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JEFFREY N. GROSSMAN*

U. S. Geological Survey, MS 954, Reston, Virginia 20192 USA
*Author's e-mail address: jgrossman@usgs.gov

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Abstract–Meteoritical Bulletin No. 82 lists information for 974 new meteorites, including 521 finds from Antarctica, 401 finds from the Sahara, 21 finds from the Nullarbor region of Australia, and 7 falls (Ban Rong Du, Burnwell, Fermo, Jalanash, Juancheng, Monahans (1998), and Silao). Many rare types of meteorites are reported: counting pairing groups as one, these include one CR chondrite, two CK chondrites, two CO chondrites, four CV chondrites, one CH chondrite or Bencubbin-like, six C2 (unclassified) chondrites, two EH chondrites, two EL chondrites, three R chondrites, thirty unequilibrated ordinary chondrites, one ungrouped chondrite, three eucrites, six howardites, one diogenite, eleven ureilites, nine iron meteorites, one mesosiderite, two brachinites, one lodranite, one winonaite, and two lunar meteorites (Dar al Gani 400 and EET 96008). All italicized abbreviations refer to addresses tabulated at the end of this document.

Abu Moharek, see Saharan Meteorites from Egypt

Adrar Madet, see Saharan Meteorites from Niger

Aldama (b) 25°3'N 106°0'W
Chihuahua, Mexico
Found 1996, Summer
Ordinary chondrite (H5)
A 66.5 g stone was found by a rockhound while searching for minerals. Mineralogy and classification (J. Otto, *Frei*): olivine, $Fa_{18.7}$; pyroxene, $Fs_{16.5}Wo_{1.6}$; plagioclase, $An_{12.4}Or_{5.6}$; shock stage S2; weathering grade W3. Specimens: main mass, *SML*; type specimen, *Frei*. The iron meteorite found in the same vicinity in 1985 will be named henceforth Aldama (a).

Alnif 30°40'N 5°10'W
Centre-south, Morocco
Recognized 1992 April
Ordinary chondrite (H5)
An 8 kg stone was purchased in 1992 April by Alain Carion in a mineral shop in Risani, Morocco. The seller said it had been collected with trilobites near Oum-Jrane, ~60 km south of Alnif. Mineralogy and classification (M. Bourot-Denise, *MNHNP*): olivine, $Fa_{19.3}$; pyroxene $Fs_{17.3}Wo_{1.7}$; plagioclase, $Ab_{83.0}An_{10.6}$; shock stage S2; neumann bands noted in kamacite; weathering grade W2. Specimens: main mass, Alain Carion; 81 g, *MNHNP*.

ANSMET meteorites
(496 meteorites)
Antarctica
Found 1994–1997
Appendix 1 brings up-to-date the list of officially announced meteorites from the U.S. Antarctic Meteorite (ANSMET) program. 7298 meteorites were previously listed in the *Meteoritical Bulletin*, no. 76, 1994 January, and no. 79, 1996 July; these meteorites bring the total to 7794. The meteorites in Appendix 1 were published in the *Antarctic Meteorite Newsletter* (AMN), issue 19(2) (1996), 20(1) and 20(2) (1997), and 21(1) (1998). Listed are the classifications, masses, degrees of weathering, olivine and pyroxene compositions, natural thermoluminescence levels, pairing information, ice fields upon which the meteorites were found, and bibliographic information, all sorted by sample name. Note that meteorite pairings may be tentative.

Australia I is an unofficial synonym for Hughes 026.

Australia II is an unofficial synonym for Reid 016.

Balsas 7°31.88'S 46°2.47'W
Maranhão, Brazil
Found 1974
Iron, medium octahedrite (IIIAB)
A 41 kg iron was found in a grain field by Mr. Mario Rodrigues. Classification and description (J. T. Wasson, *UCLA*; E. Zucolotto, *Rio*): bulk Ni, 8.43 wt%; Co, 0.51 wt%; Ga, 20.9 ppm; As, 7.24 ppm; Ir, 0.397 ppm; Au, 0.927 ppm; bandwidth, 0.9 mm; shocked, with hatched kamacite; contrary to anecdotal reports that the meteorite could be an observed fall, the UCLA specimen does not show either fusion crust or remnants of a heat-altered zone. Specimens: main mass, *ACAEE* (contact E. Zucolotto, *Rio)*; type specimen, 24 g, *UCLA*.

Ban Rong Du 16°40'N 101°11'E
Phetchabun, Thailand
Fell 1993 June 13, 20:30 local time (12:30 UT)
Iron, coarse octahedrite (ungrouped)
A 16.7 kg iron meteorite was collected by Mr. Saree Ragkon and Mrs. Kumla Ragkon from the bottom of a 110 cm deep hole in sandy soil. The meteorite was observed to fall at a steep angle, coming from the southwest. Classification and description (J. T. Wasson, *UCLA*; Prinya Putthapiban and Sirot Salyapongse, *DMRT*): bandwidth, 1.9 mm; bulk Ni, 7.90 wt%; Co, 0.572 wt%; Ga, 22.5 ppm; Ge, 54.7 ppm; As, 12.7 ppm; Ir, 4.13 ppm; Pt, 27 ppm; see Royal Thai Dept. Min. Res. (1993). Specimens: main mass with finder; type specimen, 4.5 g, *UCLA*; ~20 g, *DMRT* (contact Dr. Prinya Putthapiban).

Bir Rebaa 31°40'N 8°25'E
Ouargla, Algeria
Found 1993 April 15

Ordinary chondrite (H6)
A 7.2 kg stone was found by an engineer, Mr. Pinto, on an oil-prospecting mission. Mineralogy and classification (M. Bourot-Denise, *MNHNP)*: olivine, $Fa_{19.5}$; pyroxene $Fs_{17.2}Wo_{1.3}$; plagioclase, $Ab_{82.2}An_{11.7}$, very clear; shock stage S1; weathering grade W3. Specimens: main mass with finder; 288 g, *MNHNP.*

Blumenau 26°55.43'S 49°3.53'W
Santa Catarina, Brazil
Find date unknown
Iron, fine octahedrite (IVA)
A highly weathered iron meteorite of unknown mass was obtained by Francisco Rzataki, CODISC Companhia de Esenvolvimento Industrial de Santa Catarina; he sent a sample to Prof. Joel, University of Blumenau, in 1986. Classification and description (J. T. Wasson, *UCLA;* see also Aumond *et al.*, 1994): fine octahedrite structure and preliminary compositional data on weathered material are consistent with the IVA group. Specimens: main mass with Rzataki; type specimens in *Rio* and *UCLA* are badly oxidized.

Burnwell 37°37'19"N 82°14'14"W
Pike County, Kentucky, USA
Fell 1990 September 4, 15:45 EDT (19:45 UT)
Ordinary chondrite (type 4)
A 1.504 kg stone fell through the porch of Arthur and Frances Pegg, frightening a goat and a horse, and was recovered the next day. Classification and mineralogy (T. McCoy, R. Ash, E. Jarosewich and S. Russell, *SI*): olivine, $Fa_{15.8}$; pyroxene $Fs_{13.4}$; Co in kamacite, 0.35 wt%; Fe-Ni metal, 19.75 wt%; shock stage S3; O isotopes, $\delta^{17}O = +0.48‰$; chondrule sizes similar to H chondrites; many properties are similar to Willaroy; see Russell *et al.*, 1998. Specimens: all at *SI.*

Columbus 31°49.777'N 107°23.667'W
Luna County, New Mexico, USA
Found 1997 January 27
Ordinary chondrite (H5)
Six small stones totaling 165 g (largest 88.1 g) were found by Michael and Wren Cottingham on a dry lake bed. Classification and mineralogy (A. Rubin, *UCLA*): olivine, $Fa_{18.8}$; pyroxene $Fs_{16.8}Wo_{1.1}$; shock stage S3; weathering grade W3. Specimens: type specimen, 18.5 g, *UCLA*; remainder with M. Cottingham, P.O. Box 727, Silver City, NM 88062, USA.

Dar al Gani 094-381, see Saharan meteorites from Libya

Dar al Gani 400 27°22.17'N 16°11.93'E
Libya
Found 1998 March 10
Lunar meteorite (anorthositic breccia)
A 1.425 kg stone was found in Dar al Gani in the Libyan Sahara. Classification and description (J. Zipfel, *MPI*): the meteorite is partly covered with a brownish fusion crust; fresh surfaces are gray to dark gray; matrix is well consolidated; clasts include subophitic and fine-grained to microporphyritic impact-melt breccias, granulitic fragments, intergranularly recrystallized anorthosites, and mineral fragments; chemical and O isotope composition is characteristic of lunar highland meteorites (Zipfel *et al.*, 1998b); abundances and composition of noble gases do not suggest a pairing with DaG 262 (Scherer *et al.*, 1998b). For further details, see Zipfel *et al.* (1998b). Type specimen and two polished sections are with the *MPI*; main mass with finder.

Deán Funes 30°26'S 64°12'W
Cordoba, Argentina
Found, and possibly fell, *ca.* 1977; recognized 1997
Ordinary chondrite (H5)
A 9.26 kg stone was observed to fall by an anonymous person who kept it in his garden until it was identified and bought by an anonymous meteorite collector. Classification and mineralogy (M. Ghélis and B. Zanda, *MNHNP*): olivine, $Fa_{19.6}$; pyroxene $Fs_{17.4}Wo_{1.3}$; shock stage S2; weathering grade W1. Specimens: type specimen, 15.4 g, *MNHNP*; main mass, *RLang.*

Eads 38°28.2'N 102°49.6'W
Kiowa County, Colorado, USA
Found 1975
Ordinary chondrite (H4)
A 4.86 kg stone was found in a corn field. Classification and mineralogy (A. Rubin, *UCLA*): olivine, $Fa_{18.4}$; pyroxene $Fs_{16.4}Wo_{1.5}$; shock stage S3; weathering grade W3. Specimens: type specimen, 20 g, *UCLA*; main mass, J. Allen Shaw, Edwardsville, Kansas, USA.

El Hammami 23°17'N 10°49'W
Tiris Zemmour, Mauritania
Found 1997
Ordinary chondrite (H5)
In 1997 January, an unknown mass of material, possibly broken apart from a single large stone, was sold to meteorite collectors by nomads near the town of Mhamid, Morocco; this material has since been resold under the names *Mhamid* and *Hamada du Draa.* The nomads claimed that this meteorite was found to the south, in Algeria (~29°50'N 5°50'W), in the direction of a fireball seen in 1995 January. In 1997 September, the same nomads shipped a fragment of a meteorite that they claimed was seen to fall on 1997 August 10 to Mr. Edwin Thompson. In 1997 November, Thompson traveled to Mauritania and collected six fresh-looking stones totaling ~200 kg (individual masses of 80, 51, 30, 26, 8, and 4 kg) at the base of the El Hammami Mountains in Mauritania (1000 km southwest of Mhamid, Morocco), probably in the place where they fell; fragments of these have been sold by Thompson and other dealers under the name *El Hammami.* Classification and mineralogy of *El Hammami* stones (A. Rubin, *UCLA*): olivine, $Fa_{18.8}$; pyroxene $Fs_{16.7}Wo_{1.4}$; shock stage S2; contains metal veins; petrologic type 5. Classification and mineralogy of *Hamada du Draa* stones (D. Weber, *Mün*): olivine, $Fa_{19.2}$; pyroxene $Fs_{17.4}$; shock stage S2; contains conspicuous metal-rich veins; petrologic type 5/6; some of the material appears weathered and rusts easily, but the bulk is quite fresh. Specimens from *El Hammami* stones: ~100 kg, *Thompson*; type specimen, *UCLA*. Specimens originally called *Hamada du Draa* are now scattered in private collections, and some may remain in Morocco; type specimen, ~1 kg, *Mün.*

Because all of the above-described material seems likely to represent a single fall, the name **El Hammami** shall be the official collective name. *Mhamid* and *Hamada du Draa* should be considered only as unofficial synonyms for El Hammami. The total known mass of material is probably ~240 kg.

Elqui unknown location
Chile
Recognized before 1990
Iron, hexahedrite (IIAB)
A 260 g iron meteorite was found in the mineral collection of Antonio Alphonso when this was purchased by *LSC*. Classification and description (J. T. Wasson, *UCLA*; see Wasson and Canut de Bon, 1997): composition indicates that this specimen is not paired with other Chilean hexahedrites (Ni = 5.96%, Ga = 59 ppm, Ge = 168 ppm, Ir = 1.94 ppm, Au = 0.663 ppm). Specimens: main mass, *LSC*; type specimen, *UCLA*.

Fermo 43°10'52"N 13°45'12"E
Marche, Italy
Fell 1996 September 25, ~15:30 UT
Ordinary chondrite (H3-5)
A farmer, Mr. Luigi Benedetti, heard an explosion followed a few seconds afterwards by a crash on September 25. Two days later, Mr. Giuseppe Santarelli recovered a 10.2 kg stone from the place described by Benedetti. Classification and mineralogy (A. M. Fioretti and G. Molin, *CNR;* see Molin *et al.*, 1997): a breccia of millimeter to centimeter-sized light and dark clasts in a gray matrix; one type 3 clast contains glass and has range of olivine, Fa_{2-27}, and pyroxene, Fs_{2-22}; an equilibrated clast has olivine, $Fa_{18.2}$; matrix olivine uniform at $Fa_{17.4}$. All specimens, *PMVV*.

Frontier Mountains
(25 meteorites)
Victoria Land, Antarctica
Found 1995
These meteorites (Table 1) were collected during the 1995/1996 PNRA/EUROMET expeditions to the Frontier Mountains. Description of ureilite FRO95028: contains 68 vol% olivine (up to 2.5 mm, cores $Fa_{20.8}$, rims greatly reduced), 19 vol% pigeonite (up to 1.7 mm, $En_{73.8}Fs_{18.1}Wo_{8.1}$), 13 vol% interstitial graphite; opaque minerals include kamacite (up to 3 wt% Ni), troilite, Cr-rich iron sulfide and traces of schreibersite; chromite rare; specimen contains minor alteration and is relatively unshocked. Classifications by R. Carampin, A. M. Fioretti and G. Molin, *UPad.* Specimens: A. S. Sexton, *OU.*

G'Day is an unofficial synonym for Mundrabilla 020.

Gold Basin centroid: 35°52.5'N 114°14.0'W
Mohave County, Arizona, USA
Initial find 1995 November 24
Ordinary chondrite (L4)
A meteorite was found in an area of arroyos draining the White Hills by Professor Jim Kriegh (*UAz*, emeritus) while prospecting for gold with a metal detector. As of 1997 November, 1484 stones have been recovered, with a total mass of 61.0 kg, from an area of ~130 km^2. The largest individual stone has a mass of 1.52 kg. Classification and mineralogy (D. Kring, *UAz*): olivine, $Fa_{24\pm1}$; pyroxene $Fs_{20}Wo_1$; kamacite contains 0.72 ± 0.09 wt% Co; weathering grade W2–3. Specimens: *UAz*, 0.8 kg; *SI,* 8.4 kg; bulk of the mass with Jim Kriegh and his fellow collectors.

Great Sand Sea 005-009, see Saharan meteorites from Egypt

Grein 001-003, see Saharan meteorites from Niger

Hamada du Draa, see El Hammami

TABLE 1. Meteorites from the Frontier Mountains, Antarctica.

Name **FRO**	Lat. (+72°S)	Long. (+160°E)	Wt. (g)	Class	shock[1]	Fa mol%	Fs mol%	WG[2]
95003	57'13"	26'42"	2.9	H6		18.5	16.7	A/B
95004	57'06"	27'57"	7.9	H6		18.4	16.3	A/B
95005	59'59"	26'41"	191.3	L6		24.7	20.5	A
95006	57'55"	25'52"	121.7	H6		18.6	16.6	A/B
95007	59'26"	24'13"	6.3	H4		17.5	15.2	B
95009	57'15"	26'11"	2.1	L5		22.6	19.5	A/B
95010	57'45"	26'33"	87.1	H6		18.1	16.1	A
95011	59'21"	24'31"	1.7	H4		18.7	17.4	B/C
95012	57'45"	26'13"	44	H6		18.8	16.8	A
95013	59'21"	24'32"	0.7	L6		24.9	21.0	A
95014	59'48"	25'02"	3.5	H4	S3	14.8	12.9	A/B
95015	59'18"	24'31"	1.9	H4	S3	17.6	13.9	A/B
95016	59'48"	25'02"	5.7	H6		19.2	16.9	A
95017	59'48"	25'02"	2.1	H4	S1	19.0	16.6	A
95018	57'15"	26'11"	13.9	H5		18.0	15.9	A/B
95019	57'17"	26'24"	13	H5	S1	18.4	15.9	B
95020	59'21"	24'31"	2.2	H5	S2	19.0	16.3	A
95021	57'15"	26'11"	1.8	H6	S3	18.6	16.3	A
95022	57'11"	27'49"	3.9	H6	S3	18.8	16.3	A
95023	59'23"	24'28"	1.4	H6	S4	19.8	17.2	A
95024	57'09"	30'30"	6.3	H4	S2	18.2	15.9	A
95025	59'48"	25'02"	0.4	H4 (?)		18.5	13.4	B
95027	57'15"	26'11"	0.9	H5	S4	19.0	16.5	A/B
95028	57'04"	30'50"	13.9	Ureilite		20.8	18.1	A
95043	57'05"	30'32"	5.7	L6		25.1	20.9	A

[1]Shock classification after Stöffler *et al.* (1991).
[2]Weathering grade as used in the *Antarctic Meteorite Newsletter.*

Hammadah al Hamra 168-235, see Saharan meteorites from Libya

Hammadah al Hamra 237 28°36'56"N 13°02'95" E
Libya
Found 1997 October 18
Carbonaceous chondrite (CH) or "Bencubbinite"
See also Table 5 and Saharan meteorites from Libya. This meteorite has a high metal content of ~57 vol%. Other constituents are chondrules and silicate fragments. One CAI has been observed. Classification and analysis (J. Zipfel, *MPI*): Bulk composition: 69.6 wt% Fe, 2.48 ppm Ir, 0.14 ppm Au, 4.42 wt% Mg, 4.67 ppm Sc; for further details on grouping this meteorite with CH chondrites, see Zipfel *et al.* (1998a). Weisberg *et al.* (1998) group this meteorite with Bencubbin. Specimens: type specimen and two polished sections, *MPI*; main mass with finder.

