-QD02-0600	Curation S32-627	21.1	2	FeNi,chm	-
RA-QD02-0601	Curation S31-614	32	1	lpx	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RA-QD02-0602	Curation S32-628	22.8	1	ol	-
RA-QD02-0603	Curation S31-615	24.5	1	ol,hpx	-
RA-QD02-0604	Curation S31-616	25.4	1	ol,pl	-
RA-QD02-0605	Curation S31-617	21.6	2	chm	-
RA-QD02-0606	Curation S31-618	20.8	2	chm,Al	-
RA-QD02-0607	Curation S32-621	32.4	1	ol,ap	-
RA-QD02-0608	Curation S32-622	23	1	lpx,Al	-
RA-QD02-0609	Curation S32-623	19.2	1	ol,lpx,pl,K-fld	-
RA-QD02-0610	Curation S32-624	21.4	1	ol	-
RA-QD02-0611	Curation S3-42	23.8	1	ol	-
RA-QD02-0612	Curation S3-43	18.9	1	pl	-
RA-QD02-0613	Curation S26-510	27.6	4	Au,Fe,Ni,Cr,Al,Si	-
RA-QD02-0614	Curation S32-625	22.1	2	ol,pl,FeS	-
RA-QD02-0615	Curation S3-45	32.1	2	ol,FeS,FeNiS,Al	-
RA-QD02-0616	Curation S3-44	19.2	1	pl	-
RA-QD02-0617	LOST	23	1	pl,lpx	-
RA-SG01-0001	Curation S14-261	151	1	lpx,pl,ol,hpx	EXTRA
RA-SG01-0002	Curation S14-262	63.5	1	ol,pl	EXTRA
RA-SG01-0003	Curation S14-265	54.1	1	ol,lpx,Al	-
RA-SG01-0004	Curation S28-543	25.7	1	ol	-
RA-SG01-0006	BROKEN	35	1	hpx,ol,pl	-
RA-SG01-0006-01	Curation S28-544		-	-	-
RA-SG01-0006-02	Curation S28-545		-	-	-
RA-SG01-0007	Curation S28-546	31.2	1	lpx,hpx	-
RA-SG01-0008	Curation SG15d0	43.4	1	ol,hpx,lpx,pl	-
RA-SG01-0009	Curation SG15d1	96.9	2	ol,pl,FeNi	-
RA-SG01-0010	Curation S28-547	25.1	1	ol,pl,K-fld	-
RA-SG01-0011	Curation S28-548	26.8	1	ol	-
RA-SG01-0012	Curation S28-549	16.6	1	ol,pl	-
RA-SG01-0013	Curation S28-550	14.4	1	lpx	-
RA-SG01-0014	Curation S28-551	18.9	1	ol	-
RB-CV-0001	CONSUMED	71.84	1	ol,pl,lpx	AO2_Nagao
RB-CV-0002	CONSUMED	71.1	1	ol,K-fld	AO2_Park
RB-CV-0003	Curation glovebox2, attached to amorphous carbon fiber using resin	33.9	2	ol,FeS	AO2_Tsuchiyama
RB-CV-0004	JAXA	205	2	ol,pl,hpx,lpx,FeS	-
RB-CV-0005	Curation SG05c6	37	3	C,NaCl	-
RB-CV-0006	Curation SG05c7	27.9	3	(C,N,O),C	-
RB-CV-0007	Curation SG05c8	43.1	3	(C,N,O)	-
RB-CV-0008	Kyushu Univ.	56.1	3	(C,N,O)	AO4_Naraoka
RB-CV-0009	CONSUMED	82.51	1	ol,hpx,lpx,pl	AO2_Nagao
RB-CV-0010	Curation glovebox2, attached to amorphous carbon fiber using resin	33.3	1	ol	AO2_Tsuchiyama
RB-CV-0011	Kyushu Univ.	43.7	1	lpx	AO3_Noguchi-2
RB-CV-0012	Curation SG05d1	73.2	3	(C,O),(C,N,O)	-
RB-CV-0013	NASA	98.5	1	lpx,pl,hpx,ol	NASA2
RB-CV-0014	NASA	98	2	ol,FeS	NASA2
RB-CV-0015	NASA	45.5	1	ol,pl	NASA2
RB-CV-0016	Curation S4-67	47.4	2	ol,FeS	-
RB-CV-0017	Curation SG05d2	51.7	3	(C,N,O),(C,O)	-
RB-CV-0018	Curation SG07c7	88.5	4	Al,(C,O)	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RB-CV-0019	Curation SG05d4	32.6	3	C,(C,N,O)	-
RB-CV-0020	Curation glovebox2, particle	68.6	3	(C,O)	AO8_Yesiltas
RB-CV-0021	Curation SG05h6	49.3	3	CO	-
RB-CV-0022	CONSUMED	165	1	ol,Al	AO2_Nishiizumi
RB-CV-0023	Curation S1-8	51.5	1	ol,pl	-
RB-CV-0024	CONSUMED	108	2	ol,lpx,pl,chm	AO4_Park
RB-CV-0025	Curation glovebox2, PS	91	1	ol,pl,hpx,(Ca,Cl)	CO
RB-CV-0026	JAXA	83.2	1	ol	CU1_Yada
RB-CV-0027	Curation SG05d5	59	3	(C,N,O)	-
RB-CV-0028	NASA	76.1	1	pl,hpx,ol	NASA2
RB-CV-0029	NASA	86	3	(C,O),pl,NaCl	AO3_Chan
RB-CV-0030	Curation S4-68	34.1	1	lpx,pl,ol	-
RB-CV-0031	Kyushu Univ.	61	3	(C,N,O)	AO4_Naraoka
RB-CV-0032	Curation SG05d7	59	3	(C,N,O)	-
RB-CV-0033	Curation S4-69	43.7	1	ol,pl	-
RB-CV-0034	Curation S14-279	48.8	1	lpx,pl	-
RB-CV-0035	Curation SG05d8	25	3	(C,N,O),NaCl,hpx	-
RB-CV-0036	JAXA	57.8	1	ol,hpx	CU1_Yada
RB-CV-0037	Curation glovebox2, attached to amorphous carbon fiber using resin	51.7	2	ol,lpx,hpx,chm	AO2_Tsuchiyama
RB-CV-0038	US Naval Research Lab.	51.7	2	ol,FeS,hpx	AO3_Stroud
RB-CV-0039	CONSUMED	76.78	1	pl,ol,hpx	AO2_Nagao
RB-CV-0040	CONSUMED	61	1	ol	AO3_Yabuta
RB-CV-0041	Curation SG05e1	49	3	(C,O),(C,N,O),NaCl	-
RB-CV-0042	Curation S26-511	56	4	Al	-
RB-CV-0043	BROKEN	19.8	1	ol,lpx,(Ca)	CO
RB-CV-0044	JAXA	84.9	1	ol	CU1_Yada
RB-CV-0045	Curation glovebox2, attached to amorphous carbon fiber using resin	25.8	1	ol	AO2_Tsuchiyama
RB-CV-0046	Curation SG07c9	71	4	Al,ol	-
RB-CV-0048	Curation SG07d0	77	4	Al	-
RB-CV-0049	Curation SG05e5	37	3	(C,N,O)	-
RB-CV-0050	Curation S1-17	62	1	ol	-
RB-CV-0051	CONSUMED	78.8	2	hpx,pl,chm	AO2_Park
RB-CV-0052	Curation SG05e2	40	3	(C,O),Cl	-
RB-CV-0053	Curation S14-280	23.4	1	ol	-
RB-CV-0054	Curation SG07d1	82	4	Al	-
RB-CV-0055	Curation SG05e3	45	3	(C,N,O),Al	-
RB-CV-0056	Curation SG07d4	113	4	Al	-
RB-CV-0057	Curation S26-512	74	4	Al	-
RB-CV-0058	LOST	72	2	FeNi,Fe,ol,lpx,hpx	CO
RB-CV-0059	Curation SG07d3	59	4	Al	-
RB-CV-0060	Curation S8-145	33.1	1	ol	-
RB-CV-0061	LOST	41	1	ol	-
RB-CV-0062	Curation S10-182	24.7	1	ol,pl	-
RB-CV-0063	Curation S2-24	77.7	2	ol,FeS,Al	-
RB-CV-0064	Curation S11-205	34.5	1	ol,hpx,pl	-
RB-CV-0065	Curation SG05e6	33	3	(C,N,O)	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RB-CV-0066	Curation SG05e7	29	3	(C,N,O),NaCl	-
RB-CV-0067	Curation S26-513	61	4	(Si,O)	-
RB-CV-0068	Curation SG05f2	55	3	(C,N,O),ol	-
RB-CV-0069	Curation S8-159	29.2	1	ol,pl	-
RB-CV-0070	Curation SG07e0	72	4	(Fe,Cr,Ni)	-
RB-CV-0071	Curation S6-105	30.1	1	ol	-
RB-CV-0072	Curation S26-517	87	4	Al,(C,O)	-
RB-CV-0073	Curation SG07d7	73	4	Al	-
RB-CV-0074	Curation SG05f3	26	3	(C,N,O),NaCl,Al	-
RB-CV-0075	Curation S26-514	63	4	(Si,O)	-
RB-CV-0076	Curation S6-117	39.8	1	ol	-
RB-CV-0077	Curation SG05e8	100	3	(C,N,O)	-
RB-CV-0078	Curation SG05f1	208	3	(C,O)	-
RB-CV-0079	Kyushu Univ.	68	3	(C,N,O),Al,K,Si	AO4_Naraoka
RB-CV-0080	NASA	83	3	(C,N,O),(C,O),Al,K,Si	AO3_Chan
RB-CV-0081	Curation S2-22	53.72	2	ol,FeS	-
RB-CV-0082	CONSUMED	107.42	1	pl, hpx, K-fld	AO3_Jourdan
RB-CV-0083	Curation glovebox2, PS	93.66	1	lpx,ol,pl,Al	AO3_Boonsue
RB-CV-0084	Curation S2-28	56.02	1	ol,lpx	-
RB-CV-0085	LOST	72.97	1	ol	-
RB-CV-0086	Curation glovebox2,attached to carbon fiber using crystal bond	49.26	1	ol, Ca	AO3_Terada
RB-CV-0087	Univ. Glasgow	48.61	2	lpx,FeS, FeNi	AO5_Daly
RB-CV-0088	Curation S1-9	49.17	1	lpx	-
RB-CV-0089	CONSUMED	86.16	1	lpx,ol	AO3_Noguchi-2
RB-CV-0090	Curation S9-166	34.33	1	ol	-
RB-CV-0091	ASU	29.88	2	ol,chm	AO7_Davidson
RB-CV-0092	LOST	33.33	1	ol	-
RB-CV-0093	Curation S9-172	41.26	1	ol	-
RB-CV-0094	Curation S6-110	17.96	1	ol	-
RB-CV-0095	Curation S9-179	41.31	1	ol	-
RB-CV-0096	Univ. Hawaii	23.73	2	ol, hpx, FeS	AO6_Ishii
RB-CV-0097	Curation S6-112	17.94	1	ol	-
RB-CV-0098	Purdue Univ.	21.14	2	lpx,ol,pl,FeS	AO6_Thompson
RB-CV-0099	Curation S7-130	26.38	1	lpx,hpx	-
RB-CV-0100	Curation S11-203	20.48	1	ol	-
RB-CV-0101	Curation S11-211	22.11	2	ol,pl,FeNi	-
RB-CV-0102	Curation S10-194	26.28	1	ol,pl	-
RB-CV-0103	Curation S11-204	25.22	1	ol	-
RB-CV-0104	Curation S10-199	21.99	1	lpx,ol	-
RB-CV-0105	Curation S15-281	18.9	1	lpx	-
RB-CV-0106	Curation S15-284	26.01	2	ol,FeS	-
RB-CV-0107	Curation S6-115	24.17	1	pl	-
RB-CV-0108	Curation S10-188	26.07	2	ol,chm	-
RB-CV-0109	Curation S11-201	28.42	1	ol	-
RB-CV-0110	Curation S14-264	18.72	1	ol	-
RB-CV-0111	Curation SG18a1	29.12	1	lpx, hpx	-
RB-CV-0112	Curation SG18a2	27.79	1	lpx	-
RB-CV-0113	Curation SG18a3	27.83	1	ol	-
RB-CV-0114	Curation SG18a4	24.57	1	ol	-
RB-CV-0115	Curation SG18b1	20.83	1	lpx	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RB-CV-0116	Curation SG18a0	28.24	2	ol,lpx,FeS	-
RB-CV-0117	Curation SG18b2	25.76	1	ol,pl	-
RB-CV-0118	Curation SG18b3	21.44	1	ol,pl	-
RB-CV-0119	Curation SG18b4	24.33	2	ol,lpx,FeS	-
RB-CV-0120	Curation SG18b5	27.4	1	ol	-
RB-CV-0121	Purdue Univ.	26.45	2	ol,lpx,FeS	AO6_Thompson
RB-CV-0122	Curation SG18c1	25.24	1	pl	-
RB-CV-0123	Curation SG18c2	19.43	1	ol	-
RB-CV-0124	Curation SG18c3	23.77	1	hpx,pl	-
RB-CV-0125	Curation SG18c4	27.07	1	ol	-
RB-CV-0126	Curation SG18c5	15.96	1	ol,pl	-
RB-CV-0127	Curation SG18d2	19.44	2	FeNi,chm,pl	-
RB-CV-0128	Kyushu Univ.	47.75	2	ol,lpx, hpx,pl,Fe,FeS	CO, AO6_Matsumoto-1
RB-CV-0129	Curation SG18b0	23.47	1	hpx	-
RB-CV-0132	Curation S26-515	50	4	Al,O	-
RB-CV-0133	Curation SG18d4	30.7	1	ol	-
RB-CV-0134	Curation SG18e0	40.2	1	ol,lpx	-
RB-CV-0135	Curation SG18e1	27.25	1	ol	-
RB-CV-0136	Curation SG18e2	29.13	2	ol,hpx,FeS	-
RB-CV-0138	Curation SG18e4	17.6	1	ol	-
RB-CV-0139	Curation SG18e5	15	1	ol	-
RB-CV-0140	Curation SG18f0	20.7	1	ol	-
RB-CV-0141	Curation SG18f1	16.1	1	ol,lpx	-
RB-CV-0142	Curation SG18f2	17.7	1	ol	-
RB-CV-0143	Curation SG18f3	14.7	1	ol	-
RB-CV-0144	Univ. Jena	17.1	1	lpx,hpx,pl	AO4_Langenhorst
RB-CV-0145	Curation SG18f5	13.9	1	ol,lpx,pl	-
RB-CV-0146	Curation SG19a0	14.8	1	ol,lpx,hpx	-
RB-CV-0147	Curation SG19a1	22.3	1	lpx,ol,Al	-
RB-CV-0148	Kyushu Univ.	21.2	1	ol	AO3_Noguchi-2
RB-CV-0149	Curation SG19a3	23.9	1	lpx	-
RB-CV-0150	Curation SG19a5	21.19	1	ol,lpx	-
RB-CV-0151	Curation SG19b1	23.36	1	ol	-
RB-CV-0152	Curation SG19b2	11.56	1	ol	-
RB-CV-0153	BROKEN		-	-	-
RB-CV-0153-01	Curation SG19b3	18.58	1	ol	-
RB-CV-0153-02	Curation SG19b4	26.8	1	ol	-
RB-CV-0155	Curation SG19b5	15.58	1	ol	-
RB-CV-0156	Curation SG19c0	26.3	1	ol	-
RB-CV-0157	Curation SG19c1	21.5	2	chm,Al	-
RB-CV-0158	Curation SG19c2	23.39	1	ol	-
RB-CV-0159	Curation SG19c2	12.15	2	ol,FeNi	-
RB-CV-0160	Curation SG19c4	18.48	1	ol	-
RB-CV-0161	Curation SG19c5	15.12	1	ol	-
RB-CV-0162	Curation SG19d0	18.11	1	ol	-
RB-CV-0163	BROKEN		-	-	-
RB-CV-0163-01	Curation SG19d1	29.92	1	ol	-
RB-CV-0163-02	Curation SG19d3	44.16	1	ol	-
RB-CV-0165	BROKEN		-	-	-
RB-CV-0165-01	Curation SG19d4	22.38	1	ol	-
RB-CV-0165-02	Curation SG19e0	22.98	1	ol,pl	-
RB-CV-0167	Curation SG19e1	15.33	1	ol	-
RB-CV-0168	Curation SG19e2	17.68	1	pl	-
RB-CV-0169	Curation SG19e3	19.4	1	ol	-
RB-CV-0170	BROKEN		-	-	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RB-CV-0170-01	Curation SG19e4	13.2	1	lpx	-
RB-CV-0171	Curation SG19e5	17.4	1	pl	-
RB-CV-0172	Curation SG19f0	19.4	1	lpx,ol	-
RB-CV-0173	Curation SG19f1	19.8	2	lpx,Fe	-
RB-CV-0174	Curation SG19f2	18.5	1	ol	-
RB-CV-0175	Curation SG19f3	12.9	1	lpx	-
RB-CV-0176	Curation SG19f4	11.9	1	ol	-
RB-CV-0177	Curation SG19f5	18.9	1	ol	-
RB-CV-0179	Curation SG20a0	22.5	1	ol,lpx	-
RB-CV-0180	Curation SG20a1	19.6	1	ol	-
RB-CV-0181	Curation S24-462	22.5	1	lpx	-
RB-CV-0182	Curation S24-464	14.9	1	hpx	-
RB-CV-0183	Curation S24-465	18.4	1	ol	-
RB-CV-0184	Curation S24-468	24.2	1	ol,Al	-
RB-CV-0185	Curation S24-469	12	1	ol	-
RB-CV-0186	Curation S24-470	16.18	1	ol	-
RB-CV-0187	BROKEN	17.3	1	ol,hpx	-
RB-CV-0187-01	Curation S24-471		-	-	-
RB-CV-0187-02	Curation S24-472		-	-	-
RB-CV-0188	BROKEN		-	-	-
RB-CV-0188-01	Curation S24-473	23.06	1	hpx,Al	-
RB-CV-0192	Univ. Jena	17.2	1	hpx,lpx,ol	AO4_Langenhorst
RB-CV-0193	Curation S24-474	15	1	hpx,pl	-
RB-CV-0194	Curation S24-475	18.3	1	ol,pl	-
RB-CV-0195	Curation S24-476	18.8	1	ol	-
RB-CV-0196	BROKEN	25.63	-	-	-
RB-CV-0196-01	Curation S24-477	16.3	1	pl,lpx	-
RB-CV-0196-02	Curation S24-478	13.4	1	lpx	-
RB-CV-0197	Curation S24-479	18.8	1	pl	-
RB-CV-0198	Curation S24-480	12.7	1	ol	-
RB-CV-0199	Curation S25-481	19.1	1	ol	-
RB-CV-0200	Curation S25-482	25.4	1	pl	-
RB-CV-0201	Curation S25-484	15.8	1	lpx	-
RB-CV-0202	Curation SG07e6	15	4	Al	-
RB-CV-0203	LOST	10	4	Cr,Zn	-
RB-CV-0204	Curation S25-485	11.5	1	ol	-
RB-CV-0205	Curation S25-486	28.4	1	ol	-
RB-CV-0206	Curation S25-487	28.9	1	ol	-
RB-CV-0207	Curation S25-488	12.2	1	pl	-
RB-CV-0208	Curation S25-489	17.3	1	pl	-
RB-CV-0209	Curation S25-490	35.9	2	ol,FeS	-
RB-CV-0210	BROKEN	16.8	1	ol	-
RB-CV-0211	Curation S1-11	46.2	1	ol	-
RB-CV-0212	Curation S25-491	18.8	1	lpx	-
RB-CV-0213	Curation S15-293	16.8	1	lpx,pl	-
RB-CV-0214	BROKEN	22	-	ol	-
RB-CV-0214-01	Curation S15-292	17.5	1	ol	-
RB-CV-0214-02	Curation S15-294	15.4	1	ol	-
RB-CV-0215	Curation S15-289	22.1	1	ol	-
RB-CV-0216	Curation S15-297	17.9	1	ol	-
RB-CV-0217	Curation S5-97	37.3	1	ol	-
RB-CV-0218	Curation S5-98	27.9	2	ol,lpx,FeS,Al	-
RB-CV-0219	Curation S15-298	13	1	hpx,lpx	-
RB-CV-0220	Curation S15-299	12.3	1	lpx	-
RB-CV-0221	Curation SG07f9	40	4	Al,Mg	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RB-CV-0222	LOST	13	1	ol	-
RB-CV-0223	Curation S5-99	24.7	1	ol	-
RB-CV-0224	Curation S15-300	15.9	1	ol	-
RB-CV-0225	Curation S5-96	38.2	1	ol	-
RB-CV-0226	Curation S15-287	25.8	1	lpx,ol	-
RB-CV-0227	Curation S5-100	22.8	1	ol	-
RB-CV-0228	Curation S6-108	14.3	1	lpx	-
RB-CV-0229	Curation S6-120	12.4	1	pl	-
RB-CV-0230	Curation SG21c5	17.4	1	ol,pl	-
RB-CV-0231	Curation S15-290	25.3	1	hpx	-
RB-CV-0232	Curation S25-494	10.7	1	lpx	-
RB-CV-0233	Curation S15-288	33.5	2	ol,FeS	-
RB-CV-0234	ASU	25.9	2	FeS,Fe,FeNiS,CuS	AO5_Schrader
RB-CV-0235	Curation S25-495	15.7	1	ol,pl	-
RB-CV-0236	Curation SG21d5	14.7	1	hpx	-
RB-CV-0237	Curation S15-291	20.8	1	ol,lpx	-
RB-CV-0239	Curation SG05g4	15	3	C, NaCl, Al	-
RB-CV-0240	Curation SG07g0	20	4	Al,Mg	-
RB-CV-0241	Curation S26-516	40	4	Al	-
RB-CV-0242	LOST	17.4	1	lpx,ol	-
RB-CV-0243	Curation SG05g5	10	3	(C,N,O)	-
RB-CV-0244	Curation SG07g2	30	4	Al	-
RB-CV-0245	Curation SG21e5	17.8	1	ol	-
RB-CV-0246	Curation SG21f0	27.4	1	pl,ol	-
RB-CV-0247	Curation SG21f1	22.5	2	ol,FeS	-
RB-CV-0248	Curation SG21f2	17.1	1	ol	-
RB-CV-0249	Curation SG21f3	17.8	1	ol	-
RB-CV-0250	Curation SG21f4	16.9	1	pl,ol	-
RB-CV-0251	Curation SG21f5	16.4	1	ol	-
RB-CV-0252	Curation SG17b4	23.6	1	ol	-
RB-CV-0253	Curation S14-267	24	1	ol	-
RB-CV-0254	Curation S14-268	17	1	ol	-
RB-CV-0255	Curation S14-277	19	1	hpx,ol,pl	-
RB-CV-0256	Curation SG17d3	22	1	ol	-
RB-CV-0257	Curation SG17e4	16	1	ol	-
RB-CV-0258	Curation SG18a5	24	1	ol	-
RB-CV-0259	Curation SG05g0	30	3	C	-
RB-CV-0260	Curation SG18d0	9	1	hpx	-
RB-CV-0261	Curation SG05g6	26.9	3	C, O, N	-
RB-CV-0262	ASU	39.2	2	chm	AO7_Davidson
RB-CV-0263	BROKEN	20.98	-	ol	-
RB-CV-0263-01	Curation SG22a2	20.6	1	ol	-
RB-CV-0263-02	Curation SG22a0	15.3	1	ol	-
RB-CV-0264	Curation SG22a4	15.7	1	ol	-
RB-CV-0265	Curation SG22a5	32.2	1	ol	-
RB-CV-0266	Curation SG22b0	25.7	1	ol	-
RB-CV-0267	Hokkaido Univ.	38.5	1	ol	AO8_Bajo
RB-CV-0268	Curation SG22b2	26.6	1	pl	-
RB-CV-0269	Curation SG22b3	18.7	1	pl	-
RB-CV-0270	Curation SG22b4	19.8	1	lpx	-
RB-CV-0271	Curation SG22b5	21.1	1	ol	-
RB-CV-0272	Curation SG22c0	31.8	1	lpx,pl	-
RB-CV-0273	Curation SG22c1	13.1	1	ol	-
RB-CV-0274	Curation S26-518	20.6	4	Al	-
RB-CV-0275	Curation SG22c2	15.4	1	pl,ol	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RB-CV-0276	Curation SG22c3	11.2	1	ol	-
RB-CV-0277	Curation SG22c4	27	1	ol,hpx	-
RB-CV-0278	Curation SG22c5	17.8	1	hpx	-
RB-CV-0279	Curation SG22d0	21	1	lpx	-
RB-CV-0280	Curation SG22d1	13.4	1	ol	-
RB-CV-0281	Curation SG22d2	30.1	1	lpx,Al,Zn	-
RB-CV-0282	Curation SG22d3	36.3	1	lpx	-
RB-CV-0283	Curation SG22d4	15.6	1	lpx,pl	-
RB-CV-0284	Curation SG22d5	19.5	1	pl	-
RB-CV-0285	Curation SG22e0	15.5	1	lpx	-
RB-CV-0286	Curation SG22e1	22.4	1	ol	-
RB-CV-0287	Curation SG22e2	24.3	1	pl,ol	-
RB-CV-0288	Curation SG22e3	16.1	2	K-fld,pl,Ti	-
RB-CV-0289	Curation SG22e4	20.8	1	hpx,pl	-
RB-CV-0290	Curation SG22e5	11.7	1	hpx	-
RB-CV-0291	Curation SG22f0	10.6	1	hpx	-
RB-CV-0292	Curation SG22f1	24.3	1	hpx,Al	-
RB-CV-0293	Curation SG22f2	14.3	1	hpx,ol	-
RB-CV-0294	Curation SG22f4	28.8	1	ol,Al	-
RB-CV-0295	LOST	59.7	1	ol,Al,Ba,Cu,S	-
RB-CV-0296	Curation SG18d5	20.1	1	lpx,hpx	-
RB-QD04-0001	Curation glovebox2, almost consumed, pressed on Au plate	19	3	(C,N,O),C,ol,Al	PE
RB-QD04-0002	NASA	38	1	ol,pl,K-fld	NASA
RB-QD04-0003	LOST	32	3	C,Al,NaCl,K	-
RB-QD04-0004	LOST	85	1	hpx,ol,pl,FeS	-
RB-QD04-0005	NASA	36	1	hpx,pl	NASA
RB-QD04-0006	Curation glovebox2, PS with Au-coat	32	1	ol,pl	PE
RB-QD04-0007	Curation S3-48	14	1	pl	-
RB-QD04-0008	Curation glovebox2, PB embedded in epoxy resin	44	1	ol,hpx	AO1_Noguchi
RB-QD04-0008-01_02	Curation glovebox2, UTS by UM		1	-	AO1_Noguchi
RB-QD04-0008-03_04	Curation glovebox2, UTS by FIB		1	-	AO1_Noguchi
RB-QD04-0009	LOST	13	1	ol	-
RB-QD04-0010	LOST	26	1	ol,lpx,pl	-
RB-QD04-0011	Curation glovebox2, PB embedded in epoxy resin	35	1	[ol]	AO1_Noguchi,AO3_Zolensky
RB-QD04-0011-01_02	Curation glovebox2, UTS by UM		1	-	AO1_Noguchi
RB-QD04-0012	Curation S3-49	21	1	pl,hpx,ol	-
RB-QD04-0013	LOST	29	1	hpx,ol,Sn,K-fld	AO1_Tsuchiyama
RB-QD04-0014	JAXA	158	1	ol,lpx,pl,FeS	-
RB-QD04-0015	Curation glovebox2, PB embedded in epoxy resin	47	1	ol,FeS	AO1_Noguchi
RB-QD04-0015-01_02	Curation glovebox2, UTS by UM		1	-	AO1_Noguchi
RB-QD04-0017	Curation SG07a0	56	4	Al,CF	-
RB-QD04-0018	LOST	10	-	-	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RB-QD04-0019	Curation S3-50	23	1	pl,hpx	-
RB-QD04-0021	LOST	16	1	ol,FeS	-
RB-QD04-0022	Curation glovebox2, PS embedded in EM812 with carbon coat	38	1	pl,Al	AO1_Nakamura,AO3_Zolensky
RB-QD04-0023	CONSUMED	54	1	ol	PE
RB-QD04-0024	Curation glovebox2, FIB hole, PB embedded in epoxy resin	35	1	lpx,pl	AO1_Noguchi
RB-QD04-0024-01_03	Curation glovebox2, UTS by UM		1	-	AO1_Noguchi
RB-QD04-0024-04_05	Curation glovebox2, UTS by FIB		1	-	AO1_Noguchi
RB-QD04-0025	Curation glovebox2, PS with Au coat	34	1	lpx,ol,hpx,Na	PE,AO3_Terada
RB-QD04-0026	Curation glovebox2, PS embedded in EPON812 with carbon coat	36	1	lpx	AO1_Tsuchiyama
RB-QD04-0027	CONSUMED	30	1	ol,pl	AO1_Tsuchiyama
RB-QD04-0028	LOST	33	1	ol	-
RB-QD04-0029	LOST	21	3	CNO,CO	-
RB-QD04-0030	BROKEN	177	-		-
RB-QD04-0030-01	NASA	184	1	hpx,lpx,ol,pl,FeS	NASA2
RB-QD04-0030-02	Curation S3-53	19	1	lpx	-
RB-QD04-0031	CONSUMED	64	3	(C,O),Al	AO4_Naraoka
RB-QD04-0032	Curation SG07a2	38	4	SiO	-
RB-QD04-0033	BROKEN	71	2	ol,lpx,FeS	PE, AO2_Komatsu
RB-QD04-0033-01	LOST, particle with C-coat	20	2	-	PE, AO2_Komatsu
RB-QD04-0033-02	LOST, particle with C-coat	20	2	-	PE, AO2_Komatsu
RB-QD04-0034	Curation S3-55	46	1	lpx	-
RB-QD04-0035	Curation SG05a8upper	59	3	(C,N,O),NaCl,KCl	-
RB-QD04-0036	Curation S3-56	25	1	ol	-
RB-QD04-0037	BROKEN	80	-	CNO,CO,ol	-
RB-QD04-0037-01	Curation glovebox2, large FIB hole, pressed on In plate	48	3	(C,N,O),(C,O),ol	PE
RB-QD04-0037-01-01_02	Curation glovebox2,UTSs by FIB		3	[C,N,Si,CaCl]	PE
RB-QD04-0037-03	Curation SG05b1	15	3	(C,N,O)	-
RB-QD04-0038	NASA	56	1	lpx,ol	NASA
RB-QD04-0039	ASU	52	2	ol,lpx,FeS	AO5_Schrader
RB-QD04-0040	Curation glovebox2, embedded in epoxy resin	74	2	ol,pl,(Fe,Ni,S)	CO, AO6_Nakato
RB-QD04-0041	Curation glovebox2, particle with C-coat on Mo plate	41	1	ol,lpx,Al	PE
RB-QD04-0042	DIVIDED	47	1	ol,K-fld	AO1_Langenhorst

