Antarctic Meteorite Newsletter

Volume 18
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A periodical issued by the Meteorite Working Group to inform scientists of the basic characteristics of specimens recovered in the Antarctic.

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SAMPLE REQUEST DEADLINE: September 22, 1995

MWG MEETS October 6-7, 1995

INSIDE THIS ISSUE:

ANSMET fieldteam returns another Martian and two more Lunar meteorites!
NOW AVAILABLE!

SAMPLE REQUEST GUIDELINES

All sample requests should be made in writing to:

Secretary, MWG
SN2/Office of the Curator
NASA/Johnson Space Center
Houston, TX 77058 USA.

Requests that are received by the MWG Secretary before Sept. 22, 1995, will be reviewed at the MWG meeting on Oct. 6-7, 1995, to be held in Washington D.C. Requests that are received after the Sept. 22 deadline may possibly be delayed for review until the MWG meets again in the Spring of 1996. **PLEASE SUBMIT YOUR REQUESTS ON TIME**. Questions pertaining to sample requests can be directed in writing to the above address or can be directed to the curator by phone, FAX, or e-mail.

Requests for samples are welcomed from research scientists of all countries, regardless of their current state of funding for meteorite studies. Graduate student requests should be initialed or countersigned by a supervising scientist to confirm access to facilities for analysis. All sample requests will be reviewed in a timely manner. Those requests that do not meet the JSC Curatorial Guidelines (published in this issue), will be reviewed by the Meteorite Working Group (MWG), a peer-review committee which meets twice a year to guide the collection, curation, allocation, and distribution of the U.S. collection of Antarctic meteorites. Issuance of samples does not imply a commitment by any agency to fund the proposed research. Requests for financial support must be submitted separately to the appropriate funding agencies. As a matter of policy, U.S. Antarctic meteorites are the property of the National Science Foundation and all allocations are subject to recall.

Each request should accurately refer to meteorite samples by their respective identification numbers and should provide detailed scientific justification for proposed research. Specific requirements for samples, such as sizes or weights, particular locations (if applicable) within individual specimens, or special handling or shipping procedures should be explained in each request. Requests for thin sections which will be used in destructive procedures such as ion probe, etch or even repolishing, must be stated explicitly. Consortium requests should be initialed or countersigned by a member of each group in the consortium. All necessary information should probably be condensable into a one- or two-page letter, although informative attachments (reprints of publication that explain rationale, flow diagrams for analyses, etc.) are welcome.

Samples can be requested from any meteorite that has been made available through announcement in any issue of the Antarctic Meteorite Newsletter (beginning with 1 (1) in June, 1978). Many of the meteorites have also been described in five Smithsonian Contr. Earth Sci.: Nos. 23, 24, 26, 28, and 30. A table containing all classification as of December 1993 is published in Meteoritics 29(1) p. 100-142.

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Wake up, folks, this is no ordinary newsletter!

We announce the availability of one ***martian***, two ***lunar***, and 19 other special meteorites among the 449 ANSMET meteorites classified in this newsletter. The first seven meteorites classified from the 1994 collection include *QUE94201*, a new *basaltic shergottite*, *QUE94269*, a *lunar anorthositic breccia* paired with QUE93069, and *QUE94281*, a new *lunar basaltic breccia*. Other 1994 meteorites of special petrologic type are an *E6 enstatite chondrite* and two *C2 carbonaceous chondrites* from the new site at Lonewolf Nunataks, and a *howardite* from Queen Alexandra Range. The tail end of the 1993 collection also revealed some small treasures. These are one *howardite*, four *mesosiderites*, one *pallasite*, two C2, and two CV3 *carbonaceous* chondrites, two E4 and three L3 *chondrites*. Get your consortium plans ready. The small size of many of these meteorites will require careful planning of requests and allocations.

Information on the U.S. Collection of Antarctic Meteorites

Number of meteorites: 7645

Number of meteorites classified: 6898

From 1990-1994 Collection

Pages 5-21 contain preliminary descriptions and classifications of meteorites that were completed since publication of issue 18(1) (February 1995). Specimens of special petrologic type (carbonaceous chondrite, unequilibrated ordinary chondrite, achondrite, etc.) are represented by separate descriptions unless they are paired with previously described meteorites. However, some specimens of non-special petrologic type are listed only as single line entries in Table 1. For convenience, new specimens of special petrologic type are also recast in Table 2.

Macroscopic descriptions of stony meteorites were performed at NASA/JSC. These descriptions summarize hand-specimen features observed during initial examination. Classification is based on microscopic petrography and reconnaissance-level electron microprobe analyses using polished sections prepared from a small chip of each meteorite. For each stony meteorite the sample number assigned to the preliminary examination section is included. In some cases, however, a single microscopic description was based on thin sections of several specimens believed to be members of a single fall.

Meteorite descriptions contained in this issue were contributed by the following individuals:

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Antarctic Meteorite Locations

ALH — Allan Hills
BEC — Beckett Nunatak
BOW — Bowden Neve
BTN — Bates Nunataks
DAV — David Glacier
DOM — Dominion Range
DRP — Derrick Peak
EET — Elephant Moraine
GEO — Geologists Range
GRO — Grosvenor Mountains
HOW — Mt. Howe
ILD — Inland Forts
LAP — LaPaz Ice Field
LEW — Lewis Cliff
LON — Lonewolf Nunataks
MAC — MacAlpine Hills
MBR — Mount Baldr
MCY — MacKay Glacier
MET — Meteorite Hills
MIL — Miller Range
OTT — Outpost Nunatak
PAT — Patuxent Range
PCA — Pecora Escarpment
PGP — Purgatory Peak
QUE — Queen Alexandra Range
RKP — Reckling Peak
STE — Stewart Hills
TIL — Thiel Mountains
TYR — Taylor Glacier
WIS — Wisconsin Range