Hebron 40°10'N 97°36'W
Thayer County, Nebraska, USA
Found 1965, Summer
Ordinary chondrite (H6)
A 21.82 kg stone was discovered by Mr. Larry Degenhardt while driving a tractor; he felt the impact of the plowhead on the stone. Classification and mineralogy (A. Rubin, *UCLA*): olivine, $Fa_{19.8}$; pyroxene $Fs_{17.2}Wo_{1.2}$; shock stage S3; weathering grade W3. Specimens: type specimen, *UCLA*; main mass, Mr. Jeff Shaw, Edwardsville, Kansas.

Heze, an unofficial, widely used synonym for Juancheng. Note that *Heze* is also a synonym for the nearby 1956 fall, Hotse. Curators, collectors, and dealers are urged to discontinue all use of the name Heze in order to avoid ambiguity.

Hughes 026-033, see Nullarbor Region

Hughes 030 30°40.08'S, 129°27.72'E
South Australia, Australia
Found 1991 July
Rumuruti-group chondrite (R3-6)
An 18.3 g end-cut in the collection of R. Bartoschewitz, originally thought to be paired with Hughes 021 (L3), was recently recognized to be a new meteorite. The original mass was probably near 100 g. Classification and description (Bischoff *et al.*, 1998): a brecciated R chondrite consisting of fragments of various petrologic types (3–6) in a fine-grained matrix; olivine mainly Fa_{39-41} except in R3 clasts, Fa_{1-61}; pyroxene is Ca-rich, $Fs_{10-12}Wo_{45-48}$; spinel contains 4–6 wt% TiO_2; O isotopes in R chondrite field. Specimens: main mass with unknown finder; 25 g (under the name *Bluebush Ridge*), *Haag*; 18 g, *Bart.*

Jalanash unknown
Bayan-Ölgiy, Mongolia
Fell 1990 August 15.
Ureilite
A 700 g stone was collected after its fall on the plain of Ölgiy in western Mongolia. Classification and analysis reported in Yanai and Byambaa (1996) and Weber and Bischoff (1998): monomict ureilite; olivine, $Fa_{19.3}$; pyroxene, $Fs_{17.2}Wo_{7.8}$; shock stage S3; similar to Asuka 881931; bulk composition in Yanai *et al.* (1995). Specimens: main mass, unknown; type specimen, *Mün.*

Juancheng 35°30'N 115°25'E
Shandong Province, China
Fell 1997 February 15, 23:23:35 Beijing time (15:23:35 UT)
Ordinary chondrite (H5)
A shower of small stones (>1000 individuals) fell near the Yellow River after a brilliant fireball with smoke and sparks terminated in a loud, resonating explosion. The fall ellipse measured ~10.5 × 4.3 km, oriented east-west. The largest recovered piece weighed 2.7 kg, and the total mass is >100 kg. One fragment was reported to have penetrated a roof and landed in a pot on a stove. This meteorite has been widely traded and sold under the unofficial name Heze. Classification and mineralogy (Chen Yonghen and Wang Daode, *GIG*; Wang Ruitian, *HBS*; A. Rubin, *UCLA*;): olivine, $Fa_{19.0-19.2}$; pyroxene, $Fs_{16.9}Wo_{0.1}$; plagioclase heterogeneous, $An_{9-33}Ab_{63-84}Or_{3-12}$; kamacite contains 0.36–0.47 wt% Co; shock stage S2. Specimens: 35 kg, *DPitt*; ~1 kg, *ZMAO*; ~1 kg, *BeiAP.*

Kimba 33°13'S, 136°25'E
South Australia, Australia
Found 1997 May
Ordinary chondrite (H4)
A 1492 g stone was found by Mr. Byron Smith 5–10 km south of Kimba on Eyre Peninsula. Classification and mineralogy (M. Zbik, *USA*; A. Pring and G. Horr, *SAM*): olivine, $Fa_{19.2\pm0.2}$; pyroxene $Fs_{16.7\pm0.8}Wo_{1.2}$; shock stage S1. Specimens: main mass, contact Dr. A. Pring, *SAM.*

Krähenberg, location. 49°19'37"N 7°27'53"E
Ludolf Schultz (*MPI*) used global positioning satellite (GPS) methods to measure these precise coordinates for this 1869 German meteorite fall.

La Serena unknown location
Chile
Recognized before 1990
Iron, medium octahedrite (IIICD)
A 663 g iron meteorite was found in the mineral collection of Antonio Alphonso when this was purchased by *LSC.* Classification and description (J. T. Wasson, *UCLA*; see Wasson and Canut de Bon, 1997): band width 0.9 mm; meteorite appears sand-blasted and may have originated in the Atacama desert; composition differs from other IIICD iron meteorites (Ni = 7.62%, Ga = 70.5 ppm, Ge = 204 ppm, Ir = 0.548 ppm, Au = 1.665 ppm). Specimens: main mass, *LSC*; type specimen, *UCLA.*

Mhamid, see El Hammami

Monahans (1998) 31°36'30"N 102°51'30"W
Ward County, Texas, USA
Fell 1998 22 March, 18:48 CST
Ordinary chondrite (H5)
Two stones, weighing 1344 g and 1243 g, fell in the city of Monahans, Texas, after two sonic booms and a fireball were observed over a wide area (up to 100 km from the fall site). One stone penetrated the asphalt on a city street and was found in the sandy subsurface. Classification and mineralogy (M. Zolensky and G. Lofgren, *JSC*): a light-dark breccia, with light and black clasts in a gray-colored, pulverized host matrix; olivine, $Fa_{18.8}$ (host); pyroxene, $Fs_{17.1}Wo_{1.4}$ (host); plagioclase, $An_{1-19}Ab_{70-75}Or_{6-29}$ (all lithologies);

shock stage S2 (light clasts) to S4 (black clasts); the gray-colored matrix material contains blue crystals of indigenous halite and sylvite, some up to 3 mm in diameter, some euhedral. Specimens: both masses are owned by the City of Monahans, contact the City Manager; type specimen, 20 g, contact Dr. Everett Gibson, *JSC*. The iron meteorite (group IIF) that was found south of Monahans, Texas, in 1938 will be designated henceforth as **Monahans (1938).**

Mundrabilla 020 30°50'S 127°30'E (±15')
Western Australia, Australia
Found 1989
Howardite
A stone of ~60 g was found by a rabbit hunter in the same area where the large masses of the Mundrabilla iron were found, perhaps 15 km north of the railway. This stone is also informally known as *G'Day*. Description: contains carbonaceous chondrite (CC) clasts (Zolensky *et al.*, 1996); on the basis of the abundance of CC clasts, this meteorite is probably not paired with Mundrabilla 018 (D. Kring, pers. comm.) and is possibly paired with Old Homestead 001 (F. Wlotzka, pers. comm.). Specimens: 30 g, *Haag*.

Nadiabondi, new information 11°57.3'N 1°31.4'E
Two recent expeditions by Prof. U. Wenmenga (*UO*) to the 1956 fall site in Burkina Faso have resulted in the discovery of ~350 new individuals, with a combined mass of 4.5 kg. Accurate coordinates are listed above. New mineralogical information (J. Otto, *Frei*): $Fa_{19.4}$; pyroxene $Fs_{17.7}Wo_{1.2}$; shock stage S2; weathering grade W1. New specimens: *UO* and *Frei*.

Nullarbor Region
South Australia and Western Australia
Found 1993–1995
(21 meteorites)
Data for these meteorites are listed in Table 2 and in separate entries for Hughes 030, Mundrabilla 020, and Reid 027. The brachinite Hughes 026 lacks plagioclase and has clinopyroxene with composition $Wo_{46}En_{44}$; texture and mineral composition are homogeneous; does not appear to be paired with Reid 013; listed in Clayton and Mayeda (1996) as *Australia I.* The ureilite Reid 016 is a polymict breccia with some dark inclusions; listed in Clayton and Mayeda (1996) as *Australia II.* The petrologic subtype of Reid 017 (L3.7) was determined by induced TL by P. Benoit, *UArk*.

Poolowanna 29°49.896'S 136°51.523'E
South Australia
Found 1997 May
Ordinary chondrite (H5)
An 875 g stone was found by Mr. Roger Henwood 70 km west of Poolowanna Lake in the Simpson desert. Classification and mineralogy (M. Zbik, *USA*; A. Pring, *SAM*): olivine, $Fa_{17.1\pm0.3}$; pyroxene $Fs_{17.6\pm0.7}Wo_{0.7}$; shock stage S3–4. Specimens: main mass, contact Dr. A. Pring, *SAM*.

Pozo Almonte unknown location
Tarapaca, Chile
Recognized before 1990
Iron, medium octahedrite (IIIAB)
A 7.8 kg iron meteorite was obtained by *LSC* from a Señor Gaviño,

TABLE 2. Meteorites from the Nullarbor Region, Australia. Hughes meteorites are from South Australia, and Mundrabilla and Reid meteorites are from Western Australia.

Name	Latitude	Longitude	Wt. (g)	Pcs	Found	Class	Fa[1] mol%	Fs mol%	Shock[2]	WG[3]	Analysis[4]	Specimens[5]
Hughes 026	30°0'S (±5')	129°10'E (±5')	360	1	1995	Brachinite	34.5				(a)	26 g *AMNH*
Hughes 027	30°33.40'S	129°38.32'E	68	1	1993	H5	19.1	17.7	S2	W5	(b)	UH 265
Hughes 028	30°36.53'S	129°37.54'E	62	1	1993	H6	18.9	17.5	S4	W5	(b)	UH 266
Hughes 029	30°24.49'S	129°20.30'E	74	1	1993	H5	18.9	17.7	S2	W2	(b)	UH 268
Hughes 030	30°40.08'S	129°27.72'E	<100	1	1991	R3-6	*See separate entry*					
Hughes 031	30°10'23"S	129°32'10"E	120	2	1991	L4	22.9	18.8	S4-5	W1	(c)	*SML*
Hughes 032	30°10'6"S	129°30'E	42.7	1	1991	L5	24.6	20.8	S2	W3	(c)	*SML*
Hughes 033	30°8'2"S	129°3'45"E	20	1	1991	CO3	0.6–61 (26)	1.0–47.8 (17)	S1	W3	(c)	*SML*
Mundrabilla 020	30°50'S(±15')	127°30'E (±15')	31	1	1989	Howardite	*See separate entry*					
Reid 016	30°10'S (±5')	129°0'E (±5')	110	1	1995	Ureilite	3–24 (18.4)				(a)	27 g *AMNH*
Reid 017	30°10'S (±5')	128°55'E (±5')	unk	1	1995	L3.7	1–46 (20.5)				(a)	43 g *AMNH*
Reid 018	30°05.00'S	128°55.00'E	121	1	1993	L5	24.2	21.1	S4	W3	(b)	UH 262
Reid 019	30°31.04'S	128°28.57'E	56	1	1993	L6	24.4	21.8	S4	W1	(b)	UH 263
Reid 020	30°31.0'S	128°27.5'E	32	1	1993	L6	25.6	22.8	S2	W2	(b)	UH 264
Reid 021	30°04.07'S	128°59.09'E	20	1	1993	L6	25.0	22.4	S4	W5	(b)	UH 267
Reid 022	30°18.17'S	128°31.57'E	188	1	1993	H4	18.7	17.3	S1	W1	(b)	UH 269
Reid 023	30°18.05'S	128°31.53'E	59	1	1993	H5	18.7	17.8	S2	W2	(b)	UH 270
Reid 024	30°19.10'S	128°23.00'E	96	1	1993	H5	18.4	17.1	S2	W3	(b)	UH 271
Reid 025	30°17'12"S	128°34'24"E	21.4	1	1991	L6	24.0	19.3	S4	W4	(c)	*SML*
Reid 026	30°14'54"S	128°38'7"E	100.6	1	1991	LL6	31.5	25.4	S2	W4	(c)	*SML*
Reid 027	30°19'5"S	128°22'24"E	19.7	1	1991	Brachinite	*See separate entry*					

[1]Average fayalite contents shown in parentheses.
[2]Shock classification after Stöffler *et al.* (1991).
[3]Weathering grade after Wlotzka (1993).
[4]Description and analysis by: (a) M. Prinz, *AMNH*; (b) G. Benedix, *UHaw*; (c) J. Otto, *Frei*.
[5]Numbers starting with UH represent type specimens at *UHaw*; the main masses for these are owned by J. Y. Murakami. The locations of the main masses of the three meteorites at *AMNH* are unknown

administrator of several nitrate mines in the Iquique area. The meteorite was probably found 100–200 km inland from Iquique. Classification and description (J. T. Wasson, *UCLA*; see Wasson and Canut de Bon, 1997): band width 1.0 mm; composition, Ni = 8.75%, Ga = 22.5 ppm, Ge = 43.8 ppm, Ir = 0.234 ppm, Au = 1.052 ppm). Specimens: main mass, *LSC*; type specimen, *UCLA*.

Reid 016-027, see Nullarbor Region

Reid 027 30°19'5"S, 128°22'24"E
Western Australia, Australia
Found 1991
Brachinite
A 19.7 g stone was found by a rabbit hunter. Mineralogy and classification (J. Otto, *Frei*): olivine, $Fa_{33.7-35.7}$; clinopyroxene, $Fs_{9.4-13.0}Wo_{38.4-45.0}$; orthopyroxene, $Fs_{25.8-28.5}$ $Wo_{2.1-3.3}$; abundant plagioclase, $An_{14.5}Or_{4.7}$; chromite, Fe/(Fe + Mg) = 0.91, Cr/(Cr + Al) = 0.93; contains oxidized Fe-Ni metal, Cl-apatite, troilite; equigranular texture, grain size 100–600 μm; shock stage S2; weathering grade W4. Specimens: main mass, *SML*; type specimen *Frei*.

Roosevelt County Meteorites
Roosevelt County, New Mexico, USA
Found 1994
(4 meteorites)
Four meteorites (Table 3) were found by Ivan Wilson in Section 32, T2S, R33E of Roosevelt County. Classification and mineralogy by G. Benedix, *UHaw*.

Roundsprings 39°10'N 98°26'W
Lincoln County, Kansas, USA
Found 1986
Ordinary chondrite (H5)
A stone of ~6 kg was found in a pasture by Jim Stewart and used as a doorstop and to make car repairs. Classification and mineralogy (A. Rubin, *UCLA*; M. Zolensky, *JSC*): olivine, $Fa_{18.3}$; pyroxene $Fs_{16.1}Wo_{1.4}$; shock stage S2; weathering grade W5. Specimens: main mass, *DPitt*; type section, *JSC*.

Sahara 97001-97211, see Saharan meteorites from unknown locations

Sahara 97096 unknown coordinates
Sahara, country unknown
Found 1997 April
Enstatite chondrite (EH3)
See **Saharan meteorites from unknown locations** for find circumstances, ownership and pairing. This meteorite and its pairing group have a total mass of ~28 kg. Mineralogy and classification (M. Bourot-Denise, *MNHNP*): olivine, 0.2–5.0 wt% FeO; pyroxene, 0.4–2.7 wt% FeO; kamacite, 3.3 wt% Ni, 2.4 wt% Si; troilite, 2.9 wt% Cr, 0.2 wt% Ti; schreibersite, 15.5 wt% Ni; niningerite, 25.1 wt% Mg, 11.6 wt% Mn; sphalerite, 2.7 wt% Mn; perryite, 3.3 wt% P; daubréelite, 35.1 wt% Cr, 14.4 wt% Fe, 5.5 wt% Zn; pyroxene in type II chondrules, 3.4–21.7 wt% FeO (eight chondrules).

Saharan meteorites from Egypt
Al Wadi al Jadid, Egypt
Found 1995–1997
(6 meteorites)
These meteorites (Table 4) were recovered by various individuals, some of whom were searching for Libyan desert glass. Abu Moharek was found by chance in a region covered with other black stones ~300 m away from the Abu Moharek dune.

TABLE 3. Meteorites from Roosevelt County, New Mexico.