Sample ID	Status	Size (μm)	Category	Phase	Label
RB-QD04-0042-01_04	Curation glovebox2, UTS by FIB		1	-	AO1_Langenhorst
RB-QD04-0043	DIVIDED	34	1	ol,lpx,Al	AO1_Tsuchiyama
RB-QD04-0043-01	Kyoto Univ., attached to carbon fiber using acetone-soluble bond, sliced by FIB		1	(ol,lpx,pl)	AO1_Tsuchiyama,AO3_Miyake
RB-QD04-0043-01_03	Curation glovebox2, UTS by FIB		1	-	AO1_Tsuchiyama
RB-QD04-0043-02	Kyoto Univ., attached to Cu mesh, a piece sliced by FIB		1	ol,lpx,pl	AO1_Tsuchiyama,AO3_Miyake
RB-QD04-0043-03	Kyoto Univ., attached to Cu mesh, a piece sliced by FIB		1	ol,lpx,pl	AO1_Tsuchiyama,AO3_Miyake
RB-QD04-0043-04	Kyoto Univ., attached to Cu mesh, UTS sliced by FIB		1	ol,lpx,pl	AO1_Tsuchiyama,AO3_Miyake
RB-QD04-0043-05	Kyoto Univ., attached to Cu mesh, UTS sliced by FIB		1	ol,lpx,pl	AO1_Tsuchiyama,AO3_Miyake
RB-QD04-0043-06	Kyoto Univ., attached to Cu mesh, UTS sliced by FIB		1	ol,lpx,pl	AO1_Tsuchiyama,AO3_Miyake
RB-QD04-0044	JAXA ICF70-T002-KA03	52	1	ol	CU2
RB-QD04-0045	US Naval Research Lab.	59	2	ol,lpx,pl,FeS	AO3_Stroud
RB-QD04-0046	Curation glovebox2, attached to carbon fiber using acetone-soluble bond	45	1	ol	AO1_Tsuchiyama,AO4_Brunetto
RB-QD04-0047	BROKEN	66	-	(C,O),C	-
RB-QD04-0047-01	Curation SG05b3	66	3	-	-
RB-QD04-0047-02	Curation glovebox2, large FIB hole, pressed on Au plate	28	3	(C,O),C	PE
RB-QD04-0047-02-01	Curation glovebox2,UTSs by FIB		3	[C,N,O,Si]	PE
RB-QD04-0048	Curation SG05c5	56	3	(C,O)	-
RB-QD04-0049	Preliminary examination	51	1	ol,Al	PE
RB-QD04-0050	Curation S26-519	55	4	Al	-
RB-QD04-0051	CONSUMED	39	1	ol	AO3_Bonal
RB-QD04-0052	NASA	96	3	(C,F,O),Al,Ti	AO3_Chan
RB-QD04-0053	Curation S3-57	31	1	ol	-
RB-QD04-0054	Curation S3-58	38	1	pl,lpx	-
RB-QD04-0055	Curation glovebox2, mounted on Au coated carbon tape	37	1	ol	AO2_Yurimoto
RB-QD04-0056	JAXA	108	2	lpx,pl,FeNi,FeS	EXTRA
RB-QD04-0057	IPAG	32.62	1	ol	AO3_Bonal
RB-QD04-0058	NASA	34.86	1	pl,ol	AO3_Keller
RB-QD04-0059	CONSUMED	190.78	1	pl,K-fld,lpx	AO3_Jourdan