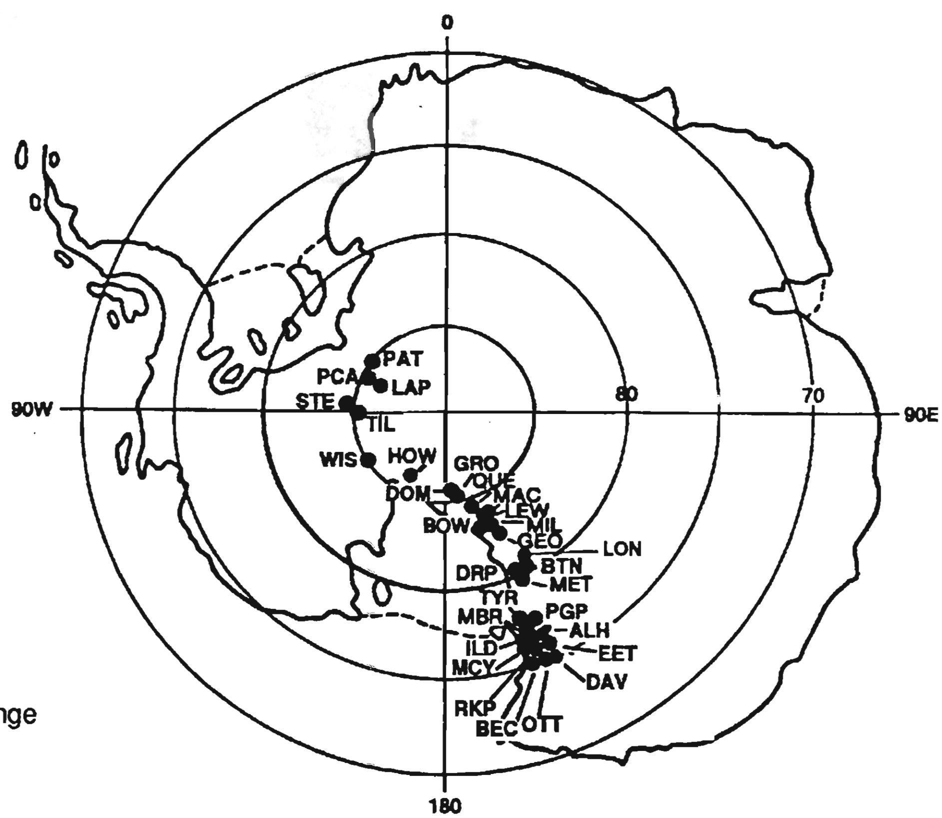

TABLE 1

List of Newly Classified Antarctic Meteorites **

Sample Number		Weight (g)	Classification	Weathering	Fracturing	% Fa	% Fs
EET 90425	~	17.0	L6 CHONDRITE	B	A		
PCA 91037	~	243.3	L6 CHONDRITE	B	B		
PCA 91045	~	249.0	L6 CHONDRITE	B	B		
PCA 91047	~	442.2	L6 CHONDRITE	B	B		
PCA 91048	~	352.6	L6 CHONDRITE	B	B		
PCA 91061	~	207.4	L6 CHONDRITE	B	B		
PCA 91110	~	25.1	L6 CHONDRITE	B	A		
PCA 91113	~	22.2	L6 CHONDRITE	B	A		
PCA 91276	~	56.3	L6 CHONDRITE	B/C	A/B		
EET 92039	~	513.6	L6 CHONDRITE	A/B	A		
EET 92188	~	0.3	CR2 CHONDRITE	C	A		
QUE 93017		8.8	C2 CHONDRITE	A/Be	A/B	1-22	1-3
QUE 93018		1.3	C2 CHONDRITE	A/B	A	1-11	
QUE 93270	~	1.5	L5 CHONDRITE	A/B	A		
QUE 93272	~	14.2	L5 CHONDRITE	A/B	A		
QUE 93273	~	1.1	H5 CHONDRITE	B/C	A/B		
QUE 93274	~	26.0	LL6 CHONDRITE	A/B	A/B		
QUE 93275	~	35.3	H5 CHONDRITE	B/Ce	A		
QUE 93276	~	36.2	L5 CHONDRITE	A/B	A		
QUE 93277	~	19.0	H5 CHONDRITE	B/C	A		
QUE 93278	~	7.7	H6 CHONDRITE	B/C	A		
QUE 93279		26.2	L5 CHONDRITE	B/C	A	25	21
QUE 93280	~	5.4	H6 CHONDRITE	B/Ce	A		
QUE 93281	~	12.8	H6 CHONDRITE	B/C	A		
QUE 93282	~	4.1	H6 CHONDRITE	B/C	A		
QUE 93283	~	11.1	L6 CHONDRITE	B/C	A		
QUE 93284	~	108.0	L5 CHONDRITE	A/B	A		
QUE 93285	~	85.5	L5 CHONDRITE	A/B	A		
QUE 93286	~	88.6	L5 CHONDRITE	A/B	A		
QUE 93287	~	19.5	L5 CHONDRITE	A/B	A		
QUE 93288	~	15.9	L5 CHONDRITE	A/B	A		
QUE 93289	~	29.0	H6 CHONDRITE	B/C	A		
QUE 93290	~	18.1	L5 CHONDRITE	A/B	A		
QUE 93291		0.5	H5 CHONDRITE	B/C	A	19	17
QUE 93292	~	4.5	H5 CHONDRITE	B/C	A		
QUE 93293		19.7	H5 CHONDRITE	B/C	A	18	16
QUE 93294	~	18.0	H6 CHONDRITE	B/C	A		
QUE 93295	~	16.4	L5 CHONDRITE	A/B	A		
QUE 93296	~	8.2	H5 CHONDRITE	B/C	A		
QUE 93297	~	1.7	H5 CHONDRITE	B/C	A		
QUE 93298	~	5.9	L5 CHONDRITE	B/C	A		
QUE 93299	~	20.7	L5 CHONDRITE	A/B	A		
QUE 93350	~	0.2	L5 CHONDRITE	A/B	A		
QUE 93352		19.5	H5 CHONDRITE	B/C	A	18	16
QUE 93353		28.4	H5 CHONDRITE	B/C	A	18	16
QUE 93354	~	1.3	H6 CHONDRITE	B/Ce	A		
QUE 93355	~	3.2	H5 CHONDRITE	B/C	A		

~Classified by using refractive indices.

Sample Number		Weight (g)	Classification	Weathering	Fracturing	% Fa	% Fs
QUE 93356	~	48.4	L5 CHONDRITE	A/B	A		
QUE 93357		4.0	H4 CHONDRITE	B/C	A/B	19	15-18
QUE 93358		10.3	LL6 CHONDRITE	B/C	A	28	22
QUE 93359	~	2.8	H6 CHONDRITE	B/C	A		
QUE 93360	~	12.4	L6 CHONDRITE	B/C	A		
QUE 93361	~	3.6	H6 CHONDRITE	B/C	A		
QUE 93362	~	4.4	L5 CHONDRITE	A/B	A		
QUE 93363		0.4	H5 CHONDRITE	B/C	A	18	16
QUE 93364		2.1	H5 CHONDRITE	B/Ce	A	18	16
QUE 93365	~	3.8	H5 CHONDRITE	B/C	A		
QUE 93366	~	11.7	H5 CHONDRITE	B/C	A		
QUE 93367	~	39.2	L6 CHONDRITE	B/C	A		
QUE 93368	~	50.4	L5 CHONDRITE	A/B	A		
QUE 93369	~	69.5	L5 CHONDRITE	A/B	A		
QUE 93370	~	92.4	L5 CHONDRITE	Be	A		
QUE 93371		48.5	L5 CHONDRITE	B	A	26	21
QUE 93373	~	35.2	L5 CHONDRITE	B	A		
QUE 93374	~	62.7	L5 CHONDRITE	A/B	A		
QUE 93375	~	13.2	L5 CHONDRITE	B	B		
QUE 93376	~	7.7	L6 CHONDRITE	B	A		
QUE 93377	~	0.5	H6 CHONDRITE	B/C	B		
QUE 93378	~	0.5	H6 CHONDRITE	B/C	A		
QUE 93379	~	8.7	H6 CHONDRITE	B/C	A		
QUE 93380	~	3.4	L6 CHONDRITE	Be	A		
QUE 93381	~	0.7	H5 CHONDRITE	B/C	A		
QUE 93382	~	2.8	H6 CHONDRITE	B/C	A		
QUE 93383	~	0.5	H5 CHONDRITE	B/C	A		
QUE 93384	~	0.3	H5 CHONDRITE	B/C	A		
QUE 93385	~	62.9	H6 CHONDRITE	B/C	A		
QUE 93386		48.8	H5 CHONDRITE	B/C	A	19	17
QUE 93387	~	6.0	H5 CHONDRITE	A/B	A		
QUE 93388	~	0.4	H5 CHONDRITE	B/C	A		
QUE 93389	~	3.6	H6 CHONDRITE	B/C	A		
QUE 93390		0.6	H5 CHONDRITE	B/C	A	18	16
QUE 93391		1.3	H5 CHONDRITE	B/C	A	18	16
QUE 93392	~	7.0	H6 CHONDRITE	B/C	A		
QUE 93393	~	2.3	L6 CHONDRITE	B	A		
QUE 93394	~	2.5	H6 CHONDRITE	B/Ce	A		
QUE 93395		34.5	H5 CHONDRITE	B	A/B	19	17
QUE 93396		7.9	H5 CHONDRITE	B	A	18	16
QUE 93397		17.8	H5 CHONDRITE	B/C	A	18	16
QUE 93398	~	20.2	H6 CHONDRITE	B/C	A		
QUE 93399		8.1	H5 CHONDRITE	B/C	A	18	16
QUE 93400	~	2.2	H5 CHONDRITE	B/C	A		
QUE 93401	~	1.7	H6 CHONDRITE	B/C	A		
QUE 93402	~	1.3	H5 CHONDRITE	B/C	A		
QUE 93403	~	0.6	L6 CHONDRITE	B	A		
QUE 93404	~	3.1	H5 CHONDRITE	B	A		
QUE 93405	~	45.5	L5 CHONDRITE	A/B	A		
QUE 93406	~	9.1	H6 CHONDRITE	B/C	A		
QUE 93407	~	12.9	H5 CHONDRITE	B/Ce	A		
QUE 93408		19.2	H5 CHONDRITE	B/C	A	19	16
QUE 93409	~	20.0	H6 CHONDRITE	B/C	A		
QUE 93410	~	85.3	L6 CHONDRITE	B/C	A		
QUE 93411		11.2	H5 CHONDRITE	B/C	A	19	17
QUE 93412	~	0.7	H6 CHONDRITE	B	A		
QUE 93413		0.5	H5 CHONDRITE	B	A	19	17

~Classified by using refractive indices.

Sample Number		Weight (g)	Classification	Weathering	Fracturing	% Fa	% Fs
QUE 93414		0.7	H5 CHONDRITE	B	A	18	16
QUE 93415	~	1.7	L6 CHONDRITE	B/C	A		
QUE 93416	~	2.8	H6 CHONDRITE	C	A		
QUE 93417		8.2	H5 CHONDRITE	C	A/B	19	17
QUE 93418	~	5.7	H6 CHONDRITE	C	A		
QUE 93419	~	3.8	H6 CHONDRITE	B/C	A		
QUE 93420	~	11.9	H5 CHONDRITE	B	A		
QUE 93421	~	2.2	H6 CHONDRITE	B/C	A		
QUE 93422	~	1.2	H6 CHONDRITE	B/C	A		
QUE 93423	~	53.3	L5 CHONDRITE	B	A		
QUE 93424	~	15.9	L6 CHONDRITE	B/C	A		
QUE 93425	~	6.5	L6 CHONDRITE	B/C	A		
QUE 93426		26.6	H5 CHONDRITE	B/C	B	19	16
QUE 93427	~	2.3	L6 CHONDRITE	B/C	A		
QUE 93428		0.5	H5 CHONDRITE	B/C	A	19	17
QUE 93430	~	5.4	H5 CHONDRITE	B	A		
QUE 93431	~	21.0	H5 CHONDRITE	B/Ce	A		
QUE 93432	~	1.6	H6 CHONDRITE	B	A		
QUE 93433	~	13.0	H6 CHONDRITE	B/Ce	A		
QUE 93434		2.0	H5 CHONDRITE	B	A	19	16
QUE 93435	~	2.1	H5 CHONDRITE	B	A		
QUE 93436	~	1.7	H6 CHONDRITE	Be	A		
QUE 93437	~	2.3	H6 CHONDRITE	B/Ce	A		
QUE 93438	~	5.4	H5 CHONDRITE	B/C	B		
QUE 93439	~	30.7	L5 CHONDRITE	B	A/B		
QUE 93440	~	12.7	L5 CHONDRITE	A/B	A		
QUE 93441	~	3.0	L5 CHONDRITE	B	A		
QUE 93442	~	13.8	L6 CHONDRITE	Be	A		
QUE 93443	~	8.7	H6 CHONDRITE	B/C	A		
QUE 93444	~	35.4	L6 CHONDRITE	B/Ce	B		
QUE 93445	~	22.3	L6 CHONDRITE	B	A/B		
QUE 93446		4.6	LL6 CHONDRITE	B/Ce	A	28	23
QUE 93447	~	17.9	L5 CHONDRITE	A/B	A		
QUE 93448	~	21.6	L5 CHONDRITE	B	B		
QUE 93449		18.1	H5 CHONDRITE	B/C	A	19	16
QUE 93450	~	42.3	L5 CHONDRITE	B	B		
QUE 93451		27.3	H5 CHONDRITE	B/Ce	A	19	17
QUE 93452	~	1.1	H6 CHONDRITE	B/C	A		
QUE 93453	~	1.1	L5 CHONDRITE	B	A		
QUE 93454	~	3.1	H6 CHONDRITE	B/C	A		
QUE 93455	~	18.4	LL6 CHONDRITE	A/B	A/B		
QUE 93456		42.0	H5 CHONDRITE	B/C	A/B	19	17
QUE 93457	~	12.1	L6 CHONDRITE	Be	A		
QUE 93458	~	4.5	H5 CHONDRITE	B/C	A		
QUE 93459	~	3.2	H5 CHONDRITE	B/C	A		
QUE 93460		63.9	H5 CHONDRITE	B	A	18	16
QUE 93461	~	66.3	L5 CHONDRITE	A/B	A		
QUE 93462	~	52.0	L5 CHONDRITE	B	B		
QUE 93463	~	37.2	L5 CHONDRITE	B	B		
QUE 93464		21.3	H4 CHONDRITE	B/C	A	18	14-16
QUE 93465		27.5	H5 CHONDRITE	B/C	A	19	17
QUE 93466		52.2	LL5 CHONDRITE	B	A/B	28	23
QUE 93467	~	79.8	L5 CHONDRITE	B	A/B		
QUE 93468	~	11.5	H5 CHONDRITE	B/C	A		
QUE 93469	~	6.7	L6 CHONDRITE	B	A		
QUE 93470	~	0.5	L5 CHONDRITE	B	A		
QUE 93471	~	2.4	L6 CHONDRITE	B/C	A		

~Classified by using refractive indices.

