

10085

10085 was the generic number assigned to the <1mm sieve fraction of the Bulk Sample fines. They were removed from ALSRC #1003 and sieved in the Bio-Prep Lab. Upon re-examination in SSPL, it was noted that many subsamples of 10085 are >1mm in size. The larger subsamples of this generic were re-sieved in RSPL and the >4mm coarse fines were described.

COARSE FINES DESCRIPTION

SAMPLE: 10085,737 NUMBEROF PARTICLES: 1 WEIGHT(GM): .501

COHERENCE: Coherent

SHAPE: Rounded

SURFACE: Not pitted. Saw mark on one side.

COLOR: Grey

MINERALOGY: Microbreccia fragment with basaltic clasts 5 to 7mm in diameter and white clasts <1mm to 4mm diameter.



S-76-26896

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,722 NUMBER OF PARTICLES: 3 WT.(gm): 1.268

COHERENCE: Coherent

SHAPE: 3 fragments of irregular shape

SURFACE: Granulated to semi-fresh

COLOR: Medium grey

MINERALOGY: Contains olivine, pinkish brown pyroxene, white to clear plagioclase, and ilmenite.

REMARKS: 3 micro-gabbroic fragments with crystal lined rugs.



S-76-26899

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,723 NUMBER OF PARTICLES: 1 WT.(gm): .545