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RB-QD04-0060	IPAG	37.31	1	ol	AO3_Bonal
RB-QD04-0061	Curation S4-66	30.65	1	ol	-
RB-QD04-0062	Hawaii Univ.	39.94	1	ol,pl	AO2_Ogliore
RB-QD04-0063	Kyushu Univ.	32.95	1	ol	AO3_Noguchi-2
RB-QD04-0064	LOST	33	1	pl,(Ca,Cl)	CO
RB-QD04-0065	Curation S26-520	37	4	Al	-
RB-QD04-0066	LOST	35	1	ol	-
RB-QD04-0067	Curation SG07b8	48	4	Al	-
RB-QD04-0068	Curation S3-60	25.34	1	ol	-
RB-QD04-0069	CONSUMED	33.23	1	ol,hpx,pl,(Si,O)	CO
RB-QD04-0070	Curation S4-62	27.73	1	lpx	-
RB-QD04-0071	Curation S4-63	21.82	1	ol,pl	-
RB-QD04-0072	CONSUMED	25.45	2	ol,Fe	AO2_Cipriani
RB-QD04-0073	Curation SG07b9	32	4	(Al,O)	-
RB-QD04-0074	NASA	32.03	1	pl,ol	AO3_Keller
RB-QD04-0075	Curation S4-64	34.7	1	hpx,lpx	-
RB-QD04-0076	Curation S4-70	30.97	1	ol	-
RB-QD04-0077	Curation S4-71	20.53	2	ol,FeS	-
RB-QD04-0078	Curation SG05d3	19	3	(C,O),ol	-
RB-QD04-0079	Curation glovebox2, attached to fiber using resin, almost consumed	30	1	ol,(Ca,Cl)	CO
RB-QD04-0080	Kyushu Univ.	34.82	1	ol,lpx,pl	AO3_Noguchi-2
RB-QD04-0081	Curation S4-74	33.29	1	ol	-
RB-QD04-0082	Curation S4-75	28.21	1	pl,ol	-
RB-QD04-0083	ESA ESTEC	30	1	lpx,ol,hpx	AO2_Cipriani
RB-QD04-0084	Tohoku Univ	30.8	1	ol,pl,K-fld	AO2_Gucsik
RB-QD04-0085	Tohoku Univ.	31.79	1	pl	AO2_Gucsik
RB-QD04-0086	Curation S4-76	21.23	1	lpx,ol,pl	-
RB-QD04-0087	Curation S4-78	29.07	1	ol	-
RB-QD04-0088	Tohoku Univ.	24.75	1	ol,(Ca,O)	CO
RB-QD04-0089	BROKEN	68	-	pl,hpx	-
RB-QD04-0089-01	Curation SG22a0	31.8	1	hpx	-
RB-QD04-0090	NASA	39	1	pl	AO3_Keller
RB-QD04-0091	Hawaii Univ.	42.76	1	pl,ol	AO2_Ogliore
RB-QD04-0092	Univ. Jena	37.61	1	ol,lpx,hpx	AO4_Langenhorst
RB-QD04-0093	LOST	28.79	1	ol,hpx	-
RB-QD04-0094	Curation S4-79	35.64	1	ol,Al	-
RB-QD04-0095	LOST	32	2	ol,pl,FeS	CU1_Uesugi
RB-QD04-0096	IPAG	33.13	1	ol	AO3_Bonal
RB-QD04-0097	Curation S1-6	37.7	1	ol,pl	-
RB-QD04-0098	Curation SG07c0	39	4	(Si,O)	-
RB-QD04-0099	Curation S1-7	36.86	1	lpx	-
RB-QD04-0100	Curation S1-10	53.98	1	lpx	-
RB-QD04-0101	Curation S1-16	54.34	1	pl	-
RB-QD04-0102	Curation glovebox2, attached to amorphous carbon fiber using resin	27.96	1	ol,pl,lpx	AO2_Tsuchiyama
RB-QD04-0103	JAXA N2-SP3	46.73	1	pl,ol	CU1_Uesugi
RB-QD04-0104	NASA	42.24	1	ol,pl	NASA2
RB-QD04-0105	Curation S1-19	32.93	1	ol	-
RB-QD04-0106	Curation SG07lowerleft	42	4	SiO	-

