10093

Sample 10093 is a subangular, medium dark grey, fine breccia. This sample was originally part of 10002,22 but was given a new generic number during re-examination. It was returned in ALSRC #1003 (Bulk Sample container).

BINOCULAR DESCRIPTIONS	BY: Twedell	DATE: 6/16/76
ROCK TYPE: Fine Breccia	SAMPLE:10093,0	WEIGHT: 25.85 gm
COLOR: Medium Dark Grey	DIMENSIONS: 5 x 2	2.8 x 1.3

SHAPE: Subangular

COHERENCE: Intergranular - coherent Fracturing - few, non-penetrative

FABRIC/TEXTURE: Anisotropic/Fine Breccia.

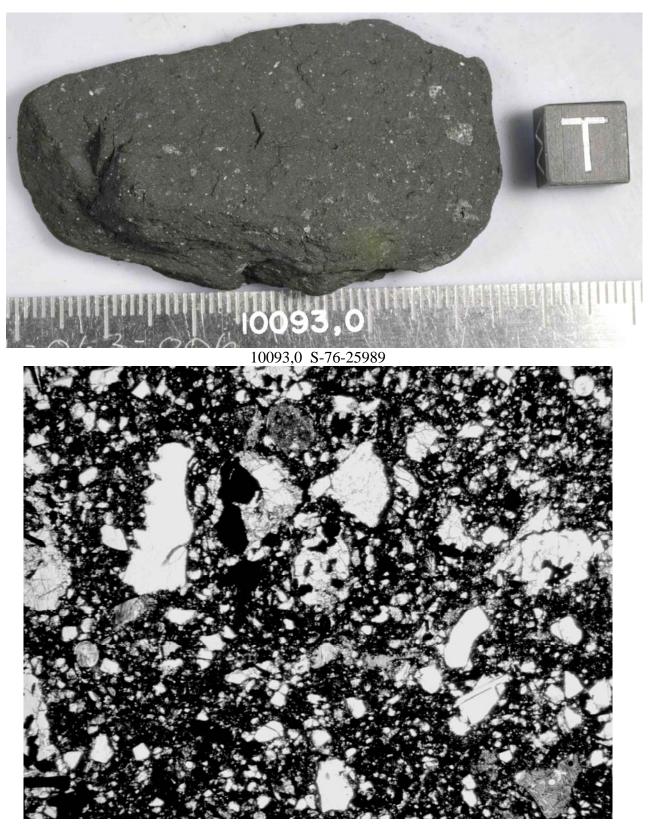
VARIABILITY: Homogeneous

SURFACE: No patina on any surfaces. Surface is rough on S₁, smooth on E₁ & W₁.

ZAP PITS: Many on E_1 , few on N_1 , and S_1 , none on any others. Pits are glass lined up to .8 mm in size.

		%OF		SIZI	E(MM)
COMPONENT	<u>COLOR</u>	<u>ROCK</u>	SHAPE	DOM.	RANGE
Matrix	Med.dk. grey	98%			
Basalt clast	Honey brown, black & white	1%	Angular to sub- rounded	1	1-2
White clast	White	<1%	Subangular to subrounded	.8	.7-1
Brown & White	Honey brown & clast wh		Angular	5	
Salt & Pepper clast	Black & white	<1%	Angular to sub- rounded	.8	.3-1.0
Grey clast	Submetallic	<1%	Subrounded	.5	

CAVITIES: Absent.



SECTION: 10093,5 Width of field 1.35 mm plane light S-76-28121

BY: Walton

SECTION: 10093,5

SUMMARY: Partly devitrified typical breccia with abundant crystallites in the matrix. Over one half of the matrix is composed of small crystallites giving the overall appearance of the matrix a light brown coloration.

MATRIX 75% OF ROCK

PHASE	% OF SECTION	<u>SHAPE</u>	SIZE (MM)	<u>COMMENTS</u>
Lt to dk brn	100%		<0.001	Moderate glass content; high crystallite content.

MINERAL CLASTS 12% OF ROCK

<u>PHASE</u>	RELATIVE ABUNDANCE	<u>SHAPE</u>	SIZE(mm)
Pyroxene ₁	Very abundant	Angular to irregular	0.001-0.4
Plagioclase ₂	Moderate	Blocky to irregular	0.001-0.4
Opaques ₃	Few	Skeletal to blocky	0.001-0.1

1) Many show poor optical characteristics; mainly smaller fragments.

2) A few large shards; most show good twin planes.

3) A few larger blocky crystals; numerous small fragments in matrix.

LITHIC CLASTS 9% OF ROCK

TYPE	RELATIVE ABUNDANCE	<u>SHAPE</u>	SIZE(MM)
Small	Very abundant	Round to irregular	0.001-1.0
Large ₄	One present	Irregular	>1.0

4) A fine-grained basalt consisting of pyroxene, plagioclase and ilmenite.

GLASS CLASTS 4 % OF ROCK

<u>TYPE</u>	RELATIVE ABUNDANCE	<u>SHAPE</u>	<u>SIZE(MM)</u>
Yellow-Orange ₅	Very abundant	Angular to spherical	0.001-0.6
White ₆	Few	Angular to spherical	0.001-0.3

5) Approximately half angular shards and half spheres or part spheres: some devitrification.6) Mostly angular shards; a few part spheres.

HISTORY AND PRESENT STATUS OF SAMPLES 7/15/76

10093 was part of 10002,22 (Bulk Sample generic processed in the Bio-Prep Lab.) Upon reexamination in SSPL it was assigned its own generic number and allocations were made for thin sections and chemical analysis.

PRISTINE SAMPLES

0 24.17 gm Rock. Three pitted surfaces. VAC-SSPL

NO RETURNED SAMPLES