COHERENCE: Coherent

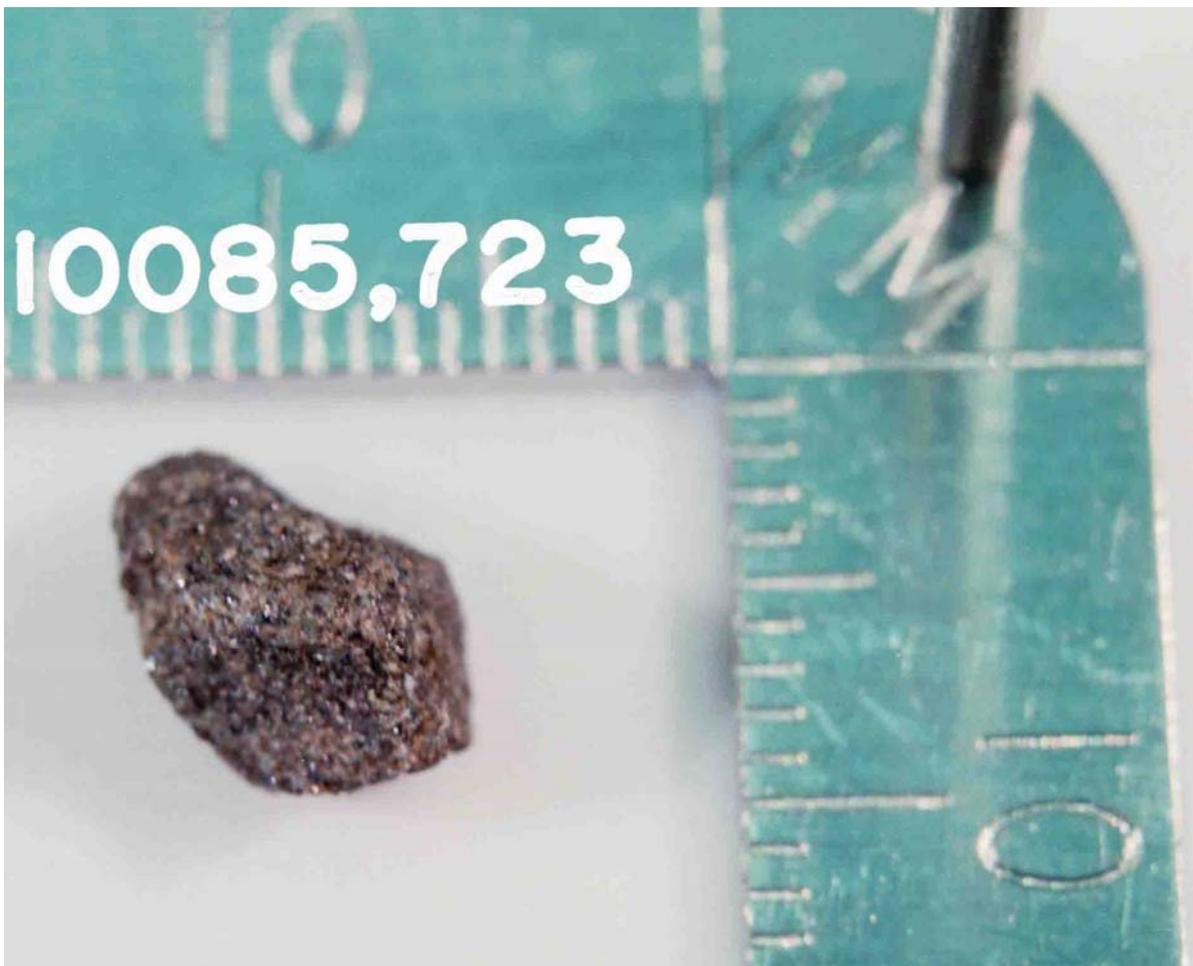
SHAPE: Irregular

SURFACE: Fairly fresh appearing

COLOR: Medium grey

MINERALOGY: White to clear plagioclase, reddish brown pyroxene, ilmenite.

REMARKS: Micro-gabbroic fragments w/o vugs.



S-76-26898

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,724 NUMBEROF PARTICLES: 1 WT.(gm): .078

COHERENCE: Coherent

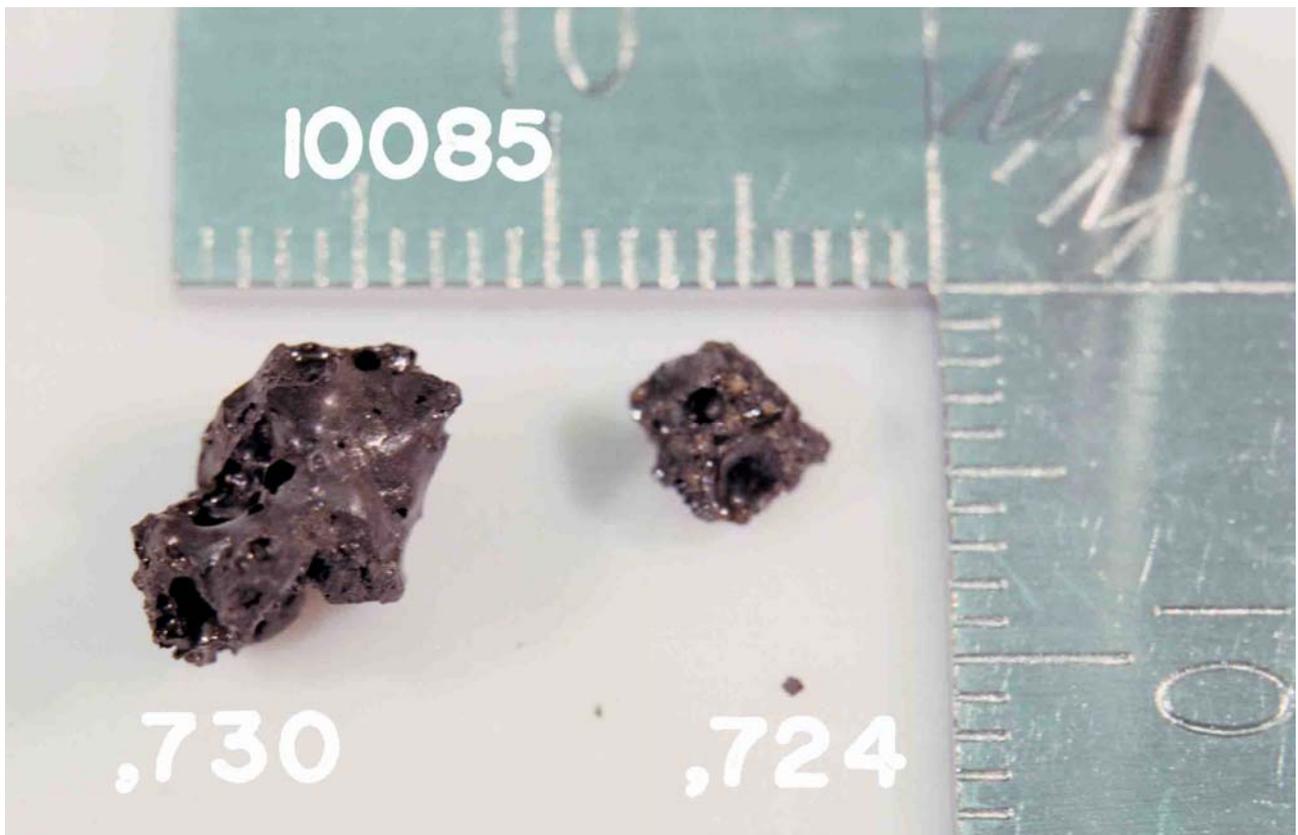
SHAPE: Jagged

SURFACE: Vesicular

COLOR: Black

MINERALOGY: Glass

REMARKS: Black, shiny vesicular glass



S-76-26884

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,725 NUMBEROF PARTICLES: 1 WT.(gm): .039