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RB-QD04-0107	CONSUMED	57.27	1	ol	AO3_Yabuta
RB-QD04-0108	Curation S2-21	58.67	1	ol,lpx	-
RB-QD04-0109	Curation S1-12	42.3	1	ol,lpx	-
RB-QD04-0110	Curation S1-13	27.1	1	ol	-
RB-QD04-0111	Curation S1-14	22.7	1	ol,pl	-
RB-QD04-0112	Univ. Hawaii	30.3	1	pl,lpx	AO6_Ishii
RC-MD01-0001	Curation S8-152	78.3	1	ol,pl	-
RC-MD01-0002	Curation S8-153	64.7	1	lpx,ol	-
RC-MD01-0003	Curation S8-155	79	1	lpx,pl,hpx	-
RC-MD01-0004	Curation S8-156	42.2	1	pl,ol	-
RC-MD01-0005	Curation SG07f0	28.6	4	Si,O	-
RC-MD01-0006	BROKEN		-	-	-
RC-MD01-0006-01	Curation S27-521	35.2	4	Al,O,C,F,N	-
RC-MD01-0006-02	Curation SG07f2	21.6	4	Fe,Ni,Cr,Al	-
RC-MD01-0007	Curation SG05g9	47.7	3	C,O,N	-
RC-MD01-0008	Curation SG05h0	53.9	3	C,O,N	-
RC-MD01-0009	Curation S8-157	73.7	2	hpx,lpx,pl,FeS	-
RC-MD01-0010	Curation S9-178	17.6	1	ol	-
RC-MD01-0011	Curation S8-158	69.9	1	ol,hpx,K-fld	-
RC-MD01-0012	Purdue Univ.	136	2	ol,pl,FeNiS	AO6_Thompson
RC-MD01-0013	Curation S8-160	141	2	hpx,pl,lpx,FeS	-
RC-MD01-0014	Curation S9-161	61.3	1	lpx,pl	-
RC-MD01-0015	Curation S9-162	60.3	1	ol,lpx	-
RC-MD01-0016	Curation S6-163	69.8	1	lpx,pl	-
RC-MD01-0017	Curation S9-164	78.1	1	lpx,pl,hpx	-
RC-MD01-0018	Univ. Hawaii	76.3	1	ol,lpx	AO6_Ishii
RC-MD01-0019	Curation S9-165	80.9	2	ol,FeS,Al	-
RC-MD01-0020	Curation S9-167	97.2	2	ol,FeS	-
RC-MD01-0021	Curation S9-168	45.5	2	ol,FeS,pl,hpx	-
RC-MD01-0022	Curation S9-180	36	1	ol	-
RC-MD01-0023	Curation S9-169	64.5	2	lpx,FeS	-
RC-MD01-0024	Curation S10-183	32.6	1	ol	-
RC-MD01-0025	Purdue Univ.	31.7	2	lpx,ol,pl,FeNiS	AO6_Thompson
RC-MD01-0026	Curation S10-184	35.6	1	ol,hpx	-
RC-MD01-0027	Curation S9-176	92.4	2	ol,FeS,Al	-
RC-MD01-0028	JAXA	160	2	ol,pl,FeNi	-
RC-MD01-0029	Curation S9-170	46.1	1	hpx,lpx	-
RC-MD01-0030	Curation S9-171	122	2	lpx,FeS,ol,FeNi	-
RC-MD01-0031	Purdue Univ.	55.1	2	lpx,ol,hpx,pl,FeS	AO6_Thompson
RC-MD01-0032	Curation S9-173	50.5	1	ol,hpx	-
RC-MD01-0033	Curation S9-174	55.7	2	lpx,pl,FeS	-
RC-MD01-0034	Curation SG07f3	43	4	Al,O	-
RC-MD01-0035	Curation S10-185	37.4	1	ol	-
RC-MD01-0036	JAXA	219	1	ol,hpx,K-fld	-
RC-MD01-0037	Curation S9-175	61.6	1	hpx,pl,lpx	-
RC-MD01-0038	Curation S10-186	25.1	1	ol,lpx	-
RC-MD01-0039	Curation S10-187	40.6	1	hpx,pl,lpx	-
RC-MD01-0040	Curation S11-213	11.3	1	ol	-
RC-MD01-0041	Curation S10-189	37.1	1	ol,hpx,pl	-
RC-MD01-0042	Curation S10-190	20.5	1	ol,pl,lpx,hpx,K-fld	-
RC-MD01-0043	Curation S10-191	29.2	1	ol,pl,lpx	-
RC-MD01-0044	Curation S10-192	42.8	1	ol	-
RC-MD01-0045	Curation S10-193	22.9	1	ol,pl,hpx	-