Sample Number	Weight (g)	Classification	Weathering	Fracturing	% Fa	% Fs
QUE 93472	4.2	H6 CHONDRITE	B/C	A	19	17
QUE 93473 ~	2.5	H6 CHONDRITE	B/Ce	A		
QUE 93474 ~	1.1	L5 CHONDRITE	B	A		
QUE 93475	4.9	H5 CHONDRITE	B/C	A	19	17
QUE 93476 ~	2.0	L5 CHONDRITE	B/Ce	B/C		
QUE 93477 ~	0.9	H5 CHONDRITE	B	A		
QUE 93478 ~	0.8	L5 CHONDRITE	Be	A		
QUE 93479 ~	0.8	L5 CHONDRITE	B	A		
QUE 93480 ~	6.5	L6 CHONDRITE	B/Ce	A		
QUE 93481	2.7	H5 CHONDRITE	B/Ce	A	18	16
QUE 93482 ~	2.4	L6 CHONDRITE	B/C	A		
QUE 93483 ~	21.4	L5 CHONDRITE	B	A		
QUE 93484	9.7	H5 CHONDRITE	B/C	A	19	17
QUE 93485	15.0	H5 CHONDRITE	B/Ce	A	18	16
QUE 93486 ~	0.5	H5 CHONDRITE	B/C	A		
QUE 93487	0.6	H5 CHONDRITE	B/C	A/B	18	16
QUE 93488	0.7	LL6 CHONDRITE	B/C	A	30	24
QUE 93489 ~	0.9	L6 CHONDRITE	B/C	A		
QUE 93490 ~	0.3	L6 CHONDRITE	B	A		
QUE 93491 ~	29.7	L6 CHONDRITE	A	A		
QUE 93492 ~	0.8	L5 CHONDRITE	B	A		
QUE 93493	5.4	H4 CHONDRITE	B/Ce	A	17	14-18
QUE 93494	15.1	H5 CHONDRITE	B	A	18	16
QUE 93495 ~	0.2	H5 CHONDRITE	B	A		
QUE 93496	5.7	H5 CHONDRITE	B/Ce	A	18	16
QUE 93497	6.2	H5 CHONDRITE	B/C	A	18	16
QUE 93498 ~	0.9	L5 CHONDRITE	B	A/B		
QUE 93499	10.0	H5 CHONDRITE	B/C	A	19	17
QUE 93500 ~	24.0	L5 CHONDRITE	B	A		
QUE 93501	124.3	H5 CHONDRITE	B/C	A	18	16
QUE 93502	59.3	H5 CHONDRITE	B/C	A	19	17
QUE 93503	59.9	H5 CHONDRITE	B/Ce	A	19	17
QUE 93504	27.9	L5 CHONDRITE	B	B	26	22
QUE 93505	19.9	H5 CHONDRITE	B/Ce	A	18	16
QUE 93506	12.6	H5 CHONDRITE	B/C	A	18	16
QUE 93507 ~	14.3	L5 CHONDRITE	A/B	A		
QUE 93508 ~	9.6	L5 CHONDRITE	B	A		
QUE 93509 ~	0.9	L5 CHONDRITE	B	A		
QUE 93510	3.5	H5 CHONDRITE	B/C	A/B	18	16
QUE 93511 ~	6.4	L5 CHONDRITE	A/B	A		
QUE 93512 ~	1.7	L5 CHONDRITE	B	A		
QUE 93513	0.2	E4 CHONDRITE	B/C	B	-	1-2
QUE 93514	0.2	H5 CHONDRITE	B/Ce	A	18	16
QUE 93515 ~	0.6	H5 CHONDRITE	B/C	A		
QUE 93516 ~	3.1	L5 CHONDRITE	B	A		
QUE 93517	0.9	MESOSIDERITE	B/C	B/C	-	24-54
QUE 93518 ~	2.1	L6 CHONDRITE	B	A		
QUE 93519 ~	3.7	L6 CHONDRITE	B/C	B		
QUE 93520	1.8	L3.5 CHONDRITE	B	A	1-21	4-42
QUE 93521	0.6	L5 CHONDRITE	B/C	A	26	21
QUE 93522	0.9	H5 CHONDRITE	B	A	18	16
QUE 93523	0.4	E4 CHONDRITE	B/C	A		0.4-1.9
QUE 93524 ~	0.7	L6 CHONDRITE	B	A		
QUE 93525	102.0	L5 CHONDRITE	B	B	26	21
QUE 93526 ~	1.7	L6 CHONDRITE	B	B		
QUE 93527 ~	69.9	H5 CHONDRITE	B/C	A		
QUE 93528	36.6	H5 CHONDRITE	B/Ce	A	19	17

~Classified by using refractive indices.

Sample Number	Weight (g)	Classification	Weathering	Fracturing	% Fa	% Fs
QUE 93529	7.5	H5 CHONDRITE	B/Ce	A	18	16
QUE 93530 ~	4.4	H5 CHONDRITE	B/C	A		
QUE 93531 ~	9.3	H5 CHONDRITE	B/Ce	A		
QUE 93532 ~	7.0	L5 CHONDRITE	B	B		
QUE 93533 ~	1.1	L6 CHONDRITE	B	A		
QUE 93534 ~	5.1	H6 CHONDRITE	B/C	A		
QUE 93535	19.8	H5 CHONDRITE	B/Ce	A	18	16
QUE 93536 ~	11.6	H5 CHONDRITE	B/C	A		
QUE 93537 ~	0.5	L5 CHONDRITE	B	A/B		
QUE 93538 ~	1.3	L6 CHONDRITE	B/Ce	A		
QUE 93539	16.7	H5 CHONDRITE	B/C	B	18	16
QUE 93540 ~	4.3	H5 CHONDRITE	B/Ce	A		
QUE 93541 ~	0.7	L6 CHONDRITE	B	A/B		
QUE 93542 ~	6.1	LL6 CHONDRITE	B	A		
QUE 93543 ~	0.2	L5 CHONDRITE	Be	A		
QUE 93544	3.3	PALLASITE	Be	A/B	12	
QUE 93545 ~	1.0	L6 CHONDRITE	B	A		
QUE 93546 ~	0.5	L6 CHONDRITE	B	A		
QUE 93547 ~	0.7	L5 CHONDRITE	B	A		
QUE 93548 ~	2.4	H6 CHONDRITE	B/C	A		
QUE 93549	52.7	L4 CHONDRITE	A/Be	A/B	24	8-17
QUE 93550	22.6	H5 CHONDRITE	B/Ce	A	18	16
QUE 93551 ~	23.5	H5 CHONDRITE	B/C	A/B		
QUE 93552 ~	10.4	L6 CHONDRITE	B	A		
QUE 93553 ~	0.3	L5 CHONDRITE	B	A		
QUE 93554 ~	1.2	H5 CHONDRITE	B/Ce	A		
QUE 93555 ~	0.4	L5 CHONDRITE	B	A		
QUE 93556	20.0	H5 CHONDRITE	B/C	A	19	17
QUE 93557 ~	8.2	H5 CHONDRITE	B/C	A		
QUE 93558 ~	0.6	L5 CHONDRITE	B	A		
QUE 93559 ~	5.4	H5 CHONDRITE	B/Ce	A		
QUE 93560	36.1	H5 CHONDRITE	B/Ce	A	18	16
QUE 93561 ~	14.9	L5 CHONDRITE	B	B		
QUE 93562 ~	4.1	L6 CHONDRITE	B/C	A		
QUE 93563 ~	11.1	L5 CHONDRITE	A/B	A		
QUE 93564	62.6	H5 CHONDRITE	B/Ce	A/B	19	17
QUE 93565 ~	0.8	L5 CHONDRITE	B	A/B		
QUE 93566 ~	10.2	L5 CHONDRITE	A/B	B		
QUE 93567 ~	1.8	H5 CHONDRITE	B/C	A		
QUE 93569	39.7	H5 CHONDRITE	B/Ce	A	18	16
QUE 93570 ~	8.6	L6 CHONDRITE	B/C	A		
QUE 93571	4.3	H5 CHONDRITE	B/C	A	19	17
QUE 93572	88.9	H5 CHONDRITE	B/C	A	18	16
QUE 93573 ~	1.3	L5 CHONDRITE	B	A		
QUE 93574 ~	6.7	L5 CHONDRITE	A/B	A		
QUE 93575	1.5	MESOSIDERITE	B/C	A/B		17-36
QUE 93576 ~	12.9	L5 CHONDRITE	A/B	A/B		
QUE 93577	2.1	H5 CHONDRITE	B/C	A	18	16
QUE 93578 ~	1.0	L5 CHONDRITE	A/B	A		
QUE 93579	6.1	H5 CHONDRITE	B	A/B	18	16
QUE 93580 ~	3.3	L5 CHONDRITE	B/C	A		
QUE 93581 ~	1.2	L5 CHONDRITE	B	A		
QUE 93582	0.7	H5 CHONDRITE	A/B	A	19	17
QUE 93583	0.4	H5 CHONDRITE	A/B	A	19	16
QUE 93584	24.3	MESOSIDERITE	B	A/B		14-51
QUE 93585 ~	2.1	L5 CHONDRITE	B	A		
QUE 93586	0.8	MESOSIDERITE	B	A/B		24-57

~Classified by using refractive indices.