Name	Latitude	Longitude	Wt. (g)	Found	Class	Fa mol%	Fs mol%	Shock[1]	WG[2]	Comment[3]
RC 091	34°5'N (?)	103°30'W	3.15	6/94	H4	17.9	15.1	S2	W6	UH 251
RC 092	34°5'N	103°30'W	34.29	6/94	L5	23.5	20.1	S4	W3	UH 250
RC 093	34°5'N	103°30'W	2.78	7/94	L5	23.7	19.6	S4	W6	UH 252
RC 094	34°5'N	103°30'W	3.55	7/94	L5	23.6	19.4	S4	W5	UH 253

[1]Shock classification after Stöffler *et al.* (1991).
[2]Weathering grade after Wlotzka (1993).
[3]Specimen numbers starting with UH are from *UHaw*.

TABLE 4. Meteorites from the Egyptian Sahara.

Name	Found	Latitude	Longitude	Mass (g)	Pcs	Class	Shock[1]	WG[2]	Fa	Fs	Wo	Finder[3]	Comments[4]
Abu Moharek													
	1997 Oct 21	27°14'22"N	29°50'09"E	4500	1	H4	S1	W3	18.7	16.2	1.1	Unknown	133 g, *MNHNP*[5]
Great Sand Sea													
005	1995 Nov 26	25°48'58"N	25°54'51"E	80	1	L6	S5	W4	25.7	21.3	1.5	L. Carion	2.5 g, *MNHNP*[6]
006	1995 Nov 27	26°45'56"N	26°19'25"E	45	1	L6	S5	W5	25.1	22.3	1.5	D. Glatigny	3.7 g, *MNHNP*[6]
007	1996 Dec 7	26°54'37"N	26°09'06"E	1450	1	H6	S2	W2	18.7	16.4	1.6	M. Chandeigne	120 g, *MNHNP*[5]
008	1996 Dec 9	26°35'40"N	25°37'20"E	450	5	LL3-6	S3	W1	26.8–32.4	23.1–29.6	1.2–1.9	J-B. Gillot	br; 8 g, *MNHNP*[5]
009	1996 Dec 11	27°01'50"N	26°40'28"E	414	1	H5	S2-3	W3	18.7	16.6	1.5	B. Dejonghe	83 g, *MNHNP*[5]

[1]Shock classification after Stöffler *et al.* (1991), but using only reflected-light microscopy.
[2]Weathering grade after Wlotzka (1993).
[3]The finders own the main masses.
[4]Br = breccia.
[5]Classified by M. Ghélis and B. Zanda, *MNHNP*.
[6]Classified by M. Bourot-Denise, *MNHNP*.

Saharan meteorites from Libya

Libya
Found 1996–1998
(198 meteorites)

414 meteorites were recovered from the Libyan Sahara in 1996 and 1997, including the regions Hammadah al Hamra (HaH) and Dar al Gani (DaG). Table 5 lists 197 of these meteorites (see also *Meteoritical Bulletin*, Nos. 80 and 81), along with one recovered in 1998. Noteworthy finds are a winonaite (HaH 193), a group of CO3 chondrites from DaG that are probably paired, two CK chondrites (DaG 250 and DaG 275, possibly not paired), a eucrite (DaG 276), two ureilites (DaG 319, polymict, and DaG 340), a CH chondrite (see separate listing for HaH 237), and a lunar meteorite (see separate listing for DaG 400). Many pairings are possible among these meteorites.

TABLE 5. Meteorites from the Libyan Sahara.

Name	Found	Latitude	Longitude	Wt. (g)	Pieces	Class[1]	Shock[2]	WG[3]	Fa (mol%)	Fs (mol%)	Comments[4]	Info[5]
Dar al Gani												
094	1996	27°03.93'N	16°05.25'E	385	2	H5	S3	W2	20.3	18.2	sv	(a)
095	1996	27°06.41'N	16°30.97'E	840	1	L5	S4	W4	26.2	22.5		(a)
096	1996	27°06.15'N	16°14.29'E	209	1	H5	S2	W4	18.7	17.2		(a)
097	1996	27°06.86'N	16°08.70'E	67	1	H6	S3	W3	19.6	17.6	sv	(a)
098	1996	27°06.81'N	16°08.58'E	132	1	H5/6	S3	W4	19.9	18	sv	(a)
099	1996	27°07.21'N	16°06.67'E	254	1	H6	S3	W3	20.4	18.4	sv	(a)
100	1996	27°07.27'N	16°06.53'E	4840	many	H6	S3	W3	20.6	18.7	sv	(a)
101	1996	27°07.77'N	16°04.12'E	842	1	H6	S3	W3	19.7	17.1		(a)
102	1996	27°07.23'N	16°01.41'E	173	2	H6	S3	W3	20	17	sv	(a)
104	1996	27°08.12'N	16°03.12'E	269	1	H6	S3	W3	20.2	18.3		(a)
105	1996	27°08.03'N	16°03.92'E	85	1	H6	S3	W3	20.3	17.8		(a)
106	1996	27°07.94'N	16°04.08'E	293	1	H6	S3	W4	20.3	17.8	sv	(a)
107	1996	27°08.07'N	16°05.36'E	1510	many	H6	S3	W3	20.2	17.9	sv	(a)
108	1996	27°10.99'N	16°19.85'E	221	1	H5	S3	W3	19.2	17.2	sv	(a)
109	1996	27°09.83'N	16°31.22'E	47	1	LL5-6	S3	W2	30.9	25.7	sv, br	(a)
110	1996	27°09.00'N	16°24.38'E	57	1	L6	S3	W4	25.5	22.1		(a)
111	1996	27°09.98'N	16°12.60'E	76	1	H6	S3	W4	19.2	17.2	sv	(a)
112	1996	27°10.05'N	16°08.44'E	212	1	L5/6	S3	W2	25.3	22.2		(a)
113	1996	27°11.01'N	16°06.91'E	290	4	H5	S3	W1	19.2	17	sv	(a)
114	1996	27°11.04'N	16°06.71'E	223	2	H5	S3	W2	19.3	17.3		(a)
115	1996	27°11.74'N	16°06.02'E	379	1	H5-6	S3	W2	19.2	17.1	sv, br	(a)
116	1996	27°11.75'N	16°00.79'E	615	1	H5	S3	W2	20.1	17.9		(a)
117	1996	27°11.75'N	16°00.79'E	415	4	H5	S3	W3	19.9	18.1	sv	(a)
118	1996	27°15.29'N	16°00.40'E	1770	52	L5/6	S4	W4	25.6	21.8	sv	(a)
119	1996	27°07.98'N	16°02.37'E	287	1	H5	S2	W4	18.9	17.1		(a)
120	1996	27°06.70'N	16°01.79'E	132	7	H5	S2	W4	18.6	16.8		(a)
121	1996	27°06.28'N	16°00.70'E	282	12	H6	S3	W4	20	18		(a)
122	1996	27°06.45'N	16°02.15'E	182	4	H6	S3	W3	20.4	17.9	sv	(a)
123	1996	27°06.64'N	16°04.21'E	511	5	H6	S3	W3	20.6	18.1	sv	(a)
124	1996	27°07.11'N	16°06.20'E	204	2	H6	S3	W4	20.6	18.3	sv	(a)
125	1996	27°07.23'N	16°06.73'E	860	1	H6	S3	W3	20.5	17.8	sv	(a)
126	1996	27°07.82'N	16°09.39'E	90	2	H6	S3	W4	20	17.8	sv	(a)
127	1996	27°07.99'N	16°09.80'E	619	3	H6	S3	W4	20.3	18.5		(a)
128	1996	27°09.14'N	16°16.03'E	281	1	H5	S3	W1	19.2	16.9	sv	(a)
129	1996	27°09.30'N	16°16.73'E	299	1	H5	S2	W3	18.8	17.3		(a)
130	1996	27°07.76'N	16°22.37'E	303	1	L6	S4	W4	25.8	21.8		(a)
131	1996	27°08.13'N	16°19.23'E	114	1	L6	S4	W3	25.8	21.9		(a)
132	1996	27°09.54'N	16°13.20'E	120	1	H5	S3	W4	19.9	17.6	sv	(a)
133	1996	27°10.03'N	16°09.03'E	62	1	H6	S3	W2	20	18.2		(a)
134	1996	27°10.19'N	16°08.59'E	39	1	H6	S3	W3	20.4	18.6	sv	(a)
138	1996	27°08.82'N	16°09.51'E	454	1	H5	S3	W2	19.5	17.3		(a)
139	1996	27°09.45'N	16°12.48'E	171	1	H5	S3	W3	19.8	17.1		(a)
140	1996	27°09.45'N	16°12.48'E	263	1	H3.9-6	S3	W1	19.9 ± 1.3	16.2 ± 4.1	br	(a)
142	1996	27°14.84'N	16°13.84'E	1225	3	H5/6	S2	W3	19.5	17.3		(a)
143	1996	26°59.00'N	16°30.36'E	133	3	H5/6	S2	W4	19.7	17.6		(a)
144	1996	26°58.88'N	16°30.26'E	302	1	H5/6	S2	W4	19.2	17.3		(a)
146	1996	27°02.02'N	16°24.33'E	837	4	H6	S3	W4	20.5	17.8		(a)
147	1996	27°02.71'N	16°22.90'E	387	15	H5	S3	W2	17.9	16	sv	(a)
148	1996	27°02.74'N	16°22.77'E	1006	4	H5	S3	W2	17.5	16		(a)
149	1996	27°02.79'N	16°22.36'E	116	1	L3-5	S2	W3	4–26, peak: 24.2	6–22, peak: 20.4	br	(a)
150	1996	27°08.42'N	16°12.28'E	218	1	H6	S3	W3	20.3	18.1	sv	(a)
151	1996	27°11.10'N	16°08.01'E	130	1	H5	S3	W2	19.5	17.2		(a)
152	1996	27°11.16'N	16°07.85'E	118	1	L6	S3	W3	25.7	22.3		(a)

TABLE 5. *Continued.*

Name	Found	Latitude	Longitude	Wt. (g)	Pieces	Class[1]	Shock[2]	WG[3]	Fa (mol%)	Fs (mol%)	Comments[4]	Info[5]
Dar al Gani												
153	1996	27°11.20'N	16°07.37'E	145	2	H6	S3	W2	19.6	18	sv, br	(a)
154	1996	27°11.49'N	16°06.90'E	259	11	H6	S3	W2	20.3	18	sv, br	(a)
155	1996	27°09.37'N	16°01.74'E	1380	many	H5	S2	W3	18.7	16.7		(a)
156	1996	27°06.66'N	16°01.30'E	107	1	H6	S2	W4	20.6	18.7	sv, br	(a)
157	1996	27°06.64'N	16°01.55'E	63	1	H6	S3	W4	20.5	18.6		(a)
158	1996	27°06.48'N	16°04.26'E	70	1	H6	S4	W4	19.7	17.4		(a)
159	1996	27°07.21'N	16°12.50'E	326	1	L6	S3	W3	25.7	21.3	sv	(a)
160	1996	27°08.29'N	16°16.34'E	347	1	H4	S2	W4	19.4	17		(a)
161	1996	27°01.81'N	16°32.21'E	120	1	H5/6	S2	W3	19.9	17.9		(a)
162	1996	27°01.85'N	16°31.29'E	89	1	LL6	S2	W4	31.4	25.6	br	(a)
163	1996	27°01.61'N	16°30.51'E	151	1	H6	S3	W2	19.8	17.6		(a)
166	1996	27°09.92'N	16°08.69'E	44	1	H5	S3	W2	19.7	17.5	sv	(a)
167	1996	27°11.02'N	16°06.95'E	1732	7	H5-6	S2	W2	18.9	17.3	sv, br, im	(a)
168	1996	27°14.99'N	16°01.23'E	533	16	L6	S4	W4	25.5	22.1	sv	(a)
169	1996	27°38.14'N	16°52.40'E	814	1	L6	S4	W3	25.8	22	sv	(a)
170	1996	27°41.99'N	15°43.37'E	759	13	H5-6	S2	W2	19.6	17.7	sv, br	(a)
171	1996	27°05.77'N	16°01.54'E	112	1	CO3	S2	W3			(6)	(a)
173	1996	27°06.70'N	16°00.80'E	492	2	CO3	S2	W2			(6)	(a)
174	1996	27°06.99'N	16°04.98'E	452	21	H5	S2	W3	19.6	17.2		(a)
175	1996	27°07.07'N	16°05.12'E	1641	5	H5-6	S3	W2	19	16.7	sv, br	(a)
176	1996	27°07.49'N	16°07.25'E	158	2	H4	S2	W4	18.2	16.7	br	(a)
177	1996	27°07.62'N	16°07.76'E	133	2	LL6	S3	W3	31.9	25.4	sv, br	(a)
181	1996	27°04.55'N	16°27.20'E	113	1	L6	S4	W4	25.9	22.2		(a)
182	1996	27°04.40'N	16°25.85'E	377	1	L6	S4	W3	25.6	21.9		(a)
183	1996	27°04.63'N	16°23.89'E	612	2	L6	S4	W3	25.6	21.6		(a)
184	1996	27°04.64'N	16°13.02'E	314	1	L6	S3	W3	25.9	22	sv, br	(a)
186	1996	27°06.16'N	16°01.70'E	599	5	CO3	S2	W2			(6)	(a)
188	1996	27°10.23'N	15°56.71'E	828	1	CO3	S2	W3			(6)	(a)
189	1996	27°10.97'N	15°56.54'E	3370	2	CO3	S2	W2			(6)	(a)
191	1996	27°09.69'N	15°57.05'E	1379	3	CO3	S2	W2			(6)	(a)
192	1996	27°07.69'N	16°00.24'E	3145	3	CO3	S2	W2			(6)	(a)
193	1996	27°07.10'N	16°00.61'E	115	1	H6	S3	W4	20.6	18		(a)
194	1996	27°05.98'N	16°02.08'E	581	3	CO3	S2	W2			(6)	(a)
195	1996	27°04.89'N	16°08.88'E	299	1	H6	S2	W3	20	17.4		(a)
198	1996	27°02.83'N	16°26.48'E	337	3	H6	S3	W2	19.6	17.2	sv	(a)
199	1996	27°03.48'N	16°24.13'E	1699	1	H6	S3	W2	19.6	17.2		(a)
202	1996	27°07.02'N	16°00.92'E	554	17	H6	S3	W4	20.3	18	sv	(a)
203	1996	27°07.47'N	15°59.50'E	378	1	CO3	S2	W2			(6)	(a)
204	1996	27°09.07'N	15°57.99'E	720	1	CO3	S2	W2			(6)	(a)
206	1996	27°37.51'N	15°58.93'E	122	3	L6	S3	W3	24.9	21.5	sv, br	(a)
207	1996	27°37.44'N	16°03.07'E	66	1	H5-6	S3	W1	19.4	16.8	sv, br	(a)
212	1996	27°37.89'N	16°02.00'E	147	2	H6	S2	W4	19.5	17.7		(a)
214	1996	27°07.28'N	16°04.11'E	231	1	H6	S3	W3	20.4	18.1	br	(a)
222	1996	27°27.20'N	16°18.76'E	837	1	LL5-6	S3	W3	29.5	25.1	sv, br, im	(a)
225	1996	27°34.65'N	16°08.18'E	324	1	H3.9	S2	W3	17.1 ± 0.9	15.4 ± 2.1		(a)
231	1997	27°10.11'N	15°57.50'E	932	1	CO3	S2	W2			(6)	(a)
242	1997	27°12.15'N	16°03.16'E	69	1	impact melt br.			23.5 ± 1.1	18.8 ± 2.3	(7)	(a)
247	1997	27°12.21'N	16°12.00'E	107	1	LL6	S3	W3	31.7	25.9	sv	(a)
250	1997	27°13.10'N	16°15.25'E	57	1	CK	S2	W3	31.2	26.7		(a)
252	1997	27°06.87'N	16°21.31'E	206	1	LL6	S2	W3	31.4	25.1	br	(a)
275	1997	27°21.74'N	16°05.38'E	492	2	CK	S2	W4	32.4			(a)
276	1997	27°22.65'N	16°11.59'E	98	1	Eucrite		W3	62.1 (one grain)	24–55	(8)	(a)
298	1997	26°58.20'N	16°42.28'E	2459	1	LL4	S3	W0	27.7	23.2		(b)
299	1997	26°48.44'N	16°06.68'E	178	1	H4	S2	W3	18.4	16.1		(b)
300	1997	26°56.68'N	16°10.76'E	118	1	H3-5	S2	W1	18.2 (13.0–20.4)	19.0 (17.3–20.5)		(b)
301	1997	26°58.29'N	16°27.08'E	217	1	L6	S3	W5	25.2	21.9	br, sv	(b)
302	1997	26°58.20'N	16°27.75'E	191	3	H5	S2	W5	18.2	16.2		(b)
303	1997	27°08.10'N	16°14.01'E	365	1	CO3	S2	W2	0.4–64.9	0.9–3.2	(6)	(b)
304	1997	27°10.11'N	16°11.07'E	128	1	H6	S3	W4	19.6	17.0	sv	(b)
305	1997	27°17.17'N	16°04.48'E	339	1	LL5	S2	W2	28.8	23.4		(b)
306	1997	27°42.28'N	16°11.35'E	616	1	H5/6	S2	W4	18.5	16.5		(b)
307	1997	27°31.42'N	16°09.07'E	370	1	L6	S4	W2	24.3	20.6	br	(b)
308	1997	27°23.08'N	16°07.72'E	394	1	H6	S3	W2	19.1	16.7	br	(b)