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RC-MD01-0046	Curation S6-106	53	1	ol,lpx,pl	-
RC-MD01-0047	Curation S10-195	17.5	1	ol	-
RC-MD01-0048	Curation S10-196	28.7	2	ol,FeS	-
RC-MD01-0049	Curation S10-197	35.2	1	lpx,Al	-
RC-MD01-0050	Curation S10-198	29.9	1	ol	-
RC-MD01-0051	Curation S10-200	25.1	1	lpx,ol,pl	-
RC-MD01-0052	Curation S11-206	26.8	1	ol,pl	-
RC-MD01-0053	BROKEN	21.2	-	ol	-
RC-MD01-0054	Curation S6-107	30.4	2	ol,FeS	-
RC-MD01-0055	Curation S6-109	24.5	2	hpx,pl,lpx,chm	-
RC-MD01-0056	Curation S6-111	57.3	2	FeS,lpx	-
RC-MD01-0057	Curation S6-113	63.9	2	ol,FeS	-
RC-MD01-0058	Curation S6-114	33.1	1	pl	-
RC-MD01-0059	Curation S11-207	16.1	1	pl	-
RC-MD01-0060	Curation S11-208	22.9	1	ol,pl	-
RC-MD01-0061	Curation S11-209	21.3	1	ol,pl,hpx	-
RC-MD01-0062	Curation S11-210	25.2	1	ol	-
RC-MD01-0063	Curation S11-212	28.8	2	ol,FeS	-
RC-MD01-0064	Curation S11-214	25.4	1	ol	-
RC-MD01-0065	Curation S11-215	21.4	1	lpx	-
RC-MD01-0066	Curation S6-118	21.2	1	hpx	-
RC-MD01-0067	Curation S6-119	34.9	4	Fe	-
RC-MD01-0068	Curation S7-121	35.5	1	ol	-
RC-MD01-0069	Curation S7-122	34.9	1	ol,Al	-
RC-MD01-0070	Curation S7-123	26.8	1	pl,hpx	-
RC-MD01-0071	Curation S7-124	19.3	1	ol,pl	-
RC-MD01-0072	LOST	30.4	1	ol,Al	-
RC-MD01-0073	Curation S7-125	22.9	2	lpx,hpx,FeNi	-
RC-MD01-0074	Curation S7-126	20.2	1	ol,pl	-
RC-MD01-0075	Curation S27-522	36	4	Al,Fe,O	-
RC-MD01-0076	Curation S7-127	20.3	2	lpx,ol,FeS	-
RC-MD01-0077	Curation S7-128	22.2	2	ol,chm	-
RC-MD01-0078	LOST	17.1	1	ol	-
RC-MD01-0079	Curation S7-131	15.6	1	ol	-
RC-MD01-0080	Curation S7-132	19.3	1	ol	-
RC-MD01-0081	Curation S7-133	39.4	1	ol,pl	-
RC-MD01-0082	Curation S7-134	34	1	pl,ol,hpx	-
RC-MD01-0083	Curation S7-136	17.3	1	ol,pl,K-fld,Al	-
RC-MD01-0084	Curation S7-137	20	1	lpx,ol,hpx	-
RC-MD01-0085	Curation S6-116	70	2	ol,hpx,FeS	-
RC-MD01-0086	Curation S7-135	33.3	2	ol,lpx,pl,FeS	-
RX-MD03-0001	Curation S33-655	46.1	1	ol	-
RX-MD03-0002	Curation S36-708	48.6	1	ol	-
RX-MD03-0003	Curation S36-709	42.9	2	FeS	-
RX-MD03-0004	Curation S37-729	29.5	1	ol,lpx,pl	-
RX-MD03-0005	Curation S38-744	44.9	1	ol	-
RX-MD03-0006	Kochi core Center	69.9	1	lpx	AO7_Liu
RX-MD03-0007	Curation SG32b3	34.9	1	lpx,hpx,pl	-
RX-MD03-0008	Curation SG32b4	47.6	1	ol	-
RX-MD03-0009	Curation SG32b5	51.7	1	ol	-
RX-MD03-0010	Curation SG32c0	36.6	2	ol,chm,pl	-
RX-MD03-0011	Curation SG32c1	38.3	1	ol	-
RX-MD03-0012	Curation SG32c2	67.3	1	ol,pl	-
RX-MD03-0013	Curation SG32c3	41.8	1	ol	-
RX-MD03-0014	Curation SG32c4	44.9	2	FeS,ol,hpx	-