Sample Number	Weight (g)	Classification	Weathering	Fracturing	% Fa	% Fs
QUE 93587 ~	0.5	L5 CHONDRITE	A/B	A		
QUE 93588 ~	2.5	L5 CHONDRITE	B	A		
QUE 93589 ~	0.5	L5 CHONDRITE	A/B	A/B		
QUE 93590 ~	8.1	L5 CHONDRITE	A/B	A		
QUE 93591 ~	0.5	H6 CHONDRITE	B/C	A		
QUE 93592	53.5	H5 CHONDRITE	B/C	A	19	17
QUE 93593 ~	24.4	L5 CHONDRITE	A/B	A/B		
QUE 93594 ~	24.7	L5 CHONDRITE	A/B	A		
QUE 93595	7.6	L5 CHONDRITE	B/Ce	A	25	21
QUE 93596 ~	1.1	L6 CHONDRITE	B/C	A		
QUE 93597 ~	29.7	L5 CHONDRITE	A/B	A/B		
QUE 93598 ~	8.3	L5 CHONDRITE	A/B	A		
QUE 93599 ~	2.7	L5 CHONDRITE	B/C	A		
QUE 93600 ~	68.7	L5 CHONDRITE	B	A		
QUE 93601 ~	1.2	L6 CHONDRITE	B/C	A		
QUE 93602 ~	0.2	L5 CHONDRITE	A/B	A		
QUE 93603 ~	2.2	L6 CHONDRITE	B/C	A		
QUE 93604 ~	2.1	H6 CHONDRITE	B	A		
QUE 93605 ~	4.3	L5 CHONDRITE	B	A		
QUE 93606 ~	0.9	L5 CHONDRITE	A/B	A		
QUE 93607	1.5	L3.5 CHONDRITE	Be	A/B	1-32	4-25
QUE 93608 ~	34.4	L5 CHONDRITE	B	A		
QUE 93609 ~	1.1	H6 CHONDRITE	C	A		
QUE 93610 ~	13.0	L5 CHONDRITE	A/B	A		
QUE 93611 ~	16.7	L5 CHONDRITE	A/B	A		
QUE 93612 ~	0.3	L5 CHONDRITE	B/C	A		
QUE 93613	6.4	H5 CHONDRITE	B/C	A	18	16
QUE 93614 ~	3.4	L5 CHONDRITE	B	A		
QUE 93615 ~	2.3	L5 CHONDRITE	A/B	A		
QUE 93616 ~	1.3	L5 CHONDRITE	B/C	A		
QUE 93617 ~	0.4	H5 CHONDRITE	B/C	A		
QUE 93618 ~	0.4	H5 CHONDRITE	B/C	A		
QUE 93619 ~	5.9	L5 CHONDRITE	A/B	A	~	
QUE 93620 ~	1.3	L6 CHONDRITE	B/C	A		
QUE 93621 ~	1.5	L5 CHONDRITE	B	A		
QUE 93622 ~	3.8	L6 CHONDRITE	B/C	A		
QUE 93623	1.6	H5 CHONDRITE	B/Ce	A	19	17
QUE 93624	2.6	H5 CHONDRITE	B/C	A	19	17
QUE 93625 ~	2.9	L5 CHONDRITE	A/B	A		
QUE 93626 ~	0.7	L5 CHONDRITE	B/C	A		
QUE 93627 ~	6.6	L5 CHONDRITE	A/B	A		
QUE 93628	47.8	H5 CHONDRITE	B/C	A	19	17
QUE 93629	39.9	L4 CHONDRITE	B/C	A	25	21
QUE 93630 ~	1.1	H5 CHONDRITE	B	A		
QUE 93631 ~	0.9	H6 CHONDRITE	A/B	A		
QUE 93632 ~	1.2	L6 CHONDRITE	A	A		
QUE 93633 ~	0.9	H5 CHONDRITE	B	A		
QUE 93634 ~	4.4	L5 CHONDRITE	A/B	A		
QUE 93635 ~	1.0	L5 CHONDRITE	B	A		
QUE 93636 ~	4.8	L5 CHONDRITE	B/C	A/B		
QUE 93637 ~	9.9	L5 CHONDRITE	B	A		
QUE 93638 ~	0.5	L5 CHONDRITE	B	A		
QUE 93639	1.6	CV3 CHONDRITE	Ae	A	1-17	1-11
QUE 93640 ~	17.6	L5 CHONDRITE	B	A/B		
QUE 93641 ~	1.4	H6 CHONDRITE	B/C	A/B		
QUE 93642 ~	2.5	L5 CHONDRITE	B	A		
QUE 93643 ~	0.9	L6 CHONDRITE	B	A		

~Classified by using refractive indices.

Sample Number		Weight (g)	Classification	Weathering	Fracturing	% Fa	% Fs
QUE 93644	~	3.6	L5 CHONDRITE	B	A		
QUE 93645	~	1.5	L5 CHONDRITE	B	A		
QUE 93646	~	0.8	L5 CHONDRITE	B/C	A		
QUE 93647	~	6.2	L5 CHONDRITE	B/C	A		
QUE 93648	~	6.4	L5 CHONDRITE	B	A		
QUE 93649	~	0.6	L6 CHONDRITE	B	A		
QUE 93650	~	0.4	L5 CHONDRITE	B/C	A		
QUE 93651	~	19.4	L5 CHONDRITE	A/B	A		
QUE 93652		1.6	H5 CHONDRITE	B/C	A	19	17
QUE 93653	~	3.1	H6 CHONDRITE	B/C	A		
QUE 93654	~	0.8	L5 CHONDRITE	B/C	A		
QUE 93655	~	0.8	H5 CHONDRITE	B/C	A		
QUE 93656	~	15.2	L5 CHONDRITE	A/B	A		
QUE 93657	~	2.5	L5 CHONDRITE	B	A		
QUE 93658		20.2	L5 CHONDRITE	B/Ce	A	25	21
QUE 93659		4.2	H5 CHONDRITE	B/C	A	19	17
QUE 93660	~	19.6	L5 CHONDRITE	A/B	A		
QUE 93661	~	7.5	L5 CHONDRITE	A/B	A		
QUE 93662		5.2	H5 CHONDRITE	B/C	A	19	17
QUE 93663	~	36.0	L5 CHONDRITE	A/B	A		
QUE 93664	~	1.2	L5 CHONDRITE	B/C	A		
QUE 93665	~	33.7	L5 CHONDRITE	A/B	A		
QUE 93666	~	1.6	H6 CHONDRITE	B/C	A		
QUE 93667	~	6.0	L5 CHONDRITE	A/B	A		
QUE 93668	~	17.6	L6 CHONDRITE	B/C	A		
QUE 93669	~	1.1	L6 CHONDRITE	B/C	A		
QUE 93670		0.9	L5 CHONDRITE	B	A	25	21
QUE 93671	~	0.4	L5 CHONDRITE	B	A		
QUE 93672		20.9	H5 CHONDRITE	B/C	A	19	17
QUE 93673	~	39.3	L6 CHONDRITE	B/C	A		
QUE 93674	~	55.4	L5 CHONDRITE	A/B	A		
QUE 93675	~	3.3	L5 CHONDRITE	B/C	B		
QUE 93676		48.6	H5 CHONDRITE	B/C	A	19	16
QUE 93677		10.3	H5 CHONDRITE	B/C	A	18	16
QUE 93678	~	13.6	L5 CHONDRITE	B/Ce	B		
QUE 93679	~	14.7	L6 CHONDRITE	B/C	A		
QUE 93680		4.1	H5 CHONDRITE	C	A	19	17
QUE 93681	~	0.5	L6 CHONDRITE	B	A		
QUE 93682	~	1.2	L6 CHONDRITE	C	A		
QUE 93683	~	128.8	L5 CHONDRITE	A/B	A		
QUE 93684		0.4	L4 CHONDRITE	B/C	A	24	16-19
QUE 93685		57.1	H5 CHONDRITE	B	A	19	16
QUE 93686		13.1	H5 CHONDRITE	C	A	19	16
QUE 93687	~	11.7	L6 CHONDRITE	B/C	A		
QUE 93688		13.8	H5 CHONDRITE	B/C	A	18	16
QUE 93689		23.0	H5 CHONDRITE	B/C	A	19	17
QUE 93690	~	7.5	H6 CHONDRITE	B/C	A		
QUE 93691	~	23.8	L6 CHONDRITE	B/C	A		
QUE 93692		73.4	H5 CHONDRITE	B/C	A	18	16
QUE 93693		0.5	H5 CHONDRITE	B/C	A	18	16
QUE 93694	~	0.6	L6 CHONDRITE	B/C	A		
QUE 93695	~	4.9	L5 CHONDRITE	B/C	A		
QUE 93696	~	99.3	L5 CHONDRITE	A/B	A		
QUE 93697	~	88.3	L5 CHONDRITE	A/B	A		
QUE 93698	~	23.4	L6 CHONDRITE	A/B	A		
QUE 93699	~	103.6	L5 CHONDRITE	A/B	A		
QUE 93700	~	5.2	H5 CHONDRITE	B	A		

~Classified by using refractive indices.