TABLE 5. *Continued.*

Name	Found	Latitude	Longitude	Wt. (g)	Pieces	Class[1]	Shock[2]	WG[3]	Fa (mol%)	Fs (mol%)	Comments[4]	Info[5]
Dar al Gani												
309	1997	27°30.77'N	16°09.76'E	132	1	L6	S4	W2	24.5	20.8		(b)
310	1997	27°17.52'N	16°06.72'E	96	1	H5/6	S3	W2	18.3	16.1		(b)
311	1997	27°09.57'N	16°03.17'E	707	many	H6	S3	W3	19.0	17.5	br	(b)
312	1997	27°05.32'N	16°08.59'E	117	1	H6	S3	W2	18.7	16.9		(b)
313	1997	26°48.44'N	15°54.09'E	3294	1	L(LL)3	S3	W2	14.1 (1.3–41.7)	8.1 (2.1–21.3)		(b)
314	1997	27°07.27'N	16°19.86'E	76	1	L6	S3	W2	24.4	20.7	sv	(b)
315	1997	27°07.33'N	16°18.72'E	525	1	H3-5	S4	W1	16.8 (11.7–18.1)	11.2 (5.7–15.6)	br	(b)
316	1997	27°14.61'N	16°04.86'E	721	1	L6	S3	W3	24.2	20.4		(b)
317	1997	27°00.80'N	16°11.25'E	145	1	L6	S3	W4	24.9	21.1		(b)
318	1997	27°08.59'N	15°52.38'E	4236	many	H3	S2	W3	18.3 (12.9–22.2)	10.8 (4.6–16.6)		(b)
319	1997	27°01.68'N	16°21.52'E	740	3	Ureilite	low[9]	W2			pm, br	(c)
320	1997	27°02.03'N	16°19.56'E	189	1	L6	S3	W3	24.5	20.6		(b)
321	1997	27°05.92'N	16°08.48'E	213	1	H5	S3	W3	18.3	16.2		(b)
322	1997	27°05.95'N	16°08.42'E	1126	1	H4	S2	W2	17.9	15.7		(b)
323	1997	28°18.00'N	15°43.05'E	2711	many	L4	S4	W1	23.2	19.7		(b)
324	1997	28°10.89'N	15°38.87'E	433	1	H6	S1	W1	19.1	16.7		(b)
325	1997	28°12.36'N	15°38.13'E	274	1	H5	S2	W2	18.6	16.3		(b)
327	1997	27°50.44'N	15°53.14'E	50.3	1	H3	S2	W2	16.1 (1.6–19.3)	11 (4.9–16.1)		(b)
329	1997	27°07.74'N	16°15.93'E	234	1	H5	S2	W3	18.8	16.1		(b)
330	1997	27°06.25'N	16°07.05'E	352.7	1	L5	S2	W3	24.8	20.9		(b)
331	1997	27°06.57'N	16°04.47'E	194	1	CO3	S2	W2	0.4–43.7	0.7–12.9	(6)	(b)
332	1997	27°06.28'N	16°00.52'E	280	1	CO3	S3	W3	0.2–51.0	0.9–1.1	(6)	(b)
333	1997	27°07.81'N	16°13.91'E	1050	1	H5-6	S3	W2	18.7	16.4	br, sv	(b)
334	1997	27°09.31"N	16°16.95'E	422	1	L6	S3	W3	24.0	20.3		(b)
335	1997	27°12.21"N	16°18.69'E	147	1	H5	S3	W3	17.9	15.9		(b)
336	1997	27°11.62"N	16°12.46'E	171	1	H5/6	S2	W4	19.3	16.9		(b)
340	1997	27°09.08"N	16°02.70'E	591	1	Ureilite	low[9]	W4	20.1	16.9		(c)
342	1997	27°06.29"N	16°07.17'E	166	1	L5-6	S2	W3	24.6	20.8	br	(b)
343	1997	27°09.28"N	16°04.74'E	103	2	H4	S2	W4	17.7	15.5		(b)
345	1997	27°12.99"N	16°09.00'E	84	1	L5	S2	W3	24.8	21.4		(b)
346	1997	27°17.49"N	16°12.80'E	77	1	H4	S2	W4	16.9	11.5 (5–13.7)		(b)
349	1997	27°13.60"N	16°06.78'E	82.5	1	L5	S3	W3	23.7	20.4		(b)
350	1997	27°13.49"N	16°14.63'E	112	1	L6	S4	W1	24.8	21.3	br, sv	(b)
352	1997	27°14.32"N	16°07.78'E	111	1	L5	S3	W2	23.8	20.2		(b)
353	1997	27°35.79"N	15°52.23'E	210	1	H3-5	S3	W3	17.2 (6.6–22.5)	13.8 (7.9–16.1)	br	(b)
354	1997	27°37.03"N	15°57.98'E	82	1	H3	S1	W4	16.7 (9.4–18.7)	12.3 (4.7–16.3)		(b)
357	1997	27°51.97"N	15°53.84'E	478	1	L6	S3	W2	24.8	21.0	br	(b)
369	1997	27°56.92"N	15°54.08'E	1001	1	L(H)3	S2	W3	16.8 (9.3–27.4)	9.1 (4.4–17.7)		(b)
370	1997	27°49.92"N	15°50.26'E	37	1	H6	S3	W2	19.1	17.4		(b)
374	1997	27°52.40"N	15°54.81'E	111	1	L6	S3	W2	24.6	20.4		(b)
378	1997	27°54.97"N	15°50.27'E	68	1	H(L)3	S3	W2	14.3 (0.9–26.6)	7.9 (2.1–25.2)		(b)
381	1997	27°26.07"N	16°07.36'E	930	1	L6	S3	W1	24.5	20.8		(b)
400	1998	27°22.17'N	16°11.93'E	1425	1	Lunar			*See separate entry.*			(b)
Hammadah al Hamra												
168	1996	28°52.23'N	12°24.53'E	76	1	L6	S4	W4	26.7	22.6		(a)
169	1996	28°35.34'N	13°05.91'E	623	1	H5	S2	W3	19.5	17.4		(a)
170	1996	28°36.13'N	13°25.86'E	96	1	H6	S2	W4	20.3	17.9		(a)
171	1996	28°37.13'N	13°21.76'E	1195	3	H5	S2	W2	17	14.7		(a)
172	1996	28°37.33'N	13°19.23'E	841	17	L5	S4	W4	24.5	21.2	sv, br	(a)
175	1996	28°37.91'N	13°05.16'E	1582	3	L5	S2	W3	25.8	21.7		(a)
176	1996	28°39.57'N	13°18.34'E	1147	33	L6	S4	W3	26.2	22.2	sv	(a)
177	1996	28°35.26'N	13°15.25'E	265	1	L6	S3	W3	25.6	21.6	sv	(a)
178	1996	28°37.07'N	13°08.81'E	378	11	H5	S2	W3	18.2	16.4		(a)
179	1996	28°35.99'N	13°18.53'E	367	1	L6	S3	W3	24.6	21.1		(a)
182	1996	28°45.49'N	12°36.44'E	106	1	L6	S5	W3	25.6	22.1	sv	(a)
184	1996	28°28.84'N	13°01.88'E	2010	2	H4	S2	W4	17.9	16.6		(a)
185	1996	28°41.88'N	13°19.16'E	1645	1	H5	S2	W3	19.7	17.9		(a)
187	1996	28°44.33'N	13°14.18'E	188	1	H6	S3	W3	19.7	17.6		(a)
189	1996	28°31.99'N	12°58.89'E	57	1	L5	S3	W3	25.4	21.5		(a)
191	1996	28°38.61'N	13°24.40'E	95	1	LL6	S3	W3	32	26.1	sv	(a)
192	1996	28°38.72'N	13°25.99'E	43	1	H5-6	S3	W2	20.4	18.1	sv, br	(a)
193	1996	28°39.28'N	13°27.52'E	259	1	Winonaite	S1	W3	5.3 ± 0.4	6.1 ± 0.4	cpx $Fs_{1.3–2.5}$	(a)
194	1996	28°39.31'N	13°28.21'E	1255	1	L4	S1	W0/1	24.1	20.4		(a)

TABLE 5. *Continued.*

Name	Found	Latitude	Longitude	Wt. (g)	Pieces	Class[1]	Shock[2]	WG[3]	Fa (mol%)	Fs (mol%)	Comments[4]	Info[5]
Hammadah al Hamra												
195	1996	28°50.63'N	12°32.19'E	85	1	L4	S1	W0/1	24.8	21.1		(a)
197	1996	29°07.37'N	12°21.53'E	93	1	H5	S3	W4	19.2	17.7	sv	(a)
202	1997	28°37.98'N	13°13.42'E	386	1	LL6	S3	W2	32.5	27	sv	(a)
216	1997	30°12.49'N	12°56.24'E	333	1	H5	S2	W3	18.6	15.8		(b)
217	1997	28°32.88'N	13°01.71'E	1267	1	H4-5	S2	W2	18.5	16.3	br	(b)
218	1997	28°38.69'N	13°19.38'E	2540	1	LL4-6	S3	W2	28.0	23.3	br, sv	(b)
219	1997	28°36.01'N	13°25.41'E	609	1	L4	S2	W3	21.1	15.8		(b)
220	1997	28°55.92'N	12°37.52'E	4153	1	H4	S2	W2	18.9	16.6		(b)
221	1997	29°13.25'N	11°32.44'E	1227	1	H4-5	S2	W1	19.1	16.4	br	(b)
222	1997	29°11.22'N	11°36.10'E	3393	1	L6	S3	W1	24.8	21.2		(b)
223	1997	29°11.18'N	11°36.34'E	2833	1	L6	S3	W1	25.1	20.9		(b)
226	1997	28°39.57'N	12°24.79'E	476.4	4	H6	S2	W3	18.9	16.5		(b)
227	1997	28°39.60'N	12°38.90'E	1920	many	H4-5	S3	W2	19.0	17.1	br	(b)
228	1997	28°30.68'N	13°12.25'E	404.5	1	H5	S2	W2	19.2	16.7		(b)
229	1997	29°10.57'N	11°38.03'E	666	1	L6	S3	W1	25.0	20.9		(b)
230	1997	29°08.54'N	11°52.99'E	809	1	H5	S2	W3	18.8	16.8		(b)
233	1997	29°05.22'N	12°04.67'E	123	1	H5	S2	W3	19.3	16.8		(b)
234	1997	29°04.56'N	11°58.52'E	133	1	L6	S3	W3	24.9	20.8		(b)
235	1997	29°01.03'N	12°05.20'E	537	1	H5	S3	W3	18.6	16.3		(b)
237	1997	28°36.56'N	13°02.95'E	3173	1	(see note 10)	S3	W2	*See separate entry.*			(b)

[1]Slashes (*e.g.*, L5/6) indicate transitional classes, hyphens (*e.g.*, H5-6) indicate breccias, groups in parentheses indicate uncertain assignments.
[2]Shock classification after Stöffler *et al.* (1991).
[3]Weathering grade after Wlotzka (1993) and Bischoff and Geiger (1995).
[4]Abbreviations: br = breccia, cpx = clinopyroxene, im = impact melt, pm = polymict, sv = shock veins.
[5]Analysts and specimens: (a) Analyses by D. Weber, K. Pollok, A. Jäckel, L. Niemann and T. Grund, and classifications by D. Weber and A. Bischoff (*Mün*), type specimens *Mün*, main masses with anonymous finder or at *MNB*; (b) J. Zipfel and F. Wlotzka (*MPI*), type specimens at *MPI*, main masses with finder; (c) C. A. Goodrich (*MPI*), type specimens at *MPI*, main masses with finder.
[6]Most probably paired with Dar al Gani 005 (see Meteoritical Bulletin No. 80 and 81).
[7]Dar al Gani 242: impact melt breccia with H-chondritic fragments (Fa: 20.1; Fs: 17.8).
[8]Dar al Gani 276: polymict eucrite; cpx, Fs_{14-43}; plagioclase, An_{77-97}.
[9]A relatively unshocked ureilite; see Scherer *et al.* (1998a).
[10]A CH chondrite or a "Bencubbinite"; see separate entry for explanation.

Saharan meteorites from Niger

Agadez, Niger
Found 1997 March
(10 meteorites)

Ten chondrites (Table 6) were found in the sandy deserts of north-central Niger by an expedition sponsored by *GEO* magazine to the Tenere region of the Sahara. Classifications and mineralogy by P. Scherer, H. Schulze, F. Wlotzka and J. Zipfel (*MPI*). Tiffa 005 and Tiffa 006 seem to be paired, and Tiffa 001 may also be a member of this group (based on noble gas analysis). The EL chondrite, Grein 002, contains 0.5 wt% Si in kamacite. Specimens: main masses, *Guhr*; type specimens, *Hamb* and *MPI*.

Saharan meteorites from unknown locations

Sahara, country unknown
Found 1997
(184 meteorites)

These meteorites (Table 7) have been collected by Mr. Marc Labenne and his family in the Sahara. Mr. Labenne will not disclose the exact locations of these meteorites at the present time. See separate entry, above, for Sahara 97096. The LL7 chondrite, Sahara 97037, is very well recrystallized, with no evidence of chondrules; a large fraction of pyroxenes are Ca-rich ($Fs_{12.0}Wo_{42.8}$); feldspar ($Ab_{86.1}An_{10.4}$) and phosphates (merrillite and apatite) make millimeter-sized associations; most metal grains are oxidized, but those that remain are very Ni-rich (61.7 wt% Ni, 1.9 wt% Co). Specimens: main masses, *Labenne*; type specimens as shown in Table 7.

TABLE 6. Meteorites from the Sahara, Niger.

Name	Find date	Latitude	Longitude	Mass (g)	Pcs.	Class	Shock	WG	Fa (mol%)	Fs (mol%)
Grein 001	2-Mar-97	21°13.74' N	10°45.38' E	710.3	1	H3	S2	W1	19.1	11.7
Grein 002	3-Mar-97	20°42.87' N	11°6.94' E	608.9	1	EL4-5		W0		
Grein 003	4-Mar-97	20°34.07' N	11°20.75' E	490.6	2	H6	S1	W1	18.5	16.6
Tiffa 001	10-Mar-97	19°56.94' N	11°55.98' E	26900	1	H5	S2	W2	17.3	15.6
Tiffa 002	10-Mar-97	19°41.76' N	11°31.61' E	4705	2	H4-5	S1	W3	18.1	16.2
Tiffa 003	12-Mar-97	20°0.59' N	11°51.94' E	329.2	1	L6	S3	W1	23.4	19.0
Tiffa 004	12-Mar-97	19°57.30' N	11°52.51' E	1362	1	H5	S2	W2	17.0	
Tiffa 005	12-Mar-97	19°55.16' N	11°52.91' E	327	1	H5	S2	W2	17.4	
Tiffa 006	12-Mar-97	19°54.67' N	11°52.51' E	560.1	1	H5	S2	W2	16.8	15.2
Adrar Madet	15-Mar-97	18°30' N	10°24' E	1113	1	H5-6	S2	W3	17.7	15.7

TABLE 7. Meteorites from the Sahara, locations unknown.

