

10091

Sample 10091 is an angular to sub-angular, medium dark grey, breccia. This sample originally weighed 24 gm and presently measures 4.2x3x2 cm. It was originally returned in ALSRC #1003 (Bulk Sample container).

BINOCULAR DESCRIPTIONS

BY: Geeslin

DATE: 7/9/76

ROCK TYPE: Breccia

SAMPLE: 10091,26 WEIGHT: 10.41gm

COLOR: Medium dark grey

DIMENSIONS: 4.2 x 3 x 2 cm

SHAPE: Angular to subangular

COHERENCE: Intergranular - fairly coherent  
Fracturing - absent

FABRIC/TEXTURE: Anisotropic/Breccia

VARIABILITY: Homogeneous

SURFACE: Edges fairly sharp and not rounded. Some patina on T<sub>1</sub>, N<sub>1</sub>, faces.

ZAP PITS: Few on T<sub>1</sub>-N<sub>1</sub>.

CAVITIES: Absent

<u>COMPONENT</u>	<u>COLOR</u>	<u>%OF ROCK</u>	<u>SHAPE</u>	<u>SIZE(MM) DOM. RANGE</u>	
Basalt Clast <sub>1</sub>	Black, White/Brn	10	Angular to rounded	3	2-5
Matrix	Dk.Grey	90	-----	----	----

1) Pyroxene, plagioclase and ilmenite. All crystallites, even distribution.

#### THIN SECTION DESCRIPTION

There was no thin section for the generics 10091 available at the onset of Secondary Examination. It was judged that the remaining sample (10.41 gm) should not be chipped for a thin section allocation.



10091,26 (S-76-25552)

HISTORY AND PRESENT STATUS OF SAMPLES - 7/12/76

10091 was removed from the Bulk Sample container (ALSRC #1003) and split in the Bio-Prep Lab. There are no remaining pristine samples. The one remaining returned sample was re-examined in RSPL.

PRISTINE SAMPLES:

None

RETURNED SAMPLES:

36      10.41 gm      Chip. One face has a few pits.

## CHEMICAL ANALYSES

<u>Element</u>	<u>Number of Analyses</u>	<u>Mean</u>	<u>Units</u>	<u>Range</u>
SiO <sub>2</sub>	2	40.64	PCT	4.27
Al <sub>2</sub> O <sub>3</sub>	2	11.62	PCT	6.62
TiO <sub>2</sub>	2	8.84	PCT	2.50
FeO	2	17.37	PCT	3.86
MnO	2	.194	PCT	.129
MgO	2	7.05	PCT	1.16
CaO	2	10.49	PCT	4.78
Na <sub>2</sub> O	2	.198	PCT	.305
K <sub>2</sub> O	2	.211	PCT	.133
P <sub>2</sub> O <sub>5</sub>	2	.041	PCT	.032
H	2	.21	PPM	.020
Li	2	3.90	PPM	.4
Rb	2	10.00	PPM	6.0
Cs	2	.550	PPM	.67
Sr	2	41.00	PPM	2.0
Ba	2	64.00	PPM	92.0
V	2	28.00	PPM	6.0
Cr <sub>2</sub> O <sub>3</sub>	2	.285	PCT	.044
Co	2	11.8	PPM	4.4
Ni	2	290.0	PPM	260.0
Y	2	1.35	PPM	.100
Zr	2	23.5	PPM	17.00
Nb	2	2.05	PPM	.5
Ag	2	2.0	PPM	2.0
La	2	.535	PPM	.39
Ce	2	1.90	PPM	1.80
B	2	.37	PPM	.52
Ga	2	2.3	PPM	1.4
Tl	1	2.70	PPB	0
C	1	6.0	PPM	0
Ge	2	.875	PPM	.85
N	1	15.00	PPM	0
As	2	.335	PPM	.110
S	2	.245	PCT	.07
F	2	3.05	PPM	1.3
Cl	2	2.65	PPM	1.3

Analysts: Oro et al., (1970).

No Age References