Sample Number	Weight (g)	Classification	Weathering	Fracturing	% Fa	% Fs
QUE 93702 ~	1.7	L6 CHONDRITE	B/C	A		
QUE 93703 ~	11.9	L6 CHONDRITE	B	A		
QUE 93704 ~	1.0	L6 CHONDRITE	B	A		
QUE 93705	55.0	L3.7 CHONDRITE	B	A	6-19	2-19
QUE 93706 ~	108.2	L5 CHONDRITE	B	A		
QUE 93707 ~	95.4	L5 CHONDRITE	B	A		
QUE 93708	9.1	H5 CHONDRITE	B/C	A	19	17
QUE 93709	2.5	LL6 CHONDRITE	B	A	28	23
QUE 93710 ~	4.3	H5 CHONDRITE	B/C	A/B		
QUE 93711	98.6	H5 CHONDRITE	B/C	A	18	16
QUE 93712 ~	0.3	L6 CHONDRITE	B/C	A		
QUE 93713 ~	0.4	L6 CHONDRITE	B/C	A		
QUE 93714 ~	8.3	L6 CHONDRITE	A/B	A		
QUE 93716 ~	8.9	L6 CHONDRITE	B/C	A		
QUE 93717	10.6	H5 CHONDRITE	B/C	A/B	18	16
QUE 93718 ~	0.8	L6 CHONDRITE	B/C	A		
QUE 93719	16.1	H5 CHONDRITE	B/C	A	19	17
QUE 93720 ~	73.9	L5 CHONDRITE	A/B	A		
QUE 93721 ~	70.6	L5 CHONDRITE	A/B	A		
QUE 93722	11.9	H5 CHONDRITE	B/C	A	17	15
QUE 93723	15.4	HOWARDITE	A/B	A		22-51
QUE 93724 ~	120.4	L6 CHONDRITE	B/C	A/B		
QUE 93725 ~	11.9	L5 CHONDRITE	A/B	A		
QUE 93726	43.6	H5 CHONDRITE	B/C	A	18	16
QUE 93727 ~	36.3	L5 CHONDRITE	A/B	A/B		
QUE 93728 ~	32.0	L6 CHONDRITE	B/C	A		
QUE 93729 ~	12.3	L6 CHONDRITE	B/C	A/B		
QUE 93730 ~	46.6	L5 CHONDRITE	A/B	A		
QUE 93731 ~	42.1	L6 CHONDRITE	B/C	A		
QUE 93732 ~	30.7	L5 CHONDRITE	A/B	A		
QUE 93733 ~	7.4	L6 CHONDRITE	B/C	A		
QUE 93734	4.9	H5 CHONDRITE	B/C	A	19	16
QUE 93735 ~	46.3	L5 CHONDRITE	A/B	A		
QUE 93736 ~	41.1	L5 CHONDRITE	B/C	A		
QUE 93737	7.6	L5 CHONDRITE	B/C	A	25	21
QUE 93738	14.0	H5 CHONDRITE	B/C	A	19	16
QUE 93739 ~	45.2	L5 CHONDRITE	A/B	A		
QUE 93740 ~	50.1	L5 CHONDRITE	A/B	A		
QUE 93741 ~	17.3	L6 CHONDRITE	B/C	A		
QUE 93742	6.8	H5 CHONDRITE	B/C	A	18	16
QUE 93743 ~	23.8	L6 CHONDRITE	B/C	A		
QUE 93744	7.7	CV3 CHONDRITE	B/C	A	1-10	1-2
QUE 93745 ~	0.8	L5 CHONDRITE	A/B	A		
QUE 93746 ~	10.8	L5 CHONDRITE	B/C	A		
QUE 93747 ~	2.3	L5 CHONDRITE	B/C	A		
QUE 93748 ~	3.1	L6 CHONDRITE	B/C	A		
QUE 93749 ~	0.5	L5 CHONDRITE	B/C	A		
QUE 93750	19.7	H6 CHONDRITE	B/C	A/B	17	15
QUE 93751 ~	12.7	H5 CHONDRITE	B/Ce	A		
QUE 93752	45.9	H5 CHONDRITE	B/C	A/B	19	16
QUE 93753 ~	5.1	L5 CHONDRITE	A/B	A/B		
QUE 93754 ~	12.5	L5 CHONDRITE	B/C	A		
QUE 93755 ~	11.2	L6 CHONDRITE	B/C	A		
LON 94100	1947.1	E6 CHONDRITE	A/Be	B		0-1
LON 94101	2804.6	C2 CHONDRITE	Be	C	1-39	1-3
LON 94102	941.6	C2 CHONDRITE	Ce	B/C	1-41	1-3

~Classified by using refractive indices.

Sample Number	Weight (g)	Classification	Weathering	Fracturing	% Fa	% Fs
QUE 94200	165.4	HOWARDITE	A/B	A/B		18-43
QUE 94201	12.0	SHERGOTTITE	Be	A		21-69
QUE 94269	3.2	LUNAR-ANORTH. BRECCIA	A/B	A/B		22-39
QUE 94281	23.4	LUNAR-BASALTIC BRECCIA	Be	A/B	33-36	23-55

*****NOTES TO TABLES 1 AND 2:***

"Weathering" categories:

A: Minor rustiness; rust haloes on metal particles and rust stains along fractures are minor.
B: Moderate rustiness; large rust haloes occur on metal particles and rust stains on internal fractures are extensive.
C: Severe rustiness; metal particles have been mostly stained by rust throughout.
e: Evaporite minerals visible to the naked eye.

"Fracturing" categories:

A: Minor cracks; few or no cracks are conspicuous to the naked eye and no cracks penetrate the entire specimen.
B: Moderate cracks; several cracks extend across exterior surfaces and the specimen can be readily broken along the cracks.
C: Severe cracks; specimen readily crumbles along cracks that are both extensive and abundant.

~Classified by using refractive indices.

TABLE 2

Newly Classified Specimens Listed By Type **

Sample Number	Weight (g)	Classification	Weathering	Fracturing	% Fa	% Fs
		Achondrites				
QUE 93723	15.4	HOWARDITE	A/B	A		22-51
QUE 94200	165.4	HOWARDITE	A/B	A/B		18-43
QUE 94269	3.2	LUNAR-ANORTH. BRECCIA	A/B	A/B		22-39
QUE 94281	23.4	LUNAR-BASALTIC BRECCIA	Be	A/B	33-36	23-55
QUE 94201	12.0	SHERGOTTITE	Be	A		21-69
		Carbonaceous Chondrites				
QUE 93017	8.8	C2 CHONDRITE	A/Be	A/B	1-22	1-3
QUE 93018	1.3	C2 CHONDRITE	A/B	A	1-11	
LON 94101	2804.6	C2 CHONDRITE	Be	C	1-39	1-3
LON 94102	941.6	C2 CHONDRITE	Ce	B/C	1-41	1-3
EET 92188 ~	0.3	CR2 CHONDRITE	C	A		
QUE 93639	1.6	CV3 CHONDRITE	Ae	A	1-17	1-11
QUE 93744	7.7	CV3 CHONDRITE	B/C	A	1-10	1-2
		Chondrites - Type 3				
QUE 93520	1.8	L3.5 CHONDRITE	B	A	1-21	4-42
QUE 93607	1.5	L3.5 CHONDRITE	Be	A/B	1-32	4-25
QUE 93705	55.0	L3.7 CHONDRITE	B	A	6-19	2-19
		E Chondrites				
QUE 93513	0.2	E4 CHONDRITE	B/C	B	-	1-2
QUE 93523	0.4	E4 CHONDRITE	B/C	A		0.4-1.9
LON 94100	1947.1	E6 CHONDRITE	A/Be	B		0-1
		Stony-Irons				
QUE 93517	0.9	MESOSIDERITE	B/C	B/C	-	24-54
QUE 93575	1.5	MESOSIDERITE	B/C	A/B		17-36
QUE 93584	24.3	MESOSIDERITE	B	A/B		14-51
QUE 93586	0.8	MESOSIDERITE	B	A/B		24-57
QUE 93544	3.3	PALLASITE	Be	A/B	12	

~Classified by using refractive indices.

Tentative Pairings for New Specimens

Table 3 summarizes possible pairings of the new specimens with each other and with previously classified specimens, based on descriptive data in this newsletter issue. Readers who desire a more comprehensive review of the meteorite pairings in the U.S. Antarctic collection should refer to the compilation provided by Dr. E.R.D. Scott, as published in issue 9(2) (June 1986). Possible pairings were updated in Meteoritical Bulletin No. 76, Meteoritics 29, 100-143 (1994).

LUNAR-ANORTH. BRECCIA
QUE 94269 with QUE 93069.

MESOSIDERITE
QUE 93517, 93575, 93584, and 93586 with QUE 86900.

C2 CHONDRITE
LON 94101 and 94102.

QUE 93017 with QUE 93004.

QUE 93018 with QUE 93005.

CR2 CHONDRITE
EET 92188 with EET 87711.

CV3 CHONDRITE
QUE 93639, 93744 with QUE 93429.

E4 CHONDRITE
QUE 93513 and 93523.

L6 CHONDRITE
PCA 91037, 91045, 91047, 91048, 91061, 91110, 91113, 91276 with PCA 91009.

PETROGRAPHIC DESCRIPTIONS

Sample No.: QUE93017
Location: Queen Alexandra Range
Dimensions (cm): 2.5 x 2.2 x 2.0
Weight (g): 8.8
Meteorite Type: C2 Chondrite

Macroscopic Description: Robbie Marlow
Dull black fusion crust covers 60% of the exterior of this carbonaceous chondrite. Evaporite deposit is present on some surfaces and some surface fracturing is visible. The interior matrix is black with abundant millimeter-sized white inclusions. The matrix is fined grained and evenly textured.

Thin Section (.2) Description: Brian Mason
The section shows a few chondrules, up to 0.6 mm across, some irregular aggregates, and numerous small silicate grains in a black matrix. The silicate grains are almost entirely olivine near Mg_2SiO_4 in composition, with a few more iron-rich grains. A little pyroxene near $MgSiO_3$ in composition is present. The matrix appears to consist largely of iron-rich serpentine. The meteorite is a C2 chondrite; it is very similar to QUE93004 and 93006, with which it is probably paired.

Sample No.: QUE93018
Location: Queen Alexandra Range
Dimensions (cm): 1.5 x 1.1 x 0.8
Weight (g): 1.3
Meteorite Type: C2 Chondrite

Macroscopic Description: Robbie Marlow
The exterior of this carbonaceous chondrite has patches of dull black fusion crust. Areas devoid of fusion crust are dull black and porous. The interior matrix is black and fine grained. One millimeter-sized dark clast is visible.

Thin Section (.2) Description: Brian Mason
The section shows rare chondrules up to 0.5 mm across, and numerous small silicate grains in a dark brown to black matrix. Most of the chondrules have been converted into brown serpentine. Trace amounts of nickel-iron and troilite are present as minute grains. Olivine is near Mg_2SiO_4 in composition, with a few more iron-rich grains. The matrix appears to consist largely of iron-rich serpentine. The meteorite is a C2 chondrite; it is very similar to QUE93005, with which it is probably paired.