Name	Found	Latitude[1]	Longitude[1]	Mass (g)	Pcs	Class[2]	Shock[3]	WG[4]	Fa	Fs	Wo	remarks	Loc[5]
Sahara													
97001	1997 Feb.	y+0°12'31"N	x+0°31'58"W	25450	5	L6	S3	W3	24.0	20.3	1.4		*(a)*
97002	1997 Feb.	y+0°09'53"N	x+0°30'57"W	2540	many	L5	S5	W1	25.2	20.6	1.3		*(a)*
97003	1997 Feb.	y+0°05'04"N	x+0°29'57"W	1251	1	L6	S6	W2	25.2	23.3	1.9	black chondrite	(a)
97004	1997 Feb.	y+0°04'31"N	x+0°31'35"W	409	1	H6	S1	W2	18.6				(b)
97005	1997 Feb.	y+0°10'25"N	x+0°31'52"W	252	1	L4/5	S2	W1	24.6				(b)
97006	1997 Feb.	y+0°05'09"N	x+0°31'26"W	192	1	L/LL5/6	S1-2	W2	25.5				(b)
97007	1997 Feb.	y+0°08'29"N	x+0°29'16"W	252	3	H4/5	S1	W2	17.8	16.5	1.2	native copper in plessite	(a)
97008	1997 Feb.	y+0°08'38"N	x+0°29'14"W	61	1	H5	S2	W2	18.9				(b)
97009	1997 Feb.	y+0°08'37"N	x+0°29'31"W	96	1	(note 6)	S2-3	W3-4	32.8			breccia	(b, c)
97011	1997 Feb.	y+0°09'07"N	x+0°30'09"W	236	1	L/LL5/6	S1	W1	25.7				(b)
97012	1997 Feb.	y+0°09'42"N	x+0°29'18"W	1430	1	L/LL6	S2	W2-3	25.5				(b)
97013	1997 Feb.	y+0°09'34"N	x+0°28'12"W	304	1	LL6	S2	W2	27.2				(b)
97014	1997 Feb.	y+0°09'54"N	x+0°32'03"W	433	1	H5	S2	W3	19.2				(b)
97015	1997 Feb.	y+0°09'54"N	x+0°32'03"W	51	1	H4/5	S3	W2	18.3				(b)
97016	1997 Feb.	y+0°09'13"N	x+0°30'10"W	396	1	H6	S3	W4	18.4				(b)
97017	1997 Feb.	y+0°10'01"N	x+0°31'21"W	199	1	L3/4	S3	W2	25.6				(b)
97018	1997 Feb.	y+0°10'03"N	x+0°31'16"W	420	1	H5/6	S2	W2	19.4				(b)
97019	1997 Feb.	y+0°10'08"N	x+0°29'01"W	783	1	H5	S2	W1-2	18.2				(b)
97021	1997 Feb.	y+0°08'52"N	x+0°28'49"W	895	1	L/LL5/6	S2-3	W2	24.9				(b)
97023	1997 Feb.	y+0°08'51"N	x+0°28'31"W	28	1	H4	S2	W1	18.3				(b)
97024	1997 Feb.	y+0°08'55"N	x+0°28'30"W	320	1	H4	S2	W1-2	18.6				(b)
97025	1997 Feb.	y+0°09'20"N	x+0°28'18"W	99	1	L4/5	S3	W3	25.1				(b)
97026	1997 Feb.	y+0°09'35"N	x+0°28'20"W	39	1	H4	S2	W2-3	17.3				(b)
97027	1997 Feb.	y+0°09'25"N	x+0°28'10"W	374	1	H3/4	S1-2	W2	18.1				(b)
97028	1997 Feb.	y+0°09'32"N	x+0°28'05"W	289	1	H4	S2	W2-3	19.7				(b)
97029	1997 Feb.	y+0°09'39"N	x+0°28'07"W	311	1	L5/6	S2	W3	25.3				(b)
97030	1997 Feb.	y+0°09'33"N	x+0°28'32"W	538	1	LL5/6	S2	W2	25.8				(b)
97032	1997 Feb.	y+0°09'49"N	x+0°29'19"W	324	1	L5	S2	W2	24.2				(b)
97033	1997 Feb.	y+0°09'32"N	x+0°29'28"W	485	1	H5	S2-3	W2	19.0				(b)
97034	1997 Feb.	y+0°03'37"N	x+0°31'02"W	212	1	H4	S3	W3	19.9				(b)
97035	1997 Feb.	y+0°03'33"N	x+0°30'50"W	9750	1	H5	S1	W2	18.2				(b)
97036	1997 Feb.	y+0°03'37"N	x+0°30'54"W	9905	1	H4	S2	W3	18.1				(b)
97037	1997 Feb.	y+0°09'30"N	x+0°28'25"W	149	1	LL7	S1	W4	31.2	26.6	2.8	millimeter-sized plag. and phosphate	(a)
97039	1997 Apr.	y+0°09'16"N	x+0°28'54"W	65	1	(note 6)	S2	W3	31.3			breccia	(b)
97040	1997 Apr	y+0°09'N[7]	x+0°28'W[7]	185	1	L4	S4	W3	24.8	20.9	0.9		(c)
97042	1997 Apr.	y+0°08'44"N	x+0°29'28"W	83.4	1	(note 6)	S2	W3	33.0			breccia	(b)
97044	1997 Apr.	*location unknown*		2100	1	L6	S2	W3-4	25.4				(b)
97045	1997 Apr.	y+0°13'50"N	x+0°32'02"W	125	1	H4/5	S2	W4	17.8				(b)
97047	1997 Apr.	y+0°08'52"N	x+0°29'21"W	146	1	H6	S3-4	W2	19.9				(b)
97048	1997 Apr.	y+0°08'55"N	x+0°29'18"W	256	1	H4	S3	W3	18.7				(b)
97049	1997 Apr.	y+0°06'38"N	x+0°30'41"W	2060	1	LL6	S2	W3	29.5				(b)
97050	1997 Apr.	y+0°08'41"N	x+0°28'49"W	48.3	1	L5	S1-2	W3	20.3				(b)
97051	1997 Apr.	y+0°08'37"N	x+0°28'48"W	38.3	1	L5	S1	W3-4	20.9				(b)
97053	1997 Apr.	y+0°08'47"N	x+0°28'25"W	62.4	1	H5	S2	W2	17.7				(b)
97054	1997 Apr.	y+0°07'59"N	x+0°30'15"W	810	2	H4	S1-2	W3	19.4				(b)
97055	1997 Apr.	y+0°08'16"N	x+0°29'44"W	675	1	H6	S1-2	W3	19.4				(b)
97057	1997 Apr.	y+0°08'46"N	x+0°28'26"W	196	1	L6	S2	W2	24.1			breccia	(b)
97058	1997 Apr.	y+0°09'43"N	x+0°28'41"W	450	1	H3/4	S1	W2	19.6				(b)
97059	1997 Apr.	y+0°09'05"N	x+0°28'39"W	900	many	LL6	S2	W3	26.8				(b)
97060	1997 Apr.	y+0°09'48"N	x+0°28'58"W	92	1	L/LL5/6	S2-3	W2-3	16.0				(b)
97061	1997 Apr.	y+0°08'09"N	x+0°28'35"W	36.6	2	H4	S2	W3	18.4				(b)
97062	1997 Apr.	y+0°08'52"N	x+0°28'44"W	805	many	L5/6	S2	W1-2	24.3				(b)
97063	1997 Apr.	y+0°09'04"N	x+0°28'22"W	784	many	L6	S2	W3	25.2				(b)
97064	1997 Apr.	y+0°13'20"N	x+0°31'43"W	161.3	1	LL6	S2	W3	26.0				(b)
97065	1997 Apr.	y+0°08'24"N	x+0°28'27"W	60	1	H6	S2	W3	19.1				(b)
97066	1997 Apr.	y+0°08'35"N	x+0°28'40"W	119	1	H6	S2-3	W3	18.3				(b)
97067	1997 Apr.	y+0°08'50"N	x+0°28'25"W	101.1	1	L4	S2	W2-3	20.5				(b)
97068	1997 Apr.	y+0°08'17"N	x+0°29'19"W	99	1	L6	S3-4	W1	24.4				(b)
97069	1997 Apr.	y+0°08'06"N	x+0°29'00"W	224	1	H4	S2	W2	18.8				(b)
97070	1997 Apr.	y+0°03'49"N	x+0°30'16"W	1250	many	H5	S1-2	W3	19.1				(b)
97071	1997 Apr.	y+0°04'30"N	x+0°29'60"W	195	2	LL5/6	S2	W1	27.5				(b)

TABLE 7. *Continued.*

Name	Found	Latitude[1]	Longitude[1]	Mass (g)	Pcs	Class[2]	Shock[3]	WG[4]	Fa	Fs	Wo	remarks	Loc[5]
Sahara													
97072	1997 Apr	y+0°00'40"N	x+0°32'36"W	1270	1	EH3			.			Paired with Sahara 97096	(a)
97073	1997 Apr.	y+0°07'41"N	x+0°30'11"W	335	1	L6	S2	W2	24.4				(b)
97074	1997 Apr.	y+0°09'02"N	x+0°28'46"W	650	many	L6	S2-3	W2	23.8				(b)
97075	1997 Apr.	y+0°08'50"N	x+0°28'44"W	38	1	H5	S2	W2	18.7				(b)
97076	1997 Apr.	y+0°09'30"N	x+0°28'26"W	50	1	L6	S2	W2	24.2				(b)
97077	1997 Apr.	y+0°09'37"N	x+0°28'23"W	73	1	L6	S3/4	W2	25.0				(b)
97078	1997 Apr.	y+0°09'53"N	x+0°28'36"W	98	1	L5/6	S2	W3	24.9				(b)
97079	1997 Apr	y+0°00'24"N	x+0°32'16"W	928	1	EH3						Paired with Sahara 97096.	(a)
97080	1997 Apr.	y+0°09'45"N	x+0°28'29"W	200	many	L5/6	S2	W2	25.1				(b)
97081	1997 Apr	y+0°00'23"N	x+0°32'01"W	440	1	EH3						Paired with Sahara 97096.	(a)
97082	1997 Apr.	y+0°08'41"N	x+0°28'09"W	257	2	LL5	S1	W3-4	26.1				(b)
97083	1997 Apr.	y+0°08'51"N	x+0°28'12"W	83	1	H6	S2	W1	17.3				(b)
97084	1997 Apr.	y+0°08'49"N	x+0°28'17"W	38	1	H4/5	S3	W2	17.4				(b)
97085	1997 Apr.	y+0°08'13"N	x+0°29'35"W	187	1	L5	S2	W1-2	24.4				(b)
97086	1997 Apr	y+0°00'09"N	x+0°31'54"W	330	1	EH3		W6				Paired with Sahara 97096.	(a)
97087	1997 Apr.	y-1°59'09"N	x+0°32'03"W	11210	many	H5	S1	W2	17.8				(b)
97088	1997 Apr	y-1°59'45"N	x+0°32'52"W	500	1	EH3		W6				Paired with Sahara 97096.	(a)
97089	1997 Apr	y+0°00'28"N	x+0°32'19"W	339	1	EH3						Paired with Sahara 97096.	(a)
97090	1997 Apr	y+0°00'29"N	x+0°32'28"W	2510	1	EH3						Paired with Sahara 97096.	(a)
97091	1997 Apr	y+0°00'33"N	x+0°32'31"W	6140	1	EH3						Paired with Sahara 97096.	(a)
97092	1997 Apr	y+0°00'33"N	x+0°32'31"W	337	1	EH3						Paired with Sahara 97096.	(a)
97093	1997 Apr	y+0°00'51"N	x+0°32'59"W	1359	1	EH3						Paired with Sahara 97096.	(a)
97095	1997 Apr.	y+0°01'47"N	x+0°32'17"W	7304	many	H5	S2	W2-3	17.8				(b)
97096	1997 Apr	y+0°01'43"N	x+0°32'21"W	2516	1	EH3	S2	W1		*See separate entry.*			(a)
97097	1997 Apr.	y+0°00'18"N	x+0°32'37"W	12300	1	LL6	S1	W3	26.0				(b)
97098	1997 Apr	y+0°01'09"N	x+0°33'03"W	100	1	EH3						Paired with Sahara 97096.	(a)
97099	1997 Apr.	y-1°59'59"N	x+0°33'15"W	525	1	LL6	S2	W3-4	25.3				(b)
97101	1997 Apr	y+0°00'24"N	x+0°32'25"W	98	1	EH3						Paired with Sahara 97096.	(a)
97103	1997 Apr	y+0°00'46"N	x+0°32'17"W	248	1	EH3						Paired with Sahara 97096.	(a)
97104	1997 Apr.	y+0°00'57"N	x+0°32'16"W	207	3	LL6	S2	W4	25.2				(b)
97105	1997 Apr	y+0°00'34"N	x+0°32'03"W	469	1	EH3						Paired with Sahara 97096.	(a)
97106	1997 Apr	y+0°00'37"N	x+0°31'53"W	90	1	EH3						Paired with Sahara 97096.	(a)
97107	1997 Apr	y+0°00'37"N	x+0°31'53"W	67	1	EH3						Paired with Sahara 97096.	(a)
97108	1997 Apr	y-1°59'08"N	x+0°32'03"W	60	1	EH3		W6				Paired with Sahara 97096.	(a)
97109	1997 Apr.	y+0°00'31"N	x+0°32'01"W	347	1	L4	S2-3	W2	23.3				(b)
97111	1997 Apr.	y+0°00'30"N	x+0°32'16"W	345	1	H4	S2	W2-3	17.2				(b)
97113	1997 Apr	y+0°01'11"N	x+0°31'56"W	618	1	EH3						Paired with Sahara 97096.	(a)
97114	1997 Apr	y+0°00'26"N	x+0°31'45"W	118	1	EH3						Paired with Sahara 97096.	(a)
97115	1997 Apr	y+0°00'29"N	x+0°31'43"W	61	1	EH3						Paired with Sahara 97096.	(a)
97116	1997 Apr	y+0°00'25"N	x+0°31'44"W	105	1	EH3						Paired with Sahara 97096.	(a)
97117	1997 Apr	y+0°00'04"N	x+0°31'18"W	305	1	EH3						Paired with Sahara 97096.	(a)
97118	1997 Apr	y+0°00'32"N	x+0°31'58"W	283	1	EH3						Paired with Sahara 97096.	(a)
97120	1997 Apr	y+0°00'32"N	x+0°32'24"W	100	1	EH3		W6				Paired with Sahara 97096.	(a)
97121	1997 Apr	y+0°00'12"N	x+0°31'57"W	154	1	EH3						Paired with Sahara 97096.	(a)
97122	1997 Apr	y+0°00'40"N	x+0°31'52"W	176	1	EH3						Paired with Sahara 97096.	(a)
97123	1997 Apr	y+0°00'10"N	x+0°31'45"W	190	1	EH3						Paired with Sahara 97096.	(a)
97124	1997 Apr	y+0°00'22"N	x+0°31'27"W	20	1	EH3		W6				Paired with Sahara 97096.	(a)
97125	1997 Apr	y+0°00'26"N	x+0°32'02"W	70	1	EH3						Paired with Sahara 97096.	(a)
97126	1997 Apr	y+0°00'26"N	x+0°32'02"W	50	1	EH3		W6				Paired with Sahara 97096.	(a)
97127	1997 Apr	y+0°00'26"N	x+0°32'01"W	344	1	EH3						Paired with Sahara 97096.	(a)
97128	1997 Apr.	y+0°00'23"N	x+0°31'57"W	630	1	L5	S1	W3-4	25.2				(b)
97129	1997 Apr	y+0°00'36"N	x+0°31'53"W	119	1	EH3						Paired with Sahara 97096.	(a)
97130	1997 Apr	y+0°00'38"N	x+0°31'53"W	160	1	EH3						Paired with Sahara 97096.	(a)
97131	1997 Apr	y+0°00'34"N	x+0°31'51"W	40	1	EH3		W6				Paired with Sahara 97096.	(a)
97132	1997 Apr	y+0°00'29"N	x+0°31'49"W	50	1	EH3		W6				Paired with Sahara 97096.	(a)
97133	1997 Apr.	y-1°58'14"N	x+0°31'06"W	643	1	L6	S2	W2	24.9				(b)
97134	1997 Apr.	y-1°59'03"N	x+0°31'00"W	288	4	L6	S2	W3	24.8				(b)
97135	1997 Apr.	y-1°59'03"N	x+0°31'00"W	120	2	LL5/6	S2	W3	26.0				(b)
97136	1997 Apr.	y+0°03'54"N	x+0°31'03"W	44	1	LL5/6	S1-2	W4	30.4				(b)
97137	1997 Apr.	y+0°12'40"N	x+0°32'36"W	475	1	L/LL4	S1-2	W3-4	25.2				(a)
97138	1997 Apr.	y+0°02'54"N	x+0°31'16"W	98	1	LL4	S2	W3	26.2				(b)
97139	1997 Apr.	y+0°04'21"N	x+0°31'49"W	515	1	L5	S2	W3	25.5				(b)
97140	1997 Apr.	y+0°04'19"N	x+0°31'53"W	60.8	1	L6	S2	W3	20.9				(b)