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RX-MD03-0015	Curation SG32c5	56.8	1	ol	-
RX-MD03-0016	Curation SG32d0	70.3	1	pl,ol,hpx	-
RX-MD03-0017	Curation SG32d1	36.8	1	pl,lpx,ol,hpx,Al	-
RX-MD03-0018	Curation SG32d2	65.6	2	ol,FeS	-
RX-MD03-0019	Curation SG32d3	40.9	2	ol,lpx,pl,FeS	-
RX-MD03-0020	Curation SG32d4	29	1	ol,pl	-
RX-MD03-0021	Curation SG32d5	55.8	2	FeS,ol	-
RX-MD03-0022	Curation SG32e0	72	2	pl,ol,hpx,FeS,K-fld,chm	-
RX-MD03-0023	Curation SG32e1	52.1	1	hpx,ol,K-fld	-
RX-MD03-0024	Curation SG32e2	46.8	2	ol,FeS,pl	-
RX-MD03-0025	Curation SG32e3	39.9	1	ol,pl	-
RX-MD03-0026	Curation SG32e4	33.5	1	ol,pl	-
RX-MD03-0027	Curation SG32e5	34.9	1	ol,lpx,pl	-
RX-MD03-0028	Curation SG32f0	27.4	2	ol,pl,lpx,chm	-
RX-MD03-0029	Curation SG32f1	35.4	2	pl,FeS	-
RX-MD03-0030	Curation SG32f2	30.8	1	ol,lpx,pl	-
RX-MD03-0031	Curation SG32f3	39.3	1	ol,pl	-
RX-MD03-0032	Curation SG32f4	41.1	1	ol,pl	-
RX-MD03-0033	Curation SG32f5	39.4	2	ol,lpx,pl,FeS	-
RX-MD03-0034	Curation S35-695	24.2	2	FeS	-
RX-MD03-0035	Curation S33-660	40.3	1	lpx,ol	-
RX-MD03-0036	Curation S34-661	40.4	2	FeS,ol	-
RX-MD03-0037	Curation S34-662	30.9	2	ol,FeS,Al	-
RX-MD03-0038	Curation S34-663	34.3	1	ol	-
RX-MD03-0039	Curation S34-664	48.6	1	ol,pl,hpx	-
RX-MD03-0040	Curation S34-665	35.4	1	ol,pl	-
RX-MD03-0041	Curation S34-666	43.4	2	hpx,ol,FeS	-
RX-MD03-0042	Curation S34-667	32	1	hpx,ol	-
RX-MD03-0043	Curation S34-668	49.4	1	pl,hpx	-
RX-MD03-0044	Curation SG05h1	41.7	3	C,O,Cl,Na,Mg	-
RX-MD03-0045	Curation S34-669	60.4	2	ol,FeS	-
RX-MD03-0046	Curation S34-670	35.1	1	ol	-
RX-MD03-0047	Curation S34-671	110	2	FeS,ol	-
RX-MD03-0048	Curation S34-672	46.4	1	ol,K-fld	-
RX-MD03-0049	Curation S34-673	63.6	2	FeS,pl	-
RX-MD03-0050	Curation S34-675	35.8	1	ol	-
RX-MD03-0051	Curation S34-674	88.8	1	ol,hpx,pl	-
RX-MD03-0052	Curation S34-676	38.7	1	ol	-
RX-MD03-0053	Curation S34-677	55.1	2	ol,FeS	-
RX-MD03-0054	Kochi core Center	104	2	lpx,FeS	AO7_Liu
RX-MD03-0055	Curation S34-678	40.7	1	hpx,lpx,ol,pl	-
RX-MD03-0056	Curation S34-679	61.4	1	pl,ol	-
RX-MD03-0057	Curation S34-680	40.4	2	lpx,hpx,ol,FeS	-
RX-MD03-0058	Curation S35-681	58.6	2	lpx,ol,pl,FeS	-
RX-MD03-0059	Curation S35-682	93.6	1	ol	-
RX-MD03-0060	Curation S35-683	29.4	1	lpx	-
RX-MD03-0061	Kochi core Center	108	1	ol,hpx	AO7_Liu
RX-MD03-0062	Curation S35-684	40.8	1	ol	-
RX-MD03-0063	Curation S35-685	32.6	1	ol,pl,lpx,Al	-
RX-MD03-0064	Curation S35-686	52.1	2	lpx,FeS	-
RX-MD03-0065	Curation S35-687	38.9	1	ol	-
RX-MD03-0066	Curation S35-688	41.1	2	ol,FeS,hpx	-
RX-MD03-0067	Curation S35-689	32.4	1	ol	-
RX-MD03-0068	Curation S35-690	28.2	1	ol,hpx	-
RX-MD03-0069	Curation S35-691	34.1	1	lpx,hpx	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RX-MD03-0070	Curation S35-692	30.1	1	ol,pl,Al	-
RX-MD03-0071	Curation S22-425	45.6	1	ol,pl	-
RX-MD03-0072	Curation S22-426	30.3	2	ol,FeNi	-
RX-MD03-0073	Curation S22-427	41.7	2	ol,pl,FeS	-
RX-MD03-0074	Curation S22-428	52.7	1	ol,hpx	-
RX-MD03-0075	Curation S22-429	38	1	ol	-
RX-MD03-0076	Curation S22-430	36.2	1	ol,pl,Al	-
RX-MD03-0077	Curation S22-431	69.4	2	ol,pl,FeS	-
RX-MD03-0078	Curation S22-432	33.9	2	hpx,ol,pl,FeS	-
RX-MD03-0079	Curation S22-433	51.1	1	lpx,hpx	-
RX-MD03-0080	Curation S22-434	37.8	1	ol,pl	-
RX-MD03-0081	Curation S22-435	31.9	1	ol,pl	-
RX-MD03-0082	Kochi core Center	76.2	2	ol,FeS	AO7_Liu
RX-MD03-0083	Curation S22-436	28.2	1	ol,pl	-
RX-MD03-0084	Curation S22-437	33.4	1	lpx,pl	-
RX-MD03-0085	Curation S22-438	33.5	1	lpx,pl	-
RX-MD03-0086	Curation S22-439	30	1	lpx,pl,ol	-
RX-MD03-0087	Curation S22-440	55.5	1	lpx	-
RX-MD03-0088	Curation S23-442	29.7	1	hpx,pl,Cl	-
RX-MD03-0089	BROKEN		-	ol	-
RX-MD03-0089-01	Curation S23-443	23.2	1	ol,pl,hpx	-
RX-MD03-0089-02	Curation S23-444	19.7	1	ol	-
RX-MD03-0090	Curation S23-445	84.8	2	ol,lpx,K-fld,FeS	-
RX-MD03-0091	Curation S23-447	32.8	1	ol,pl,hpx	-
RX-MD03-0092	Curation S23-448	57.1	1	lpx,pl,hpx	-
RX-MD03-0093	Curation SG37d5	44	1	pl,lpx	-
RX-MD03-0094	Curation S23-449	33.3	1	pl,hpx	-
RX-MD03-0095	Curation S23-450	39.9	2	ol,chm	-
RX-MD03-0096	Curation S23-451	32.2	1	lpx,pl	-
RX-MD03-0097	Curation S23-452	33.4	1	pl.lpx	-
RX-MD03-0098	Curation S23-453	43.7	1	pl,hpx	-
RX-MD03-0099	Curation S23-454	44	1	ol	-
RX-MD03-0100	Curation S23-455	23.7	1	lpx,hpx	-
RX-MD03-0101	Curation S23-456	47.2	2	lpx,pl,FeS	-
RX-MD03-0102	Curation S23-457	17.4	1	ol,hpx,lpx,K-fld	-
RX-MD03-0103	Curation SG05h5	40.3	3	NaCl,C,N,O,ol.lpx	-
RX-MD03-0104	Curation S23-458	25.9	1	lpx,pl	-
RX-MD03-0105	Curation S23-459	147	2	ol,lpx,hpx,chm,K-fld	-
RX-MD03-0106	Curation S23-460	29.9	1	lpx,pl,ol	-
RX-MD03-0107	Curation S2-27	33.6	1	ol,lpx,pl	-
RX-MD03-0108	BROKEN		-	-	-
RX-MD03-0108-01	Curation S2-30	17.8	1	ol	-
RX-MD03-0108-02	Curation S2-34	18.5	2	ol,FeS,lpx	-
RX-MD03-0109	Curation S2-36	44.3	1	ol	-
RX-MD03-0110	Curation S2-38	37.7	2	pl,Ca,FeS,K-fld,ol	-
RX-MD03-0111	Curation S2-23	54.8	1	hpx,ol	-
RX-MD03-0112	Curation S3-46	25.8	1	ol,pl	-
RX-MD03-0113	LOST	47.5	1	ol,lpx	-
RX-MD03-0114	Curation S27-523	36.3	4	Al,O,C,ol	-
RX-MD03-0115	Curation S2-26	88.4	1	Si,O,C,pl	-
RX-MD03-0116	LOST	31.6	1	ol	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RX-MD03-0117	Curation S3-51	43.1	1	ol,pl	-
RX-MD03-0118	Curation S3-52	24.8	1	ol,lpx	-
RX-MD03-0119	Curation S3-54	22.8	2	lpx,FeS	-
RX-MD03-0120	Curation S3-59	35.3	1	lpx,pl	-
RX-MD03-0121	Curation S4-65	33.4	1	hpx,ol	-
RX-MD03-0122	Curation S4-72	15.3	2	FeS,hpx,Cu	-
RX-MD03-0123	Curation S4-73	23.7	1	hpx,lpx	-
RX-MD03-0124	Curation S4-77	36.6	1	ol	-
RX-MD03-0125	Curation S4-80	27.3	2	FeS,ol	-
RX-MD03-0126	Curation S5-81	72.2	2	FeS	-
RX-MD03-0127	Curation S5-82	79	2	lpx,chm,Al	-
RX-MD03-0128	Curation S5-83	63.3	1	ol,hpx,pl	-
RX-MD03-0129	Curation S5-84	37.8	1	ol,pl	-
RX-MD03-0130	Curation S5-85	34.9	1	pl	-
RX-MD03-0131	Curation S5-87	24.2	1	ol	-
RX-MD03-0132	LOST	33.5	1	ol,pl	-
RX-MD03-0133	Curation S5-88	36.1	1	lpx,pl	-
RX-MD03-0134	Curation S5-89	37.6	1	ol	-
RX-MD03-0135	Curation S5-90	51.1	1	hpx	-
RX-MD03-0136	Curation S5-91	130	1	ol,pl	-
RX-MD03-0137	Kochi core Center	106	1	ol,K-fld	AO7_Liu
RX-MD03-0138	Curation S5-92	36.9	1	ol,lpx,hpx,pl	-
RX-MD03-0139	Curation S5-93	24.1	2	ol,hpx,FeS	-
RX-MD03-0140	Curation S6-101	25	1	hpx,lpx,ol	-
RX-MD03-0141	Curation S6-102	30.6	1	lpx	-
RX-MD03-0142	Curation S28-557	17.6	1	lpx,pl,K-fld	-
RX-MD03-0143	Curation S28-558	27.8	1	ol,Al	-
RX-MD03-0144	Curation SG26a3	25.4	1	ol	-
RX-MD03-0145	Curation S28-559	23.2	1	lpx,ol	-
RX-MD03-0146	LOST	33.6	1	ol	lost during manipulation
RX-MD03-0147	Curation S28-560	56.6	2	ol,FeNiS,pl	-
RX-MD03-0148	Curation S29-561	32.3	1	pl,hpx,pl	-
RX-MD03-0149	Curation S29-562	38.6	1	pl,Ca,Fe	-
RX-MD03-0150	Curation S29-563	38.3	1	ol,pl,lpx,Ca	-
RX-MD03-0151	Curation S29-564	75.6	1	ol,lpx,Al	-
RX-MD03-0152	Curation S29-565	36.7	1	lpx,pl	-
RX-MD03-0153	Curation S29-566	24.5	1	ol	-
RX-MD03-0154	Curation S29-568	28.1	1	pl,ol	-
RX-MD03-0155	Curation SG26c2	28.1	1	lpx,ol	-
RX-MD03-0156	Curation S29-569	50.3	1	ol,Al	-
RX-MD03-0157	Curation S29-570	33.4	1	ol,Al	-
RX-MD03-0158	BROKEN		-	-	-
RX-MD03-0158-01	Curation S29-571	29.7	1	lpx,ol	-
RX-MD03-0158-02	Curation S29-572	27.1	1	lpx,hpx	-
RX-MD03-0158-03	Curation SG26c5	11.2	1	ol	-
RX-MD03-0159	Curation S29-573	56.6	2	lpx,FeS,ol,hpx	-
RX-MD03-0160	Curation S29-574	32.7	1	ol	-
RX-MD03-0161	Curation S29-575	24.3	2	ol,pl,FeS	-
RX-MD03-0162	Curation S29-576	36.5	1	ol	-
RX-MD03-0163	Curation S29-577	49.8	2	ol,FeS	-
RX-MD03-0164	Curation S29-578	21.6	2	FeS,lpx,pl	-
RX-MD03-0165	Curation S29-579	30.5	1	ol	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RX-MD03-0166	Curation S29-580	26.6	1	ol	-
RX-MD03-0167	Curation S30-581	28.7	1	pl,ol,Ca	-
RX-MD03-0168	Curation S30-582	24.3	1	ol	-
RX-MD03-0169	Curation S30-583	18	1	lpx	-
RX-MD03-0170	Curation S30-584	21	1	ol	-
RX-MD03-0171	BROKEN		-	-	-
RX-MD03-0171-01	Curation S30-585	32.6	1	ol,Al,Fe,Cr,Zn	-
RX-MD03-0171-02	Curation S30-586	25.3	1	ol,Al	-
RX-MD03-0172	Curation S30-587	38	1	ol,pl	-
RX-MD03-0173	Curation S30-588	21.8	2	ol,FeS	-
RX-MD03-0174	Curation S30-589	22.6	1	lpx,ol,pl	-
RX-MD03-0175	Curation S32-629	16	1	ol	-
RX-MD03-0176	Curation S32-630	25.6	1	lpx	-
RX-MD03-0177	Curation S32-631	24	1	ol	-
RX-MD03-0178	Curation S32-632	44.9	1	ol,Al	-
RX-MD03-0179	Curation S32-633	31.1	1	hpx,ol,pl	-
RX-MD03-0180	Kyoto Univ.	39.7	1	hpx,ol,Ca,C,O	AO11_Igami
RX-MD03-0181	Curation S32-634	22.7	1	pl,lpx,ol	-
RX-MD03-0182	Curation S32-635	34.9	1	ol,hpx,pl	-
RX-MD03-0183	Curation S32-636	37.7	1	ol	-
RX-MD03-0184	Curation S32-637	28	2	FeS,Sn	-
RX-MD03-0185	Curation S32-638	26.4	1	hpx	-
RX-MD03-0186	Curation S32-640	34.7	1	ol,pl	-
RX-MD03-0187	Curation S33-641	25.5	1	ol,pl	-
RX-MD03-0188	Curation S33-643	32	1	ol	-
RX-MD03-0189	Curation S33-642	29.1	1	ol	-
RX-MD03-0190	Curation S33-644	22.9	1	ol	-
RX-MD03-0191	Curation SG29c5	33.4	1	pl	-
RX-MD03-0192	Kyoto Univ.	40.3	1	ap,ol,hpx	AO11_Igami
RX-MD03-0193	Curation S27-526	25.6	4	Al,Si,K,Na,O,C	-
RX-MD03-0194	Curation SG29d1	21.5	1	ol	-
RX-MD03-0195	Curation S33-646	28.9	1	ol,hpx,pl	-
RX-MD03-0196	Curation S33-647	22.3	1	ol,pl	-
RX-MD03-0197	Curation S33-648	29.9	1	pl,ol	-
RX-MD03-0198	Curation S33-649	25.4	2	ol,hpx,FeS	-
RX-MD03-0199	Curation S33-650	29.5	1	ol,pl	-
RX-MD03-0200	Curation glovebox2, particle	85.8	1	ol,pl	AO8_Yesiltas
RX-MD03-0201	Curation S33-651	29.7	1	ol,pl	-
RX-MD03-0202	Curation S33-652	15.9	1	ol,pl	-
RX-MD03-0203	Curation S33-653	18.6	1	ol,pl,lpx	-
RX-MD03-0204	Curation S33-654	32.1	1	lpx,ol	-
RX-MD03-0205	Curation S33-656	33.8	1	ol	-
RX-MD03-0206	Curation S33-657	27	1	ol	-
RX-MD03-0207	Curation S33-658	26.7	2	ol,FeS	-
RX-MD03-0208	Curation S33-659	25.3	1	lpx,ol	-
RX-MD03-0209	Curation SG29f5	34.5	1	ol,K-fld	-
RX-MD03-0210	Curation S35-693	37.5	1	ol,pl	-
RX-MD03-0211	Curation S35-694	25.1	1	hpx,ol	-
RX-MD03-0212	Curation SG32b2	23.5	1	ol,ap	-
RX-MD03-0213	Curation S24-461	21.5	1	lpx,pl	-
RX-MD03-0214	Curation S6-103	31.7	1	ol	-
RX-MD03-0215	Curation S11-217	35.1	1	pl,ol	-