Sample No.: QUE93513
Location: Queen Alexandra Range
Dimensions (cm): 0.5 x 0.4 x 0.2
Weight (g): 0.2
Meteorite Type: E4 Chondrite

Macroscopic Description: Carol Schwarz
Approximately 50% of this tiny rusty and fractured fragment is covered with dark reddish brown fusion crust. Some metal is visible. The entire sample is now embedded in epoxy.

Thin Section (.1) Description: Brian Mason
The section shows an aggregate of chondrules and chondrule fragments, up to 1.2 mm across, and mineral grains in a moderate amount of black matrix. The chondrules and mineral grains consist almost entirely of pyroxene, with possible traces of olivine. The matrix contains a moderate amount of nickel-iron and sulfides. Weathering is extensive, with veinlets and patches of brown limonite throughout the section. Microprobe analyses show that the pyroxene is close to $MgSiO_3$ in composition (FeO 0.7-1.8%, CaO 0.2-0.6%). The nickel-iron contains 2.1-2.4% Si. One grain of roedderite, $NaKMg_5Si_{12}O_{30}$, was analyzed. The meteorite is classified as an E4 chondrite.

Sample No.: QUE93517; 93575; 93584; 93586
Location: Queen Alexandra Range
Dimensions (cm): 1.2 x 0.9 x 0.4; 1.5 x 0.8 x 0.4; 2.7 x 2.1 x 1.7; 1.0 x 0.8 x 0.4
Weight (g): 0.9; 1.5; 24.3; 0.8
Meteorite Type: Mesosiderite

Macroscopic Description: Carol Schwarz and Robbie Marlow
These weathered, small, angular fragments contain little or no fusion crust and have a dark red-brown color. The smallest two fragments, QUE93517 and 93586, are now entirely embedded in epoxy.

Thin Section (QUE93517,1; 93575,2; 93584,2; 93586,1) Description: Brian Mason
Microprobe analyses of these sections show a wide range of pyroxene compositions (Fs_{14-57}). The meteorites are classified as mesosiderites. They are very similar to the larger mesosiderite QUE86900 (Antarctic Meteorite Newsletter 10(2), 1987), with which they are probably paired.

Sample No.: QUE93520
Location: Queen Alexandra Range
Dimensions (cm): 1.5 x 1.0 x 0.9
Weight (g): 1.8
Meteorite Type: L3 Chondrite (estimated L3.5)

Macroscopic Description: Carol Schwarz
Rusty, pitted, black fusion crust covers 80% of the exterior of this meteorite. The dark gray interior has abundant rusty white inclusions. Some metal is present.

Thin Section (,2) Description: Brian Mason
The section shows numerous chondrules and chondrule fragments (up to 1.8 mm across) in a black matrix which contains small amounts of nickel-iron and troilite. Brown limonitic staining pervades the section. Microprobe analyses show a wide range of olivine and pyroxene compositions: olivine, Fa_{1-21}, mean Fa_{14}; pyroxene, Fs_{4-42}. The meteorite is an L3 chondrite (estimated L3.5).

Sample No.: QUE93523
Location: Queen Alexandra Range
Dimensions (cm): 0.8 x 0.6 x 0.3
Weight (g): 0.4
Meteorite Type: E4 Chondrite

Macroscopic Description: Carol Schwarz
Frothy fusion crust is present on this small chondrite. The overall appearance of QUE93523 is a polished, reddish brown fragment. The entire sample is now embedded in epoxy.

Thin Section (,1) Description: Brian Mason
The section shows an aggregate of chondrules and chondrule fragments, up to 1.2 mm across, and mineral grains in a moderate amount of black matrix. The chondrules and mineral grains consist almost entirely of pyroxene, with accessory olivine in a few chondrules. Polysynthetic twinning is present in some of the pyroxene. The matrix contains a moderate amount of nickel-iron and sulfides. Weathering is extensive, with veinlets and patches of brown limonite throughout the section. Microprobe analyses show that the pyroxene is close to $MgSiO_3$ in composition (FeO 0.4-1.9%, CaO 0.1-0.6%). The nickel-iron contains 2.8% Si. The meteorite is classified as an E4 chondrite. It is very similar to QUE93513, with which it is probably paired.

Sample No: QUE93544
Location: Queen Alexandra Range
Dimensions (cm): 1.8 x 1.0 x 0.5
Weight (g): 3.3
Meteorite Type: Pallasite

Macroscopic Description: Carol Schwarz
The fusion crust on this pallasite is polished and weathered and covers eighty percent of the exterior surface. The specimen has an irregular shape and some yellow crystals are visible on the exterior. The interior consists of metal with some clear white and yellow minerals. A minor amount of evaporite deposit is present.

Thin Section (,2) Description: Brian Mason
The section consists almost entirely of nickel-iron, with a few anhedral grains of olivine, up to 0.6 mm across, at one margin. The section is rimmed with brown limonite, evidently the product of weathering. Olivine composition is Fa_{12}. The specimen appears to be a fragment of a pallasite.

Sample No.: QUE93607
Location: Queen Alexandra Range
Dimensions (cm): 1.2 x 0.9 x 0.5
Weight (g): 1.5
Meteorite Type: L3 Chondrite (estimated L3.5)

Macroscopic Description: Cecilia Satterwhite
The exterior is totally covered with dull, pitted, dark-brown to black fusion crust. Some fractures penetrate the surface. The interior matrix is fine-grained, dark-brown to black with some small weathered inclusions visible. Oxidation is obvious and evaporite deposit is present.

Thin Section (,2) Description: Brian Mason
The section shows numerous chondrules (up to 1.2 mm across), chondrule fragments, and mineral grains in a small amount of black matrix. The matrix contains moderate amounts of nickel-iron and sulfide. Weathering is extensive, with brown limonitic staining throughout the section. The section is partially rimmed with fusion crust. Microprobe analyses show a wide range of olivine and pyroxene compositions: olivine, Fa_{1-32}, mean Fa_{13}; pyroxene, Fs_{4-25}. The meteorite is classified as an L3 chondrite (estimated L3.5).

Sample No.: QUE93639
Location: Queen Alexandra Range
Dimensions (cm): 1.8 x 1.0 x 0.6
Weight (g): 1.6
Meteorite Type: CV3 Chondrite

Macroscopic Description: Robbie Marlow
Ten percent of this meteorite is covered with frothy black patches of fusion crust. Trace amounts of evaporite deposit are visible on the exterior. The interior matrix is dark gray and fine grained with abundant white inclusions.

Thin Section (.2) Description: Brian Mason
The section shows numerous chondrules and irregular aggregates, up to 1.5 mm across, in a black matrix. A small amount of nickel-iron and troilite is present at the rims and within the chondrules. Microprobe analyses show that most of the olivine in the chondrules is close to Mg_2SiO_4 in composition, but ranges up to Fa_{17}; pyroxene composition is Fs_{1-11}. The matrix appears to consist largely of iron-rich olivine, about Fa_{50}. The meteorite is classified as a C3 chondrite of the Vigarano subtype; it is very similar to QUE93429, with which it is probably paired.

Sample No.: QUE93705
Location: Queen Alexandra Range
Dimensions (cm): 3.8 x 3.4 2.0
Weight (g): 55.0
Meteorite Type: L3 Chondrite (estimated L3.7)

Macroscopic Description: Cecilia Satterwhite
Ninety percent of the exterior of this L chondrite is covered with shiny, smooth, dark brown to black fusion crust. Areas devoid of fusion crust are weathered and have a rough texture. The interior is dark brown to black and fine-grained. Oxidation is scattered heavily throughout the sample. Some small weathered inclusions are visible.

Thin Section (.2) Description: Brian Mason
The section shows numerous chondrules (up to 1.8 mm across), chondrule fragments, and mineral grains in a small amount of black matrix. The matrix contains a small amount of nickel-iron and troilite. Weathering is extensive, with brown limonitic staining throughout the section. Microprobe analyses shows a considerable range in olivine and pyroxene compositions: olivine, Fa_{6-19}, mean Fa_{14}; pyroxene, Fs_{2-19}. The meteorite is classified as an L3 chondrite (estimated L3.7).

Sample No.: QUE93723
Location: Queen Alexandra Range
Dimensions (cm): 2.8 x 2.1 x 1.3
Weight (g): 15.4
Meteorite Type: Howardite

Macroscopic Description: Cecilia Satterwhite
Black patches of fusion crust cover thirty percent of the exterior of this achondrite. Areas without fusion crust are greenish-gray and some small white inclusions are visible. The interior surface reveals a mottled gray color with abundant small white and dark inclusions. Minor oxidation is scattered throughout the sample. The white plagioclase inclusions are 1-2 mm in size. The darker inclusions are smaller. The meteorite has a medium grained texture.

Thin Section (.3) Description: Brian Mason
The section is a microbreccia of pyroxene with minor plagioclase, and a few minute opaque grains. Individual clasts range up to 1.8 mm across. Microprobe analyses show that pyroxene compositions range fairly uniformly from Wo_2Fs_{22} to $Wo_{15}Fs_{50}$; plagioclase compositions range from An_{80} to An_{94}. One grain of SiO_2, probably tridymite, and one grain of ilmenite were analyzed. The meteorite is classified as a howardite.

Sample No.: QUE93744
Location: Queen Alexandra Range
Dimensions (cm): 2.0 x 1.6 x 1.0
Weight (g): 7.7
Meteorite Type: CV3 Chondrite

Macroscopic Description: Cecilia Satterwhite
This carbonaceous chondrite has 50% of its exterior covered with frothy black fusion crust. Some rust-colored areas are visible on the exterior. The interior is dark-brown to black in color, fine-grained with abundant oxidation scattered throughout. Some small light-gray inclusions are visible.