TABLE 7. *Continued.*

Name	Found	Latitude[1]	Longitude[1]	Mass (g)	Pcs	Class[2]	Shock[3]	WG[4]	Fa	Fs	Wo	remarks	Loc[5]
Sahara													
97141	1997 Apr.	y+0°04'11"N	x+0°32'59"W	624	2	L5/6	S2	W3	24.4				(b)
97142	1997 Apr.	y+0°03'46"N	x+0°31'38"W	502	2	LL6	S2	W2-3	27.8				(b)
97143	1997 Apr	y+0°04'54"N	x+0°32'11"W	312	1	L4/5	S4	W3	23.7	20.0	1.9		(c)
97145	1997 Apr	y+0°00'53"N	x+0°32'43"W	252	1	EH3						Paired with Sahara 97096.	(a)
97146	1997 Apr	y+0°00'29"N	x+0°31'51"W	419	1	EH3						Paired with Sahara 97096.	(a)
97147	1997 Apr	y+0°00'28"N	x+0°31'55"W	209	1	EH3						Paired with Sahara 97096.	(a)
97148	1997 Apr	y+0°00'27"N	x+0°32'04"W	51	1	EH3						Paired with Sahara 97096.	(a)
97150	1997 Apr	y+0°01'12"N	x+0°31'53"W	321	1	EH3						Paired with Sahara 97096.	(a)
97151	1997 Apr	y+0°00'36"N	x+0°32'16"W	256	1	EH3						Paired with Sahara 97096.	(a)
97152	1997 Apr.	y+0°01'34"N	x+0°31'27"W	209	4	LL5/6	S2	W3	28.3				(b)
97153	1997 Apr.	y-1°57'51"N	x+0°30'41"W	3790	many	L4	S2	W3	22.9				(b)
97154	1997 Apr.	y+0°04'39"N	x+0°31'12"W	280	1	LL6	S2	W3	26.8				(b)
97156	1997 July	y+0°02'33"N	x+0°34'55"W	445	1	L5	S5-6	W2	25.3	21.3	1.6	breccia	(c)
97157	1997 July	y+0°03'57"N	x+0°30'31"W	902	1	L5	S2	W3	25.7	21.1	1.6		(c)
97158	1997 July	y+0°00'58"N	x+0°32'27"W	1050	1	EH3						Paired with Sahara 97096.	(a)
97159	1997 July	y+0°00'51"N	x+0°32'27"W	300	1	EH3						Paired with Sahara 97096.	(a)
97160	1997 July	y+0°00'45"N	x+0°32'28"W	50	1	L5	S6	W3	23.7	20.9	1.2	black	(c)
97161	1997 July	y+0°00'51"N	x+0°32'29"W	140	1	EH3						Paired with Sahara 97096.	(a)
97162	1997 July	y+0°00'38"N	x+0°31'42"W	301	1	EH3						Paired with Sahara 97096.	(a)
97163	1997 July	y+0°01'09"N	x+0°32'15"W	116	1	H5	S3	W3	17.5	16.0	3.0		(c)
97164	1997 July	y-1°59'36"N	x+0°32'20"W	391	2	EH3						Paired with Sahara 97096.	(a)
97165	1997 July	y-1°59'37"N	x+0°32'32"W	80	1	L5	S4	W2		20.5	1.6	Possibly paired with 97171	(c)
97166	1997 July	y+0°00'33"N	x+0°31'40"W	47	1	EH3						Paired with Sahara 97096.	(a)
97167	1997 July	y+0°00'13"N	x+0°31'55"W	93	1	EH3						Paired with Sahara 97096.	(a)
97168	1997 July	y+0°00'24"N	x+0°31'35"W	61	1	EH3						Paired with Sahara 97096.	(a)
97169	1997 July	y+0°00'26"N	x+0°31'45"W	20	1	EH3						Paired with Sahara 97096.	(a)
97170	1997 July	y+0°09'49"N	x+0°28'48"W	503	many	L5	S2	W3	25.5	21.0	3.4		(c)
97171	1997 July	y+0°09'55"N	x+0°28'51"W	120	1	L5	S4	W2	25.1	20.8	1.6		(c)
97172	1997 July	y+0°10'12"N	x+0°29'25"W	1159	many	L5	S4	W2				Paired with 97171	(c)
97174	1997 July	y+0°09'55"N	x+0°28'13"W	80	1	H5	S4	W3	18.0	16.2	1.2	Possibly paired with 97191	(c)
97175	1997 July	y+0°11'02"N	x+0°30'58"W	2138	many	L5	S4	W2	25.0	20.9	1.4	Paired with 97171	(c)
97176	1997 July	y+0°09'25"N	x+0°29'04"W	1165	1	H5	S3	W2	18.7	16.6	1.3		(c)
97177	1997 July	y+0°08'37"N	x+0°29'47"W	481	2	L5/6	S2-3	W2	25.1	21.5	1.8		(c)
97178	1997 July	y+0°12'17"N	x+0°31'47"W	255	1	L6	S1-2	W1-2	23.9	20.3	3.6		(c)
97179	1997 July	y+0°08'49"N	x+0°30'32"W	1080	1	H5-6	S4	W2	18.6	16.5	1.4	breccia	(c)
97180	1997 July	y+0°02'27"N	x+0°33'22"W	230	1	L4	S4	W3	25.6	21.0	1.6		(c)
97181	1997 July	y+0°05'07"N	x+0°30'14"W	2230	1	L5/6	S6	W2	24.3	20.4	1.5	black	(c)
97182	1997 July	y+0°09'21"N	x+0°28'23"W	1240	1	L5	S4	W2				Paired with 97171	(c)
97183	1997 July	y+0°09'21"N	x+0°28'23"W	160	1	H5	S3	W2-3	18.8	16.1	1.7		(c)
97184	1997 July	y+0°09'22"N	x+0°28'06"W	582	many	L5	S5	W2	25.2	20.8	1.8	Paired with 97171	(c)
97185	1997 July	y+0°09'21"N	x+0°28'05"W	66	1	H4/5	S2-3	W3	18.6	16.6	1.0		(c)
97186	1997 July	y+0°09'23"N	x+0°28'02"W	458	many	L5	S4	W2				Paired with 97171	(c)
97187	1997 July	y+0°09'20"N	x+0°28'02"W	975	many	L5	S4	W2				Possibly paired with 97171	(c)
97188	1997 July	y+0°09'23"N	x+0°28'07"W	145	many	L4	S2	W3		21.3	1.4		(c)
97189	1997 July	y+0°09'19"N	x+0°28'10"W	45	many	H5	S3	W1	16.9	15.3	1.1		(c)
97190	1997 July	y+0°09'19"N	x+0°28'10"W	50	many	L5	S4	W2	25.1	20.9	1.8	Paired with 97171	(c)
97191	1997 July	y+0°09'19"N	x+0°28'10"W	77	many	H5	S4	W3	17.9	15.9	0.9	Possibly paired with 97174	(c)
97192	1997 July	y+0°09'34"N	x+0°28'04"W	46	many	L5	S4	W2				Paired with 97171	(c)
97193	1997 July	y+0°09'13"N	x+0°28'17"W	522	1	L3.9	S5	W2	22.4	17.6	3.1	See note 8.	(c)
97194	1997 July	y-1°59'54"N	x+0°32'33"W	292	1	L4	S3	W1	24.3	19.8	1.4		(c)
97195	1997 July	y+0°09'39"N	x+0°35'07"W	680	1	H6	S4	W4	17.7	16.2	1.2		(c)
97196	1997 July	y+0°01'20"N	x+0°34'20"W	725	1	H5	S3	W3	18.6	16.7	1.2		(c)
97197	1997 July	y+0°02'51"N	x+0°34'59"W	347	1	L5/6	S6	W3	25.5	21.7	1.5	black	(c)
97198	1997 July	y+0°02'51"N	x+0°34'59"W	309	1	L5	S3-4	W1-2	24.7	21.3	1.5		(c)
97199	1997 July	y+0°03'02"N	x+0°34'34"W	496	1	L6	S2	W3	24.6	21.5	1.2		(c)
97200	1997 July	y+0°06'52"N	x+0°31'44"W	230	1	L5/6	S4	W2	24.2	20.7	1.5		(c)
97201	1997 July	y+0°10'38"N	x+0°28'00"W	683	1	L4	S4	W1	24.7	20.7	1.6		(c)
97208	1997 Dec	y+0°10'04"N	x+0°34'01"W	152	1	LL6	S3	W4	30.7	25.8		breccia	(d)
97210	1997 Dec	y+0°11'39"N	x+0°34'15"W	3200	1	L(LL)3.6	S4	W0-1	22.8±8.4	17.6±12.2		breccia	(d)
97211	1997 Dec	y+0°13'18"N	x+0°34'18"W	4140	~100	LL4-6	S3	W2	30.1	24.7		breccia	(d)

[1]The geographic coordinates of these meteorites have not been disclosed by the finder. Listed are the offsets relative to a secret origin at (x°W longitude, y°N latitude, where x and y are integers).
[2]Slashes (*e.g.*, L5/6) indicate transitional classes, hyphens (*e.g.*, H5-6) indicate breccias, groups in parentheses indicate uncertain assignments.

[3]Shock classification after Stöffler *et al.* (1991). For measurements done at *MNHNP*, only reflected-light microscopy was used.
[4]Weathering grade after Wlotzka (1993).
[5]Locations of type specimens: (a) *MNHNP*, classified by M. Bourot-Denise; (b) *OU*, classified by A. Sexton; (c) *MNHNP*, classified by C. Fiéni, M. Ghélis and B. Zanda; (d) *Mün*, classified by A. Bischoff and D. Weber.
[6]Sahara 97009, 97039, and 97042 have fayalite contents near the top of the LL range, but have O isotopes and bulk composition that are distinct from LL (Sexton *et al.*, 1998). Fiéni, Ghélis and Zanda (*MNHNP*) classified Sahara 97009 as an LL6 with $Fa_{31.9}$ olivine and $Fs_{26.0}Wo_{2.4}$ pyroxene.
[7]Latitude probably is between y+0°09'01"N and y+0°09'16"N and longitude between x+0°28'54"W and x+0°28'60"W.
[8]Petrologic subtype was estimated visually in reflected light (see Bourot-Denise *et al.*, 1997). Ranges of mineral compositions: olivine, $Fa_{17.1–24.7}$; pyroxene, $Fs_{8.9–29.7}Wo_{0.5–13.1}$.

San Borjita 27°33'31"S 56°8'4"W
Corrientes Province, Argentina
Found and possibly fell 1983 November
Ordinary chondrite (L4)
A 12.3 kg stone was found by Mr. Don Torres and an unidentified truck driver shortly (perhaps a few days) after witnessing a large fireball. However, the moderately weathered condition of the stone casts a degree of doubt on whether the recovered meteorite actually fell in the 1983 event. Classification and mineralogy (T. McCoy and S. Russell, *SI*): olivine, $Fa_{24.4}$; pyroxene $Fs_{19.8}Wo_{0.8}$; shock stage S3; weathering grade W2. Specimens: main mass with Mr. Alejandro Marin of Posadas, Argentina; one fragment possibly retained by truck driver; type specimen, 14.4 g, *SI*.

Sand Creek 39°25.8'N 99°59.7'W
Graham County, Kansas, USA
Found *ca.* 1986
Ordinary chondrite (H5)
A 2.443 kg stone was found by a farmer while plowing a grain field. Classification and mineralogy (T. J. McCoy, *SI*): olivine, $Fa_{19.1\pm0.4}$; pyroxene $Fs_{17.1\pm0.3}Wo_{1.2\pm0.2}$; shock stage S4; weathering grade W2; probably not paired with Penokee or Morland, which have different shock features. Specimens: main mass, *Reed*; type specimen, *SI*.

Sappa 39°50.66'N 100°30.6'W
Decatur County, Kansas, USA
Found between 1981 and 1986
Ordinary chondrite (L6)
A 5.95 kg stone was found in a gravel pit by Mr. Paul Tansey. Classification and mineralogy (A. Rubin, *UCLA*): olivine, $Fa_{25.1}$; pyroxene $Fs_{21.3}Wo_{1.6}$; shock stage S3; weathering grade W2. Specimens: main mass, *UCLA*.

Silao 20°56'N 101°23'W
Guanajuato, Mexico
Fell 1995 March 12 (~08:30 central standard time)
Ordinary chondrite (H5)
A big explosion and light phenomena were widely witnessed around Silao on 1995 March 12. Mr. F. Solorzano recovered a 1460 g, completely crusted stone later that day in a field 1 km east of the city. Several smaller pieces totaling ~250 g were recovered later. Classification and mineralogy (J. Otto, *Frei*): olivine, $Fa_{19.3}$; pyroxene $Fs_{17.1}Wo_{0.6}$; shock stage S4; weathering grade W1; contains small shock veins. Specimens: main mass, Mr. Dieter Heinlein, Lilienstraße 3, D-86156 Augsburg, Germany; type specimen and thin section, *Frei*.

Snyder Hill 32°9.5'N 111°6.8'W
Pima County, Arizona, USA
Found 1994 March
Ordinary chondrite (L5)
Two fragments of a single mass, ~570 g and ~590 g, were found on a hill by Mr. Dave Johnson and his brother while searching for more pieces of the Cat Mountain meteorite. Classification and mineralogy (D. Kring, *UAz*; C. Moore, *ASU*): olivine, Fa_{24}; pyroxene $Fs_{20}Wo_{1}$; 1.01% Co in kamacite; may be partially shock-melted. Specimens: type thin sections, *UAz;* main mass split between finder and *Haag*.

Tiffa 001-006, see Saharan meteorites from Niger

Turriff 35°29'S 142°36'E
Victoria, Australia
Found 1994
Ordinary chondrite (L5)
A 218 g stone was found by David Rowney while he was plowing a paddock. Classification and mineralogy (Bill Birch, *Vict*): olivine, Fa_{24}; pyroxene $Fs_{20}Wo_{0.2}$; feldspar present; kamacite $Fe_{92.9}Ni_{6.5}Co_{0.6}$; chondrules abundant and distinct. Specimens: main mass, *Vict*.

Valencia 39°0'N 0°2'W
Valencia, Spain
Find date unknown
Ordinary chondrite (H5)
A 33.5 kg stone has long been in a collection at the University of Valencia, where it has been known as simply *the meteorite*. There have been several historic falls in this region with which the present stone might be associated: the Oliva-Gandia fall of 1520 and a possible fall near Valencia in 1603, both having no known specimens. The Olmedilla de Alarcón fall of 1929 is also an H5 but has a light-dark structure and shock veining, neither of which is present in this specimen. Description and classification (Francisco Anguita and Fina Muñoz Sanz., *UCM*; Jesus Martinez Frias, *MNCN*): olivine, $Fa_{18.0}$; pyroxene, $Fs_{15.9}$. Specimens: contact Juan Usera, *UV*.

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ADDRESSES OF METEORITE COLLECTIONS AND RESEARCH FACILITIES

ACAEE: Associacao Carazinhense de Astronomica e Estudos Espacials, Caixa Postal 97, Rio Grande do Sul, Brazil 99500-000.

AMNH: American Museum of Natural History, New York, NY 10024, USA.

ASU: Center for Meteorite Studies, Arizona State University, Box 872504, Tempe, AZ 85287, USA.

Bart: R. Bartoschewitz, Lehmweg 53, D-38518 Gifhorn, Germany.

BeiAP: Beijing Astronomical Planetarium, Beijing, People's Republic of China.

CNR: Consiglio Nazionale delle Richerche, Corso Garibaldi 37, 35100 Padova, Italy.

DMRT: Geological Survey Division, Dept. of Mineral Resources, Rama VI Road, Bangkok 10400, Thailand.

DPitt: Mr. Darryl Pitt, 225 West 83rd Street, New York, NY 10024, USA.

Frei: Institut für Mineralogie, Universität Freiburg, Albertstrasse 23b, 79104 Freiburg, Germany.

GIG: Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Guangzhou 510640, China.

Guhr: Andreas Guhr, Jungfernstieg 8, 20354 Hamburg, Germany.

Haag: Robert Haag, P.O. Box 27527, Tucson, AZ 85726, USA.

Hamb: Mineralogical Museum of the University of Hamburg, Grindelallee 48, 20146 Hamburg, Germany.

HBS: Heze Bureau of Seismology, Shandong Province, Heze 274026, China.

JSC: Johnson Space Center, Houston, TX 77058, USA

Labenne: Labenne Meteorites, 16 Boulevard Gambetta, 02700 Tergnier, France.

LSC: Museo Mineralogico Ignacio Domeyko (contact Claudio Canut de Bon), Universidad de La Serena, Casilla 554, La Serena, Chile.

MNB: Museum für Naturkunde, Invalidenstrasse 43, D-10115 Berlin, Germany

MNCN: Museo Nacional Ciencias Naturales, Madrid, Spain.

MNHNP: Museum National d'Histoire Naturelle, Paris, France.

MPI: Max Planck Institut für Chemie, Mainz, Germany.

Mün: Institut für Planetologie, Wilhelm-Klemm-Str. 10, 48149 Münster, Germany.

OU: Planetary Sciences Research Institute, Open University, Milton Keynes, UK.

PMVV: Polar Museum at Villa Vitali, Fermo (AP) Italy.

Reed: Blaine Reed, 907 County Road 207 #17, Durango, CO 81301, USA

Rio: Museu Nacional, Rio de Janeiro, Brazil.

RLang: RA Langheinrich Meteorites, 290 Brewer Road, Ilion, NY 13357, USA.

SAM: South Australian Museum, Adelaide, South Australia, Australia.

SI: Dept. of Mineral Sciences, NHB-119, National Museum of Natural History, Smithsonian Institution, Washington, DC 20560, USA.

SML: Swiss Meteorite Laboratory (Museum Bally-Prior), P.O. Box 126, CH-8750 Glarus, Switzerland.

Thompson: Edwin Thompson, 5150 Dawn Street, Lake Oswego, OR 97035, USA.

UArk: Cosmochemistry Group, Dept. Chemistry & Biochemistry, University of Arkansas, Fayetteville, AR, 72701, USA.

UAz: Lunar and Planetary Laboratory, University of Arizona, Tucson, AZ 85721, USA.

UCLA: Institute of Geophysics and Planetary Physics, University of California, Los Angeles, CA 90095-1567, USA.

UCM: Fac. Ciencias Geologicas, Dpto. Petrologia, Universidad Complutense de Madrid, Spain.

UHaw: Hawai'i Institute of Geology and Geophysics, School of Ocean and Earth Science and Technology, University of Hawai'i at Manoa, Honolulu, HI 96822, USA.

UO: Université de Ouagadougou, Departement de Geologie, BP 7021, Ouagadougou, Burkina Faso.

UPad: Centro di Studio per la Geodinamica Alpina, Dipartimento di Mineralogia e Petrologia, Universita di Padova, Corso Garibaldi 37, 35137 Padova, Italy.

USA: University of South Australia, Ian Wark Research Institute, The Levels, SA5095, Australia.

UV: Universidad de Valencia, Facultad de Biologia, Dpto. De Geologia, Valencia, Spain.

Vict: Museum of Victoria, Melbourne, Australia.

ZMAO: Zhijing Mountain Astronomical Observatory, Nanjing, People's Republic of China.

The appendix appears on the following page.