Sample ID	Status	Size (μm)	Category	Phase	Label
RX-MD03-0216	Curation S11-216	45.8	1	hpx	-
RX-MD03-0217	Curation S11-218	19.9	1	pl,ol	-
RX-MD03-0218	Curation S11-219	22.5	1	ol	-
RX-MD03-0219	Curation S12-221	22.4	1	lpx,ol,hpx	-
RX-MD03-0220	Curation S12-222	26.3	2	ol,FeNi	-
RX-MD03-0221	Curation S12-223	30	1	lpx,ol,pl,hpx	-
RX-MD03-0222	Curation S12-224	19.7	1	pl	-
RX-MD03-0223	BROKEN	18.5	2	FeS,chm	broken during manipulation, and left on the slide
RX-MD03-0224	Curation S12-225	29.1	1	ol,lpx	-
RX-MD03-0225	Curation S12-226	23.7	1	ol,lpx	-
RX-MD03-0226	Curation S12-227	26.6	1	ol,pl	-
RX-MD03-0227	Curation S12-228	23.1	1	ol,pl,lpx	-
RX-MD03-0228	Curation S12-229	15	1	ol,pl	-
RX-MD03-0229	BROKEN		-	ol,pl,FeS	-
RX-MD03-0229-01	Curation S12-230	13.9	1	ol,pl,lpx	-
RX-MD03-0230	Curation S12-231	29	1	ol,lpx	-
RX-MD03-0231	Curation S12-233	21.8	2	lpx,pl,chm	-
RX-MD03-0232	LOST	22.2	1	lpx,hpx	-
RX-MD03-0233	Curation S12-235	24.7	1	lpx	-
RX-MD03-0234	Curation S12-236	22.6	2	ol,chm	-
RX-MD03-0235	Curation S12-238	23.9	2	lpx,ol,chm	-
RX-MD03-0236	Curation S12-239	26.5	1	ol	-
RX-MD03-0237	Curation S12-240	29.6	1	ol	-
RX-MD03-0238	Curation S13-245	26.6	2	FeS,lpx,ol	-
RX-MD03-0239	Curation S13-241	22.5	1	ol,hpx	-
RX-MD03-0240	Curation S13-243	12.9	1	ol	-
RX-MD03-0241	Curation S13-244	21.1	1	ol,Al	-
RX-QD01-0001	Curation SG32a0	67.6	1	hpx,ol,lpx,pl,K-fld	-
RX-QD01-0002	Curation SG32a1	38.1	1	lpx	-
RX-QD01-0003	Curation SG32a2	62.3	2	ol,FeS	-