Thin Section (.2) Description: Brian Mason
The section shows numerous chondrules and irregular aggregates, up to 1.5 mm across, in a black matrix. The matrix contains accessory amounts of nickel-iron and troilite. Microprobe analyses show

that most of the olivine in the chondrules is close to Mg_2SiO_4 in composition, but ranges up to Fa_{10}; pyroxene composition is Fs_{1-2}. The matrix appears to consist largely of iron-rich olivine, about Fa_{50}. The meteorite is classified as a C3 chondrite of the Vigarano subtype; it is very similar to QUE93429 and 93639, with which it is probably paired.

Sample No.:	LON94100
Location:	Lonewolf Nunataks
Dimensions (cm):	13.5 x 9.5 x 8.0
Weight (g):	1947.1
Meteorite Type:	E6 Chondrite

Macroscopic Description: Kathleen McBride

This meteorite is shaped like a volcanic bomb and has a rusty-colored, exfoliating, flaky exterior. It is dull on one side and shiny on the opposite side. Thick evaporitic material is present on two exterior surfaces. The flaky crust has numerous surface cracks that do not penetrate the interior and run mostly in the longitudinal direction. The weathered crust extends a few millimeters into the interior. The interior is very fresh compared to the exterior and proved to be very coherent and extremely hard. The interior is fine-grained and varies in color from steel-gray to black with interstitial white to clear crystals.

Thin Section (,6) Description: Brian Mason

Only vague traces of chondritic structure are visible in the thin section, which shows the meteorite to consist largely of granular to prismatic enstatite (grain size 0.1-0.2 mm), about 20% nickel-iron, minor amounts of sulfides, and a little plagioclase. The enstatite is almost pure $MgSiO_3$ (Fe 0.1-0.6%, Ca 0.7-0.9%). The metal contains 0.9% Si. One grain of plagioclase, An_{17}, was analyzed. The meteorite is an E6 chondrite.

Sample No.:	LON94101
Location:	Lonewolf Nunataks
Dimensions (cm):	abundant pieces
Weight (g):	2804.6
Meteorite Type:	C2 Chondrite

Macroscopic Description: Kathleen McBride

LON94101 consists of abundant friable pieces, none of which fit together. This sample contains small (2-3 cm) patches of purplish-red fusion crust. It is black, heavily fractured, and contains green inclusions in the millimeter to centimeter size range. There are also some rusted clasts and small (<1 mm) angular white flecks. The exterior has a greenish tinge where the interior is black. Interior clasts consist of angular tan colored inclusions that are ~3-4 mm in size. Also visible are several rounded white clasts with a sugary texture that are about 3 mm in diameter.

Thin Section (,12 and ,14) Description: Brian Mason

The sections show a few chondrules, up to 0.4 mm across, some irregular aggregates, and numerous small mineral grains in a black matrix. LON94101,12 has two pale green-gray granular enclaves, one 2.9 mm and the other 1.8 mm across. The mineral grains are almost entirely olivine, near Mg_2SiO_4 in composition, with a few iron-rich grains. A small amount of pyroxene, near $MgSiO_3$ in composition, is present. The matrix consists largely of iron-rich serpentine. The larger enclave consists almost entirely of serpentine, similar in composition to the matrix. The smaller enclave consists largely of enstatite (Fs_{1-3}), with a little olivine (Fa_2) and some carbonate grains, both calcite and dolomite. The meteorite is a C2 chondrite.

Sample No.:	LON94102
Location:	Lonewolf Nunataks
Dimensions (cm):	~10 x 10.5 x 4.5
Weight (g):	941.6
Meteorite Type:	C2 Chondrite

Macroscopic Description: Kathleen McBride

LON94102 consists of one large fragment and one small piece that do not fit together but are definitely pieces of the same carbonaceous chondrite. Approximately 5% of the dull, pitted fusion crust remains on this specimen. The exterior matrix is black and contains numerous small white angular inclusions. Small areas have oxidized to a red-brown color. Fractures that penetrate the interior are numerous. Slickenside-like features are visible on the surface. Evaporite deposit is present. The sample is friable and easily crumbled when trying to obtain a chip for thin sections.

Thin Section (,11) Description: Brian Mason

The section shows a few chondrules, up to 0.6 mm across, some irregular aggregates, and numerous small mineral grains in a black matrix. The mineral grains are almost entirely olivine, near Mg_2SiO_4 in composition, with a few iron-rich grains. A small amount of pyroxene, near $MgSiO_3$ in composition, is present. The matrix consists largely of iron-rich serpentine. The meteorite is a C2 chondrite. It is very similar to LON94101, and the possibility of pairing should be considered.

Sample No.: QUE94200
Location: Queen Alexandra Range
Dimensions (cm): 5.3 x 5.2 x 3.8
Weight (g): 165.4
Meteorite Type: Howardite

Macroscopic Description: Cecilia Satterwhite
The exterior of this meteorite has dull, black fusion crust that is patchy on some surfaces. Areas devoid of fusion crust have a dull gray color. Some small green, black, and white minerals are visible. The interior of this meteorite is light gray and contains abundant, mostly small inclusions; however, a few larger inclusions are present. The inclusions are white, green-black, and gray in color. The black inclusions are the largest; one rounded inclusion is 0.6 cm. Other black inclusions vary in size from 0.2 to 0.5 cm. One basaltic clast is visible. Weathering is minor.

Thin Section (.5) Description: Brian Mason
The section shows a microbreccia of pyroxene and plagioclase clasts in a comminuted groundmass of these minerals. The pyroxene is orthopyroxene with a minor amount of pigeonite; orthopyroxene clasts are up to 1.8 mm across, whereas pigeonite clasts are smaller (maximum 0.3 mm). Microprobe analyses show pyroxene compositions ranging from Wo_1Fs_{18} to $Wo_{11}Fs_{43}$. Plagioclase compositions range from An_{74} to An_{93}. Accessory amounts of an SiO_2 mineral, probably tridymite, are present. The meteorite is a howardite.

Sample No.: QUE94201
Location: Queen Alexandra Range
Dimensions (cm): 2.3 x 2.0 x 1.5 cm
Weight (g): 12.0
Meteorite Type: Shergottite

Macroscopic Description: Roberta Score
This small, dark-gray to black stone is rounded and polished. The spotty, brownish-black, remnant fusion crust is difficult to distinguish from the melted, glassy grains on the exterior surface. The interior is coarse-grained, crystalline, and glassy. It is composed of laths or globular grains of transparent or translucent maskelynite plus dull or glassy-black pyroxene. Several mafic-rich areas, as large as 5 x 4 mm, were noted. Oxidation is scattered throughout the interior. Thick evaporite minerals are concentrated as small blebs.

Thin Section (.3) Description: Brian Mason
The section shows a coarse-grained aggregate of subequal amounts of pyroxene and maskelynite; the maskelynite as laths up to 3.6 mm long, and the pyroxene as interstitial anhedral to subhedral grains. Maskelynite is fairly uniform in composition, An_{55-64}. The pyroxene is pigeonite of variable composition, Wo_{9-20} and Fs_{21-69}. The meteorite is a shergottite.

Sample No.: QUE94269
Location: Queen Alexandra Range
Dimensions (cm): 1.9 x 1.4 x 1.3
Weight (g): 3.2
Meteorite Type: Lunar-Anorthositic Breccia

Macroscopic Description: Roberta Score
This lunar meteorite is identical to QUE93069 and would probably fit together if QUE93069 was still in one piece. One side of this flat stone has thick gray-green, frothy fusion crust. The other side has thin, weathered, dull green-brown fusion crust. A fractured surface reveals the interior matrix which is dark gray to black with abundant inclusions. The largest inclusion is white and measures 1.0 x 0.2 cm. The newly exposed interior surface has a lighter gray-colored matrix and abundant white and gray clasts. One white clast measures 0.4 x 0.2 cm. Other inclusions present include fine-grained, buff-colored clasts, several brecciated gray clasts, and smaller white clasts. Many clasts have weathered to a yellowish color. As in QUE93069, most of the clasts are small and friable and, unfortunately, are not extractable.

Thin Section (.5 and .7) Description: Brian Mason
The sections show a microbreccia of granular clasts, up to 1.5 mm across, and small plagioclase grains, in a translucent to semi-opaque brown glassy matrix; one grain of metallic iron, 0.3 mm across, was noted. Most of the plagioclase is almost pure anorthite (Na_2O 0.3-0.5%, K_2O less than 0.1%), with a few grains with higher Na_2O, up to 3.2%. QUE94269,7 has a 3 mm clast of subequal amounts of plagioclase and pyroxene; the plagioclase is anorthite (Na_2O 0.3-0.5%), the pyroxene ranges from Wo_5Fs_{39} to $Wo_{34}Fs_{22}$ with fairly uniform En content. This specimen is a

lunar meteorite, very similar to QUE93069 (Antarctic Meteorite Newsletter 17(2), 1994), with which it is certainly paired.

Sample No.: QUE94281
Location: Queen Alexandra Range
Dimensions (cm): 4.0 x 3.1 x 1.0
Weight (g): 23.4
Meteorite Type: Lunar-Basaltic Breccia

Macroscopic Description: Roberta Score and Marilyn Lindstrom

This is a very strange meteorite. It is highly glassy and inhomogeneous. The exterior is black with thick, shiny glass on one side and an irregular, rough surface on the other. The glass is black, conchoidal, vesicular in places, and has melted into many of the abundant cavities. The interior is very inhomogeneous. This meteorite is wedge-shaped, ranging in thickness from 3 mm to 10 mm. At the thin end, the rough black material has small white flecks in it, while the middle region consists of a chaotic aphanitic material. The thick end is a coarse-grained breccia with abundant angular white, yellow, and black mineral and lithic clasts up to 3 mm across. Two 2 mm-thick glassy, vesicular, black veins cut across the different areas. Oxidation is lightly scattered throughout the meteorite. It will be difficult to do detailed sampling of this complex breccia.