APPENDIX 1. Recently described meteorites from ANSMET.[1]

Name[2]	Class[3]	Mass	Weath	%Fa	%Fs	NTL	Pairing	Ice[4]	Ref
ALH 94001	L4	196.5	A/Be	25	21			a	19(2)
ALH 94002	L6	8.9	A/B					a	19(2)
ALH 94003	H5	90.2	B	18	16			a	19(2)
ALH 94004	H5	5.6	Be					a	19(2)
ALH 94005	H5	8.2	B	19	16			a	19(2)
ALH 94006	H6	13.5	A/B	18	16			a	19(2)
ALH 94007	L3.4	1.2	C	7-38	1-21			a	19(2)
ALH 94008	H6	6.3	A					a	19(2)
ALH 94009	L6	25.3	B					a	19(2)
ALH 94010	L6	8	A					a	19(2)
ALH 94011	L6	2.4	A/B					a	19(2)
ALH 94012	L4	9	A/B					a	19(2)
ALH 94013	L6	10.6	B					a	19(2)
ALH 94014	L6	22.9	A/B					a	19(2)
ALH 94015	L6	8.1	B					a	19(2)
ALH 94016	L6	9.8	A					a	19(2)
ALH 94017	L6	9.6	B					a	19(2)
ALH 94018	L6	36.3	A					a	19(2)
ALH 94019	L6	6.1	A					a	19(2)
ALH 94020	L6	14.3	A/B					a	19(2)
ALH 95100	L6	19.3	A/B					a	20(2)
ALH 95101	L6	12.2	A/B					a	20(2)
ALH 95102	L6	7.0	B					a	20(2)
ALH 95103	L6	12.9	B					a	20(2)
ALH 95104	H5	1.5	B/C					a	20(2)
ALH 95105	H5	1.1	Be					a	20(2)
ALH 95106	H5	1.4	B/Ce					a	20(2)
ALH 95107	L6	26.2	A/B					a	20(2)
ALH 95108	H6	8.7	B					a	20(2)
ALH 95109	L6	20.3	B					a	20(2)
EET 96001	Ur	5.8	B	16-25				g	21(1)
EET 96002	How	10.1	B		26-52			j	21(1)
EET 96003	How	15.6	A		21-45		96003	j	21(1)
EET 96004	How	13.4	A		29-38		96003	j	21(1)
EET 96005	C2	1.3	B	0.2-30	1-4		96005	j	21(1)
EET 96006	C2	42.2	Be	1-39	1-4		96005	j	21(1)
EET 96007	C2	5.1	Be				96005	j	21(1)
EET 96008	Lun-B	53.0	A	41-64	18-53			j	21(1)
EET 96010	CV3	16.3	B	2-33	1-3			j	21(1)
EET 96011	C2	5.3	A	0.5-31			96005	j	21(1)
EET 96012	C2	9.4	Be				96005	j	21(1)
EET 96013	C2	2.1	Be	0.5-36			96005	j	21(1)
EET 96014	C2	2.3	B	0.6-27	1-4		96005	j	21(1)
EET 96015	L3.4	0.5	B	2-33	2-6			j	21(1)
EET 96016	C2	132.1	Be				96005	j	21(1)
EET 96017	C2	19.9	Be				96005	j	21(1)
EET 96018	C2	5.9	Be					j	21(1)
EET 96019	C2	18.9	Be				96005	j	21(1)
EET 96020	L6	1307.5	A/B	24	21			j	21(1)
EET 96022	L6	687.0	A/B	23	20			j	21(1)
EET 96023	H6	897.0	B	18	16			1321	(1)
EET 96024	L6	421.3	B/C	24	21			g	21(1)
EET 96025	H6	385.3	B/C	18	16			j	21(1)
EET 96026	R	226.0	B	3-39	5-19			j	21(1)
EET 96027	H6	2038.3	C	18	16			j	21(1)
EET 96028	L6	636.4	B/C	24	21			j	21(1)
EET 96029	C2	843.3	A/B	0-39	2-5		96005	j	21(1)
EET 96030	H6	234.1	Ce	18	16			j	21(1)
EET 96031	H4	414.0	B/C	16	15		96031	j	21(1)
EET 96032	L4	435.7	A/B	26	7-21			j	21(1)
EET 96033	H6	237.0	B	19	17			j	21(1)
EET 96034	L6	311.4	Be					j	21(1)
EET 96035	L4	223.5	A/B	24	21			j	21(1)
EET 96036	L6	313.9	B					1321	(1)
EET 96037	H4	325.7	B/C	15	13		96031	j	21(1)
EET 96038	L6	284.9	B					j	21(1)
EET 96039	L6	259.5	B/C					j	21(1)
EET 96040	H4	276.2	B/C	16	14		96031	j	21(1)
EET 96041	H6	280.1	C	19	17			j	21(1)
EET 96042	Ur	249.8	A/B	14-18				j	21(1)
EET 96043	H5	392.9	C	19	17			j	21(1)
EET 96044	L6	179.5	C					j	21(1)
EET 96045	L5	111.4	A/B					j	21(1)
EET 96046	L6	117.5	B					g	21(1)
EET 96047	H4	139.4	C	15	13		96031	j	21(1)
EET 96048	L6	342.0	B					j	21(1)
EET 96049	LL6	188.3	B	29	24			j	21(1)
EET 96050	H5	195.1	B/C	18	16			j	21(1)
EET 96051	L6	154.7	B					i	21(1)
EET 96052	L6	164.9	C					j	21(1)
EET 96053	L6	187.7	B					j	21(1)
EET 96054	L6	156.2	A/B					j	21(1)
EET 96056	L6	140.1	B					g	21(1)
EET 96057	L6	199.7	A/B					i	21(1)
EET 96060	L6	84.8	A/B					j	21(1)
EET 96061	L6	98.4	A/B					j	21(1)
EET 96062	H6	122.8	B/C					j	21(1)
EET 96063	H6	83.1	B/C					j	21(1)
EET 96064	L6	24.5	A/B					j	21(1)
EET 96066	L6	16.9	B					j	21(1)
EET 96070	H6	2.4	B					j	21(1)
EET 96071	H6	0.7	B					j	21(1)
EET 96072	H6	1.4	C					j	21(1)
EET 96073	H6	9.7	B/C					j	21(1)
EET 96075	H5	11.7	C					j	21(1)
EET 96076	L6	3.2	B/C					j	21(1)
EET 96078	L6	2.6	B/C					j	21(1)
EET 96079	H6	0.9	B/C					j	21(1)
EET 96082	H6	4.6	B					j	21(1)
EET 96083	L6	43.2	B/C					j	21(1)
GRA 95200	L5	25066.1	A/B	25	21	39.6±0.1		3	20(1)
GRA 95201	H5	2990.5	Be	19	17	153±4		4	20(1)
GRA 95202	H5	2006.4	A/B	18	16	34.8±0.1		3	20(1)
GRA 95203	L5	1205.9	B	25	21	46.8±0.1		3	20(1)
GRA 95204	H5	1173.7	A/B	18	16	20.4±0.1		5	20(1)
GRA 95205	Ur	1459.8	B	20-22	18-20			3	20(1)
GRA 95206	L6	933.2	B	25	21	40.0±0.1		3	20(1)
GRA 95207	H5	914.2	A/B	18	16	17.1±0.1		4	20(1)
GRA 95208	H3.7	778.3	B	19-27	7-23	33.9±0.2		4	20(1)
GRA 95209	Lod	948.8	B	7	7			4	20(1)
GRA 95210	H5	550.4	A/B	18	16	0.16±0.03		4	20(1)
GRA 95211	H6	518.8	B/C	19	17	20.2±0.1		3	20(1)
GRA 95212	H5	444.1	B	18	16	50.0±0.1		4	20(1)
GRA 95213	H5	372.8	A/B	19	17	27.2±0.1		5	20(2)
GRA 95214	H5	204.5	B/C	18	16	83.5±0.1		4	20(2)
GRA 95215	H4	320.6	B	19	8-23	48.5±0.4		4	20(2)
GRA 95216	L5	129.1	B	24	20			4	20(2)
GRA 95217	L5	134.0	B	23	19			5	20(2)
GRA 95218	H5	79.1	B	18	16			4	20(2)
GRA 95219	H5	100.8	B/C	19	16			3	20(2)
GRA 95220	L6	55.8	A/B	26	22			5	20(2)
GRA 95221	LL6	14.9	A	32	26			4	20(2)
GRA 95222	L6	19.4	B	26	22			4	20(2)
GRA 95223	H5	20.2	B	19	16			4	20(2)
GRA 95224	L4	3.1	A/B	24	21-24			4	20(2)
GRA 95225	L4	2.7	A/B	24	21-24			4	20(2)
GRA 95226	L5	16.6	B	26	22			4	20(2)
GRA 95227	L5	36.4	Be	26	22			4	20(2)

Name[2]	Class[3]	Mass	Weath	%Fa	%Fs	NTL	Pairing	Ice[4]	Ref
GRA 95228	L6	52.2	B	25	21			4	20(2)
GRA 95229	CR2	128.9	A	1-31	2-4			4	20(2)
GRA 95230	L6	53.4	A	24	20			4	20(2)
GRA 95231	H4	16.2	A/B	18	16-22			4	20(2)
GRA 95232	L4	68.9	A/B	24	19-22			4	20(2)
GRO 95500	L6	10000.0	B/C	23	20	19.5±0.1		1	20(2)
GRO 95501	L6	8000.0	Be	23	20	12.0±0.1		1	20(2)
GRO 95502	L3.5	5362.7	B	2-24	1-27	<1	95502	1	20(2)
GRO 95503	L6	4801.5	A/Be					1	20(2)
GRO 95504	L3.5	4018.3	A/B	2-22	9-23	<1	95502	1	20(2)
GRO 95505	L3.3	2031.0	B	11-26	15-24	5±4	95502	6	20(1)
GRO 95506	H5	1194.5	B/Ce	19	17	17.9±0.3		6	20(1)
GRO 95507	H6	1000.0	B/C	19	16	32.6±0.3		6	20(2)
GRO 95508	L6	1271.6	A/B	24	20			8	20(1)
GRO 95509	H5	1014.0	B	19	17			6	20(1)
GRO 95510	L6	1097.3	A/Be	24	20	65.5±0.1		1	20(1)
GRO 95511	Iron	64.4						1	19(2)
GRO 95512	L3.5	840.4	B	3-21	8-28	<1	95502	1	20(2)
GRO 95513	L6	851.7	B	25	21	7.9±0.1		1	20(1)
GRO 95514	L6	846.4	Ae	25	21	15.0±0.3		1	20(2)
GRO 95515	L4	663.6	A/Be	24	15-21	139.8±0.5		1	20(1)
GRO 95516	H6	456.8	B	19	17	88.2±0.1		1	20(1)
GRO 95517	EH3	574.0	C		1-5	8±2		7	20(1)
GRO 95518	H4	1342.4	B/Ce	19	15-23			1	20(2)
GRO 95519	H5	682.3	B/C	18	16	3.4±0.1		1	20(1)
GRO 95520	H5	641.4	B/C	18	16	109.7±0.4		7	20(1)
GRO 95521	H5	451.5	B/C	19	17	47.6±0.8		1	20(1)
GRO 95522	Iron	962.5						1	19(2)
GRO 95523	L6	402.0	A	24	20	0.1±0.1		1	20(1)
GRO 95524	H5	360.9	B/C	18	16	0.1±0.1		6	20(1)
GRO 95525	H6	291.6	A/B	19	17	95.2±0.2		2	20(1)
GRO 95526	L6	299.9	A/Be	26	22	31.8±0.2		1	20(1)
GRO 95527	H4	400.8	B	18	17-20	0.4±0.1		1	20(2)
GRO 95528	L6	358.6	B/C	24	20	7.3±0.1		1	20(1)
GRO 95529	L5	250.6	A	24	20	78.9±0.2		7	20(1)
GRO 95530	L5	603.4	A	24	20	37.2±0.1		1	20(1)
GRO 95531	L6	723.3	A	25	21	0.80±0.1		1	20(1)
GRO 95532	H6	348.4	B	19	17	65.7±0.1		1	20(1)
GRO 95533	Eu "br"	613.2	A/B		60-63				19(2)
GRO 95534	How	17.9	A/B		20-53		95534	2	19(2)
GRO 95535	How	53.8	A/B		20-53	11±1	95534	2	19(2)
GRO 95536	L3	331.2	A/B			132±6	95502	1	20(2)
GRO 95537	H5	258.9	B/Ce	19	17	3.9±0.1		1	20(2)
GRO 95538	H5	353.3	B	19	17	73±3		1	20(2)
GRO 95539	L3	269.8	B			<1	95502	1	20(2)
GRO 95540	L5	255.1	A	25	21	0.5±0.1		1	20(2)
GRO 95541	H4	265.2	B/C	19	7-24	1.4±0.1		1	20(2)
GRO 95542	L3	276.7	A/B				95502	1	20(2)
GRO 95543	L6	222.9	A/B	25	21			1	20(2)
GRO 95544	L3.5	626	A/B	7-20	1-22	<1	95502	1	19(2)
GRO 95545	L3.5	142.1	B	1-20	4-28	<1	95502	1	19(2)
GRO 95546	L3.8	200.8	B/Ce	9-25	12-27	3.8±0.1		1	20(2)
GRO 95547	H6	281.5	C	19	17			1	20(2)
GRO 95548	L6	229.6	Be	25	21			1	20(2)
GRO 95549	L5	180.3	B	26	22			1	20(2)
GRO 95550	L3	170.0	A/B				95502	1	20(2)
GRO 95551	Ch Ung.	213.4	C	1-2	1			1	20(2)
GRO 95552	LL4	182.0	A	29	24			8	20(2)
GRO 95553	L6	215.7	A	25	21			2	20(2)
GRO 95554	H6	201.9	A/B	19	17			1	20(2)
GRO 95555	Diog Uniq	250.6	A/B		24			1	19(2)
GRO 95556	LL6	169.8	A/B	32	26			6	20(2)
GRO 95557	LL5	199.1	A/B	29	24			1	20(2)
GRO 95558	L3	202.4	A				95502	2	20(2)
GRO 95559	H4	202.2	B/C	19	16-19			6	20(2)
GRO 95560	H6	233.7	B/C					1	20(2)
GRO 95561	H6	236.3	B/C					6	20(2)
GRO 95562	L6	260.5	A					8	20(2)
GRO 95563	L6	209.4	B/C					1	20(2)
GRO 95564	L6	264.2	A					1	20(2)
GRO 95565	L5	167.5	A/B	24	20			1	21(1)
GRO 95566	C2	50.7	A/Be	1-35	2-4	0		1	20(1)
GRO 95567	L6	154.5	A/B					1	20(2)
GRO 95568	L6	139.7	B/C					1	20(2)
GRO 95569	L6	46.6	B					1	20(2)
GRO 95570	H6	146.2	C					6	20(2)
GRO 95571	L5	51.4	A	23	19			1	21(1)
GRO 95572	L5	84.8	B	24	21			1	21(1)
GRO 95573	H6	89.6	B					6	20(2)
GRO 95574	How	90.6	A		22-37		95534	2	21(1)
GRO 95575	Ur	137.8	A/B	16-21	18			2	21(1)
GRO 95576	L6	53.4	A/B					2	20(2)
GRO 95577	C2	106.2	B					1	20(1)
GRO 95578	L6	16.1	B/C					6	20(2)
GRO 95579	L5	158.7	A	23	19			6	21(1)
GRO 95580	H5	75.1	B/Ce	19	17			1	21(1)
GRO 95581	How	49.4	A		21-54		95534	2	20(1)
GRO 95582	L6	8.6	B					8	20(2)
GRO 95583	L6	108.2	B					1	20(2)
GRO 95584	H5	138.3	A/B	19	17			1	21(1)
GRO 95585	L6	88.6	A/B					1	20(2)
GRO 95586	H5	92.8	B	18	16			1	21(1)
GRO 95587	H6	117.7	B/C					1	20(2)
GRO 95588	L6	111.2	Be					1	20(2)
GRO 95589	L6	127.8	Be					1	20(2)
GRO 95590	LL4	125.8	A	29	19-25			1	21(1)
GRO 95591	L6	111.2	B					1	20(2)
GRO 95592	H5	86.4	B/C	19	17			1	20(2)
GRO 95593	L6	12.8	A					1	20(2)
GRO 95594	L6	77.3	B					2	20(2)
GRO 95595	L6	148.1	B					6	20(2)
GRO 95596	LL3.8	12.7	A/B	9-29	3-20			2	21(1)
GRO 95597	L6	76.9	A					2	20(2)
GRO 95598	H5	14.4	A/B	18	16			2	21(1)
GRO 95599	H5	75.7	B	19	17			1	21(1)
GRO 95600	LL5	19.8	B	27	23			8	21(1)
GRO 95601	H6	156.2	B					6	20(2)
GRO 95602	How	51.5	A/B	25	17-49		95534	2	20(1)
GRO 95603	L6	43.1	A/B					2	20(2)
GRO 95604	L6	153.2	A/B					2	20(2)
GRO 95605	L6	29.2	B					1	20(2)
GRO 95606	L6	15.8	B					6	20(2)
GRO 95607	L6	71.4	B/C					2	20(2)
GRO 95608	Ur	6.1	B	22	18			1	21(1)
GRO 95609	H6	32.6	B/C	19	17			1	20(2)
GRO 95610	L5	25.1	Ce	25	21			1	20(2)
GRO 95611	L4	26.7	B	24	20			1	21(1)
GRO 95612	L6	43.6	B					1	21(1)
GRO 95613	LL4	58.8	A/B	29	23-26			1	21(1)
GRO 95614	L6	29.5	A/B					1	21(1)
GRO 95615	H6	110.5	B					1	21(1)
GRO 95616	L4	122.6	B	23	19-21			1	21(1)
GRO 95617	H6	40.3	B					1	21(1)
GRO 95618	L6	26.7	B/C					1	21(1)
GRO 95619	H5	30.5	B	19	17			1	21(1)
GRO 95620	L5	161.3	B	25	21			1	21(1)
GRO 95622	L6	57.6	B					1	21(1)
GRO 95623	L4	40.7	B	24	17-20			1	21(1)
GRO 95624	L6	11.9	B					1	21(1)
GRO 95625	H5	88.6	B	18	16			1	21(1)