Table 2. A summary of the number of Itokawa samples transferred to the individual container.

	2021	2022	2023
Jan	-	0	72
Feb	-	4	14
Mar	-	42	6
Apr	-	72	38
May	-	38	134
Jun	-	10	57
Jul	-	0	18
Aug	-	0	0
Sep	-	22	0
Oct	7	3	0
Nov	19	37	
Dec	64	61	
Total	90	289	339

Table 3. Particles which have difficulty in transferring between containers so far, due to challenges in handling with an electrostatic control manipulator.

Sample ID	Category	Size (μm)
RA-QD02-0262	1	36.1
RA-QD02-0424	1	29.0
RX-MD03-0093	1	44.0
RX-MD03-0144	1	25.4
RX-MD03-0155	1	28.1
RX-MD03-0158-03	1	11.2
RB-CV-0179	1	22.5
RB-CV-0180	1	19.6
Extra-0054	1	9.55
Extra-0055	1	8.45
Extra-0058	1	13.2
Extra-0059	1	14.8
Extra-0060	1	9.53
RA-QD02-0233	4	19
RA-QD02-0298	4	63.9
RB-CV-0018	4	88.5
RB-CV-0048	4	77
RB-CV-0056	4	113
RB-CV-0073	4	73
RB-CV-0202	4	15
RB-CV-0221	4	40
RB-CV-0240	4	20
RB-QD04-0017	4	56
RB-QD04-0032	4	38
RC-MD01-0006-02	4	21.6
Extra-0067	4	40.9

Table 4. A summary of Itokawa sample distributed to research communities via the AO and to NASA. Asterisk indicates that some particles on a Teflon spatula was distributed.

Fiscal Year	AO			For NASA	
	Number of the AO	Number of proposals	Number of samples	Number of the distribution	Number of samples
2010	-	-	-	1	10
2012	1	17	65	2	10
2013-2014	2	16	51	-	-
2015	3	12	49	3	5
2016	4	8	35	4	5
2017	5	3	9	-	-
2018	6	6	16	5	*
2019	7	4	17	-	-
2020	8	2	9	-	-
2021	9	0	0	-	-
2022	10	0	0	-	-
2023	11	1	3	-	-

JAXA Special Publication JAXA-SP-23-006E

Hayabusa Asteroid Sample Catalog 2023

Edited and Published by: Japan Aerospace Exploration Agency
7-44-1 Jindaiji-higashimachi, Chofu-shi, Tokyo 182-8522 Japan
URL: https://www.jaxa.jp/
Date of Issue: January 29, 2024
Produced by: Matsueda Printing Inc.