Thin Section (.4) Description: Brian Mason

The section shows a microbreccia of pale brown pyroxene and colorless plagioclase clasts, up to 1.2 mm across, in a comminuted groundmass of these minerals. Colorless fusion crust rims part of the section, which is cut by a 1 mm-wide veinlet of vesicular black glass. Pyroxene compositions show a wide range: Wo_{4-30}, Fs_{23-55}, En_{25-66}. Plagioclase composition is An_{91-97}. A little olivine, Fa_{33-36}, was analyzed, and one grain of silica polymorph, probably tridymite. Fusion crust composition is SiO_2 47, Al_2O_3 16, FeO 13, MgO 9.1, CaO 12, K_2O <0.1, TiO_2 0.6, MnO 0.2, Na_2O 0.5. The black glass has a similar but somewhat variable composition. The high FeO:MnO ratio indicates a lunar origin, and the meteorite has a composition of a basalt-rich breccia. Its composition appears to be intermediate between those of EET87521 (Geochim. Cosmochim Acta, v. 53, p. 3323, 1989) and Calcalong Creek (Nature, v. 352, p.614, 1991) and very similar to that of Y793274 (Proc. NIPR Symp. Antarct. Meteorites, v. 4, p. 3, 1991).

TABLE 4

NATURAL THERMOLUMINESCENCE (NTL) DATA FOR ANTARCTIC METEORITES

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The measurement and data reduction methods were described by Hasan et al. (1987, Proc. 17th LPSC E703-E709; 1989, LPSC XX, 383-384). For meteorites whose TL lies between 5 and 100 krad the natural TL is related primarily to terrestrial history. Samples with NTL <5 krad have TL below that which can be reasonably ascribed to long terrestrial ages. Such meteorites have had their TL lowered by heating within the past million years or so by close solar passage, shock heating, or atmospheric entry. We suggest that meteorites with NTL >100 krad are candidates for unusual orbital/thermal histories (Benoit and Sears, 1993, EPSL 120, 463-471).

Sample	Class	NTL [krad at 250 deg. C]	Sample	Class	NTL [krad at 250 deg. C]
QUE93030	H3	66.8 +- 0.6	QUE93041	L5	3.1 +- 0.1
			QUE93042	L5	8.8 +- 0.1
QUE93024	H5	48.2 +- 0.5	QUE93044	L5	8.8 +- 0.1
QUE93027	H5	0.34 +- 0.04	QUE93045	L5	33 +- 2
QUE93028	H5	1 +- 0.1	QUE93052	L5	14.8 +- 0.2
QUE93029	H5	27.5 +- 0.1	QUE93053	L5	2.8 +- 0.4
QUE93033	H5	24.3 +- 0.1	QUE93054	L5	0.7 +- 0.1
QUE93034	H5	0.9 +- 0.1	QUE93056	L5	15.5 +- 0.1
QUE93038	H5	53 +- 0.3	QUE93057	L5	8.3 +- 0.1
QUE93043	H5	22.8 +- 0.1	QUE93058	L5	9.7 +- 0.1
QUE93046	H5	107.1 +- 0.1	QUE93059	L5	9.6 +- 0.1
QUE93049	H5	22.9 +- 0.1	QUE93061	L5	10.3 +- 0.1
QUE93051	H5	1.9 +- 0.3	QUE93062	L5	1.9 +- 0.2
QUE93055	H5	5.1 +- 0.1	QUE93063	L5	8.7 +- 0.1
			QUE93065	L5	2.7 +- 0.5
QUE93031	L5	8.1 +- 0.1	QUE93068	L5	5.2 +- 0.2
QUE93032	L5	2.1 +- 0.3	QUE93072	L5	1.6 +- 0.3
QUE93035	L5	12.6 +- 0.1	QUE93076	L5	12.2 +- 0.1
QUE93036	L5	9.9 +- 0.5			
QUE93037	L5	0.5 +- 0.1	QUE93016	L6	30.9 +- 0.3
QUE93039	L5	10.3 +- 0.2	RKP92407	L6	33.5 +- 0.2
QUE93040	L5	13.4 +- 0.1	RKP92408	L6	89 +- 2

The quoted uncertainties are the standard deviation shown by replicate measurements of a single aliquot.

COMMENTS: The following comments are based on natural TL data, TL senstivity, the shape of the induced glow curve, classifications, and JSC and Arkansas group sample descriptions.

QUE93030 is confirmed as a type 3.6 (AMN 18:1).

1. Pairings (Confirmations of pairings in AMN 18(1):

H5: QUE93043, QUE93049 and possibly QUE93029.

L5: QUE93032, QUE93037, QUE93041, QUE93053, QUE93062 and possibly QUE93054 and QUE93065 with QUE90205 group (AMN15:2).

L5: QUE93031, QUE93035, QUE93036, QUE93039, QUE93040, QUE93042, QUE93044, QUE93052, QUE93056, QUE93058, QUE93059, QUE93061 and QUE93076 with QUE90207 group (AMN15:2).

L5: QUE93057 and QUE93063 with QUE90202 (AMN 15:2).

2. TL data do not confirm pairings suggested in the Newsletter:

H5: QUE93038 with QUE93043 group (AMN 18:1).

L5: QUE93045 with QUE90201 group (AMN 18:1).

L5: QUE90218 and QUE90239 with QUE90201 group (AMN 15:1 and 15:2).

3. Additional pairings suggested by TL data:

H5: QUE93051 with QUE93028.

H5: QUE93033 with QUE93043 group.

L5: QUE90218, QUE90239, and QUE93045.

TABLE 5

^{26}Al ACTIVITY DATA FOR ANTARCTIC METEORITES

John F. Wacker
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Richland, Washington 99352

SPECIMEN NUMBER		CLASS	^{26}Al Activity (dpm/kg)	SPECIMEN NUMBER		CLASS	^{26}Al Activity (dpm/kg)
ALH	85130	H6	55.7 ±4.6	ALH	85083	L6	56.3 ±2.9
ALH	87902	L6	48.6 ±4.3	ALH	85124	L6	65.9 ±3.1
ALH	77305	L6	53.0 ±2.8	ALH	85133	H5	48.2 ±4.4
ALH	84064	H5	59.7 ±3.5	ALH	85142	H5	52.0 ±3.1
EET	83201	H6	37.9 ±2.3	EET	90025	CK5	54.8 ±3.2
EET	87515	L6	44.6 ±1.7	EET	90016	CK5	63.1 ±3.2
PCA	82503	L6	63.3 ±3.8	EET	90008	CK5	61.8 ±3.4
ALH	82103	H5	57.4 ±3.4	EET	90005	CK5	56.4 ±3.6
EET	82604	H5	48.6 ±1.7	EET	90115	L6	57.5 ±2.8
EET	83214	L6	79.8 ±4.5	EET	90031	LL6	61.3 ±4.3
LEW	87032	H6	51.3 ±2.9	EET	90071	L6	58.5 ±4.0
PCA	82505	L5	53.5 ±1.9	EET	87805	H3,7	41.8 ±3.4
DOM	85507	H5	49.1 ±3.1	EET	90053	L6	82.3 ±3.5
DOM	85509	L6	37.2 ±3.0	EET	90121	L6	73.7 ±4.3
EET	83209	L6	42.9 ±2.5	EET	90054	L6	59.2 ±3.4
BOW	85800	H6	46.8 ±3.6	EET	90051	H6	52.3 ±3.0
DOM	85501	H5	92.5 ±6.4	EET	90001	CK5	61.6 ±4.0
EET	87549	L6	46.4 ±2.7	EET	90030	L6	80.0 ±6.0
EET	87554	L6	55.0 ±1.8	EET	87818	L6	49.9 ±3.8
ALH	81162	L3	40.5 ±2.7	EET	90207	L6	66.6 ±4.2
ALH	85032	H6	56.1 ±3.7	EET	90204	L6	73.9 ±4.6
ALH	85035	LL6	41.8 ±2.4	EET	90158	L6	78.0 ±3.8
ALH	85042	H5	56.7 ±3.8	EET	90138	L6	77.7 ±5.5
ALH	85054	H5	50.4 ±4.6	EET	90157	L6	80.4 ±4.2
ALH	85079	LL6	44.3 ±2.2	EET	90152	L6	80.1 ±5.4
ALH	85080	L6	47.4 ±3.4	EET	90177	L6	70.5 ±4.7

Uncertainties are calculated from counting statistics. All data have been corrected for background effects and counting geometry, and preliminary corrections have been made for sample geometry effects. For more information or to request a copy of the complete Battelle ^{26}Al dataset, please contact John Wacker: telephone: (509) 376-1076; FAX: (509) 376-3002; e-mail: jf_wacker@pnl.gov.

ACCESSING THE JSC SN2 CURATORIAL DATABASES

The curatorial databases may be accessed as follows:

Via INTERNET	1) Type **TELNET 139.169.126.35** or **TELNET CURATE.JSC.NASA.GOV.** 2) Type **PMPUBLIC** at the USERNAME: prompt.
Via WWW	1) Using a Web browser, such as Mosaic, open URL **http://www-sn.jsc.nasa.gov/curator/curator.htm.** 2) Activate the ***Curatorial Databases*** link.
Via DECNET	1) Log onto your host computer. 2) Type **SET HOST 9300** at the system prompt. 3) Type **PMPUBLIC** at the USERNAME: prompt. NOTE: Your system manager may add node CURATE to the DECNET database on your host computer; CURATE's Decnet node number is 9.84. You may then access CURATE by typing **SET HOST CURATE** instead of **SET HOST 9300.**
Via modem	The modem may be between 1200 and 19200 baud; no parity; 8 data bits; and 1 stop bit. If you are calling long distance, the area code is 713. 1) Dial 483-2500 for 1200-9600 bps, V.32bis/V.42bis, or 483-9498 for 1200-19200 bps, V.32bis/V.42bis. 2) Once the connection is made, press <CR>. Type **INS** in response to the Enter Number: prompt. 3) Press <CR> twice quickly until the XYPLEX#> prompt displays. 4) Type **C CURATE.JSC.NASA.GOV** at the XYPLEX#> prompt. 5) Type **PMPUBLIC** at the USERNAME: prompt.

For problems or additional information, you may contact: Claire Dardano, Lockheed Engineering & Sciences Company, (713) 483-5329, dardano@snmail.jsc.nasa.gov.

Visit the Curator's home page by opening the URL http://www-sn.jsc.nasa.gov/curator/curator.htm