Name[2]	Class[3]	Mass	Weath	%Fa	%Fs	NTL	Pairing	Ice[4]	Ref
GRO 95626	EL6	52.2	B/Ce		0.1-0.5			1	21(1)
GRO 95627	L6	186.5	B/Ce					1	21(1)
GRO 95628	L6	21.2	B/C					1	21(1)
GRO 95629	L6	113.3	A/B					1	21(1)
GRO 95630	L6	71.5	B/C					1	21(1)
GRO 95631	L6	79.6	A/B					1	21(1)
GRO 95633	Eu "br"	58.1	B		32-57			1	20(2)
GRO 95634	L6	119.8	B/C					1	21(1)
GRO 95635	L6	75.5	A/B					1	21(1)
GRO 95636	L6	125.9	A/B					1	21(1)
GRO 95637	L6	293.0	Be					1	21(1)
GRO 95638	L6	90.9	B/C					1	21(1)
GRO 95639	L6	82.3	A/B					1	21(1)
GRO 95640	L6	33.3	B					1	21(1)
GRO 95641	L4	21.9	B	24	18-22			1	21(1)
GRO 95642	L6	9.5	A/B					1	21(1)
GRO 95643	L6	12.2	A					1	21(1)
GRO 95644	L6	10.2	B					1	21(1)
GRO 95645	C2	2.4	B/Ce					1	21(1)
GRO 95646	L6	8.6	A/B					1	21(1)
GRO 95647	LL6	57.1	A/B	29	25			1	21(1)
GRO 95648	L6	93.8	B					1	21(1)
GRO 95649	L6	89.1	B					1	21(1)
GRO 95650	L6	84.3	B/C					1	21(1)
GRO 95651	H6	93.5	B/C					1	21(1)
GRO 95652	CV3	93.3	B/Ce	0.3-16	4-13			1	21(1)
GRO 95653	L6	59.0	B					1	21(1)
GRO 95654	H6	67.1	B/C					1	21(1)
GRO 95655	LL6	11.6	Be	30	25			1	21(1)
GRO 95656	L6	27.4	B					1	21(1)
GRO 95657	L6	20.7	A					1	21(1)
GRO 95658	LL3.3	57.6	A/B	6-28	2-21			1	21(1)
GRO 95660	L6	131.6	B					1	21(1)
GRO 95661	L6	17.2	B					1	21(1)
GRO 95662	L6	112.0	B					1	21(1)
GRO 95663	L6	43.4	B					1	21(1)
GRO 95664	H5	89.7	B	19	17			1	21(1)
GRO 95665	L6	127.3	B					1	21(1)
GRO 95666	L6	66.5	B					1	21(1)
GRO 95668	H5	72.3	B	18	16			1	21(1)
MET 96500	How	592.9	B		20-30				21(1)
MET 96501	L6	4939.3	Be	25	21				20(2)
PRE 95400	H5	2431.8	A	19	17	103±3		9	20(1)
PRE 95401	L3.4	186.5	A/B	1-32	4-18			9	20(2)
PRE 95402	H5	236.3	B	19	17			9	20(2)
PRE 95403	L6	199.1	B/C					9	20(2)
PRE 95404	CV3	39.5	A	1-41	7-21			9	20(2)
PRE 95405	H5	31.9	B	18	16			10	20(2)
PRE 95406	L6	72.4	B					9	20(2)
PRE 95407	H5	45.2	B	18	16			10	20(2)
PRE 95408	L6	48.6	A					10	20(2)
PRE 95409	L6	33.2	B					9	20(2)
PRE 95410	R	41.7	A/B				95410	9	20(2)
PRE 95411	R	43.7	A/B	1-41	15-29		95410	9	20(2)
PRE 95412	R	14.6	A/B				95410	9	20(2)
PRE 95413	H5	106.3	B/C	19	17			9	21(1)
PRE 95414	H4	93.2	B/C	19	17-21			9	21(1)
PRE 95415	L6	82.5	B/C					9	20(2)
PRE 95416	L6	23.7	A/B					9	20(2)
QUE 93757	L6	1.3	B/C					U	19(2)
QUE 94410	H5	2.4	B/C					Q	20(2)
QUE 94425	L5	25.8	B					S	20(2)
QUE 94610	H5	2.6	B	18	16			Q	19(2)
QUE 94611	L6	13.6	B					Q	19(2)
QUE 94612	LL6	1.2	B					Q	19(2)
QUE 94613	Ur	5.1	B	22-24	19		93336	Q	19(2)
QUE 94614	Meso	2.5	B/C		22-37		86900	S	19(2)
QUE 94615	L5	26.8	A/B					S	19(2)
QUE 94616	How	13.6	B/C	59-62	17-58			S	19(2)
QUE 94617	L5	24.7	A/B					S	19(2)
QUE 94618	L5	28.4	A/B					S	19(2)
QUE 94619	L5	16.2	A/B					S	19(2)
QUE 94620	L5	59.9	B					S	19(2)
QUE 94621	L5	47.2	B					S	19(2)
QUE 94622	L5	17.7	B					S	19(2)
QUE 94623	L6	114.8	B			4.4±0.1		S	19(2)
QUE 94624	LL6	28.6	A/B					S	19(2)
QUE 94625	L5	27.9	B					S	19(2)
QUE 94626	H5	30.5	B/C	18	16			S	19(2)
QUE 94627	Iron	30.5	B				94411	S	19(2)
QUE 94628	LL6	7.3	A/B					S	19(2)
QUE 94629	L5	67.6	B					S	19(2)
QUE 94630	L5	56.9	B					S	19(2)
QUE 94631	LL6	15.7	A/B					S	19(2)
QUE 94632	L5	34.3	B					S	19(2)
QUE 94633	L5	63.9	Be					S	19(2)
QUE 94634	L5	56.9	B					S	19(2)
QUE 94635	L5	20.5	A/B					S	19(2)
QUE 94636	L5	8.1	B/C					R	19(2)
QUE 94637	H5	0.2	B	19	17			R	19(2)
QUE 94638	LL6	6.6	A/B	30	24			S	19(2)
QUE 94639	Meso	0.6	B/Ce		28-48		86900	R	19(2)
QUE 94640	L6	1.1	B/C					R	19(2)
QUE 94641	L5	63.6	A/B					S	19(2)
QUE 94642	L5	35.9	A/B					S	19(2)
QUE 94643	L6	11.1	B/C					V	19(2)
QUE 94644	H5	0.1	B	18	16			R	19(2)
QUE 94645	L5	26.4	A/B					S	19(2)
QUE 94646	L5	26.3	A/B					S	19(2)
QUE 94647	L6	16.2	B	25	21			S	19(2)
QUE 94648	L5	23.7	A/B					S	19(2)
QUE 94649	H6	0.7	B/C	19	16			R	19(2)
QUE 94650	LL6	1.1	B					R	19(2)
QUE 94651	L5	0.6	B					R	19(2)
QUE 94652	H5	8	B/C	18	16			V	19(2)
QUE 94653	H5	14.7	B/C	18	16			V	19(2)
QUE 94654	LL6	11.8	A/Be					S	19(2)
QUE 94655	L5	36.1	B					S	19(2)
QUE 94656	L5	18.7	B					R	19(2)
QUE 94657	LL6	27.2	Be					S	19(2)
QUE 94658	L5	25.8	Be					S	19(2)
QUE 94659	L5	18.8	B					S	19(2)
QUE 94660	L5	37.5	B					S	19(2)
QUE 94661	L5	57.9	B					S	19(2)
QUE 94662	L5	10.1	B					S	19(2)
QUE 94663	LL6	24.8	A/B					S	19(2)
QUE 94664	L5	10.7	Be					S	19(2)
QUE 94665	L5	38.7	Be					S	19(2)
QUE 94666	H5	4.1	B	18	16			R	19(2)
QUE 94667	L5	32.1	B					S	19(2)
QUE 94668	L5	7	B					S	19(2)
QUE 94669	H6	2.7	B/C	18	16			R	19(2)
QUE 94670	LL6	26.2	A					S	19(2)
QUE 94671	L6	0.5	B/C					R	19(2)
QUE 94672	H5	20.2	B/Ce	18	16			V	19(2)
QUE 94673	L5	74.6	Be					S	19(2)
QUE 94674	H5	2.5	B/C	19	17			R	19(2)
QUE 94675	H6	1.2	B/C					R	19(2)
QUE 94676	L5	33	B					S	19(2)
QUE 94677	L5	55.9	B					S	19(2)

Name[2]	Class[3]	Mass	Weath	%Fa	%Fs	NTL	Pairing	Ice[4]	Ref
QUE 94678	L5	13.1	B						R 19(2)
QUE 94679	H5	23.2	B/Ce	19	17				Q 19(2)
QUE 94680	L6	4.5	B/Ce	24	20				Q 19(2)
QUE 94681	L5	10.1	A/B						R 19(2)
QUE 94682	H5	3.2	B/C	18	16				Q 19(2)
QUE 94683	L6	1.4	B/C						Q 19(2)
QUE 94684	L5	4.4	A/B						R 19(2)
QUE 94685	H6	2.1	B/C						Q 19(2)
QUE 94686	H5	4	B/C	18	16				R 19(2)
QUE 94687	H5	18.5	B/C	19	17				Q 19(2)
QUE 94688	CV3	10.6	B	1-33	1		93429		Q 19(2)
QUE 94689	L5	2.4	A/B						R 19(2)
QUE 94690	L6	2.1	B/Ce						Q 19(2)
QUE 94691	H6	9.6	B/C						Q 19(2)
QUE 94692	H5	1.6	B/C	19	17				R 19(2)
QUE 94693	H6	1.8	B/C						Q 19(2)
QUE 94694	L5	16.8	B/Ce	25	21				Q 19(2)
QUE 94695	L5	12.4	B						R 19(2)
QUE 94696	L5	3.3	B						R 19(2)
QUE 94697	L5	18.6	B						S 19(2)
QUE 94698	H5	10.7	B/Ce	19	17				Q 19(2)
QUE 94699	H5	5.6	B/C	18	16				Q 19(2)
QUE 94700	H6	3.5	B/C						Q 19(2)
QUE 94701	L5	2.7	A/B						R 19(2)
QUE 94702	L6	1.9	B/C						R 19(2)
QUE 94703	L5	9.5	A/B						R 19(2)
QUE 94704	L5	3	B/C						R 19(2)
QUE 94705	L6	15.9	A/B						Q 19(2)
QUE 94706	L5	7.2	A/B						R 19(2)
QUE 94707	L5	11	A/B						S 19(2)
QUE 94708	H5	3.6	B/Ce	19	17				Q 19(2)
QUE 94709	L6	14.3	A/B						R 19(2)
QUE 94710	H6	2.1	B/Ce						Q 19(2)
QUE 94711	H6	0.9	B/Ce						R 19(2)
QUE 94712	H5	4.7	Ce	19	16				R 19(2)
QUE 94713	H6	2.2	B/C						Q 19(2)
QUE 94714	L5	118.8	B			64.8±0.1			R 19(2)
QUE 94715	L5	30.1	A/B						R 19(2)
QUE 94716	L5	128.2	B			4.2±0.2			Q 19(2)
QUE 94717	LL6	21.8	A/B						S 19(2)
QUE 94718	L5	71	Be						R 19(2)
QUE 94719	L6	141.1	B			21.4±0.1			Q 19(2)
QUE 94720	L5	39.5	A/B						R 19(2)
QUE 94721	H6	5.9	B/C						Q 19(2)
QUE 94722	H5	16.6	B/C	18	16				Q 19(2)
QUE 94723	L6	17.4	B/C						Q 19(2)
QUE 94724	H6	2.9	B/C						R 19(2)
QUE 94725	L6	2.8	B/C						Q 19(2)
QUE 94726	L6	1	B/Ce						Q 19(2)
QUE 94727	H5	14.8	B/C	18	16				Q 19(2)
QUE 94728	H6	0.1	B/C						R 19(2)
QUE 94729	LL6	14.9	B						S 19(2)
QUE 94730	L5	1	A/B						R 19(2)
QUE 94731	L5	1.1	A/B						Q 19(2)
QUE 94732	H5	7.4	B/C	18	16				R 19(2)
QUE 94733	LL6	2.4	A/B						Q 19(2)
QUE 94734	C2	11.2	B	1-31	1-7				R 19(2)
QUE 94735	H6	1.1	B/C						R 19(2)
QUE 94736	L6	0.3	B/C						R 19(2)
QUE 94737	L5	2.4	A/B						R 19(2)
QUE 94738	H5	34.5	B/C	18	16				R 19(2)
QUE 94739	L5	1.3	A/B						R 19(2)
QUE 94740	L5	17.9	B						Q 19(2)
QUE 94742	L6	5.7	B/C						R 19(2)
QUE 94743	L6	0.9	B/Ce						Q 19(2)
QUE 94744	L5	11.2	B						R 19(2)
QUE 94745	L5	1.6	B						R 19(2)
QUE 94746	L6	2.8	B/C						R 19(2)
QUE 94747	H5	2.9	B	18	16				Q 19(2)
QUE 94748	L5	22.5	B						R 19(2)
QUE 94749	L5	23.6	B						S 19(2)
QUE 94750	H5	1.2	B/C	18	16				R 19(2)
QUE 94751	H5	6.7	B	19	16				R 19(2)
QUE 94752	L6	1.5	B						Q 19(2)
QUE 94753	L5	28.8	A/B						R 19(2)
QUE 94754	H6	3	B						Q 19(2)
QUE 94755	H6	1.8	B/C						Q 19(2)
QUE 94756	L5	3.7	Be						R 20(2)
QUE 94757	H5	38.3	B/C	18	16				Q 19(2)
QUE 94758	LL6	21.3	B	27	22				R 19(2)
QUE 94759	LL6	3	B						R 19(2)
QUE 94760	LL6	5.3	Be						R 19(2)
QUE 94761	L6	0.6	B/Ce						Q 19(2)
QUE 94762	H6	27.1	B/C	19	17				Q 19(2)
QUE 94763	L6	5	B						Q 19(2)
QUE 94764	H5	7.3	B/Ce	19	16				Q 19(2)
QUE 94765	H6	1.3	B/Ce						Q 19(2)
QUE 94766	H6	5.8	B/Ce						Q 19(2)
QUE 94767	L6	23.6	B						S 19(2)
QUE 94768	H6	4.7	B/C						R 19(2)
QUE 94769	L5	47	B						S 19(2)
QUE 94770	L5	22.6	B						R 19(2)
QUE 94771	H5	17.4	B/C	17	15				Q 19(2)
QUE 94772	H6	0.7	B/C						Q 19(2)
QUE 94773	L6	4.4	B/C						R 19(2)
QUE 94774	L6	32.1	B						R 19(2)
QUE 94775	L4	1.1	B	24	20				R 19(2)
QUE 94776	H6	3.3	B/C	19	17				Q 19(2)
QUE 94777	H5	18.3	B/C	19	17				R 20(1)
WSG 95300	H3.3	2733.0	A/B	1-21	2-17	6±3			1120(1)
WSG 95301	L6	250.2	A/B						1120(2)
WSG 95302	L6	236.2	A/Be						1120(2)
WSG 95303	H5	113.2	B/C	18	16				1121(1)
WSG 95304	L4	40.4	B/Ce	25	16-21				1121(1)
WSG 95305	L6	39.2	A/B						1220(2)
WSG 95306	L6	11.2	B						1220(2)
WSG 95307	L3.8	34.1	B	18-26	11-22				1121(1)
WSG 95308	LL6	123.2	B	29	25				1121(1)

[1]See "Notes to Table 2" in Meteorite Bulletin No. 79 (Grossman and Score, 1996) for explanation of columns.
[2]Abbreviations for meteorite names: ALH = Allan Hills; GRA = Graves Nunataks; GRO = Grosvenor Mountains; PRE = Mt. Prestrud; QUE = Queen Alexandra Range; WSG = Mt. Wisting.
[3]Abbreviations for meteorite classes: Ch = chondrite; Br = brecciated; Diog = diogenite; Eu = eucrite; How = howardite; Lod = lodranite; Lun-B = lunar basaltic breccia; Meso = mesosiderite; Ung = ungrouped; Uniq = unique; Ur = ureilite.
[4]Ice field names: a = Allan Hills Main; g = Elephant Moraine Main; I = Texas Bowl; j = Meteorite City; Q = Foggy Bottom Moraine; R = Foot Rot Flats; S = Mare Meteoriticas; T = Pwellam Icefield; U = Round Bottom Moraine; 1 = Outer Cecily; 2 = Inner Cecily; 3 = Lower Central; 4 = Lower West Graves; 5 = Upper West Graves; 6 = Mt. Bumstead; 7 = South Raymond; 8 = A-1; 9 = Prestrud-Bjaaland Ice Tongue; 10 = Upper Norway Glacier; 11 = Upper Wisting; 12 = Lower Wisting; 13 = Shoodabin Icefield.