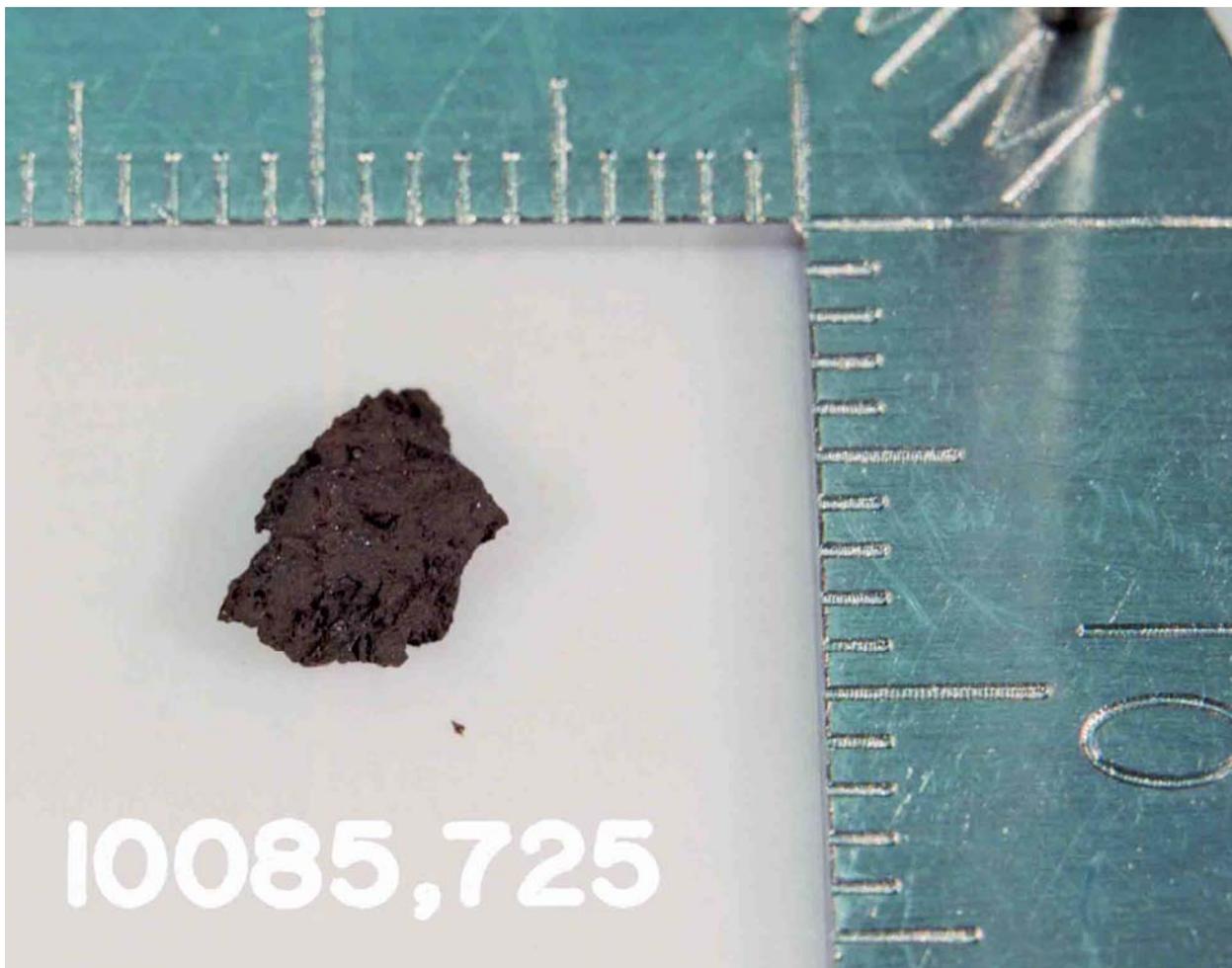
COHERENCE: Friable

SHAPE: Rounded

SURFACE: Smooth

COLOR: Black

MINERALOGY: Soil breccia black matrix glass (no clasts)



S-76-26883

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,726

NUMBEROF PARTICLES: 3

WT.(gm): .349

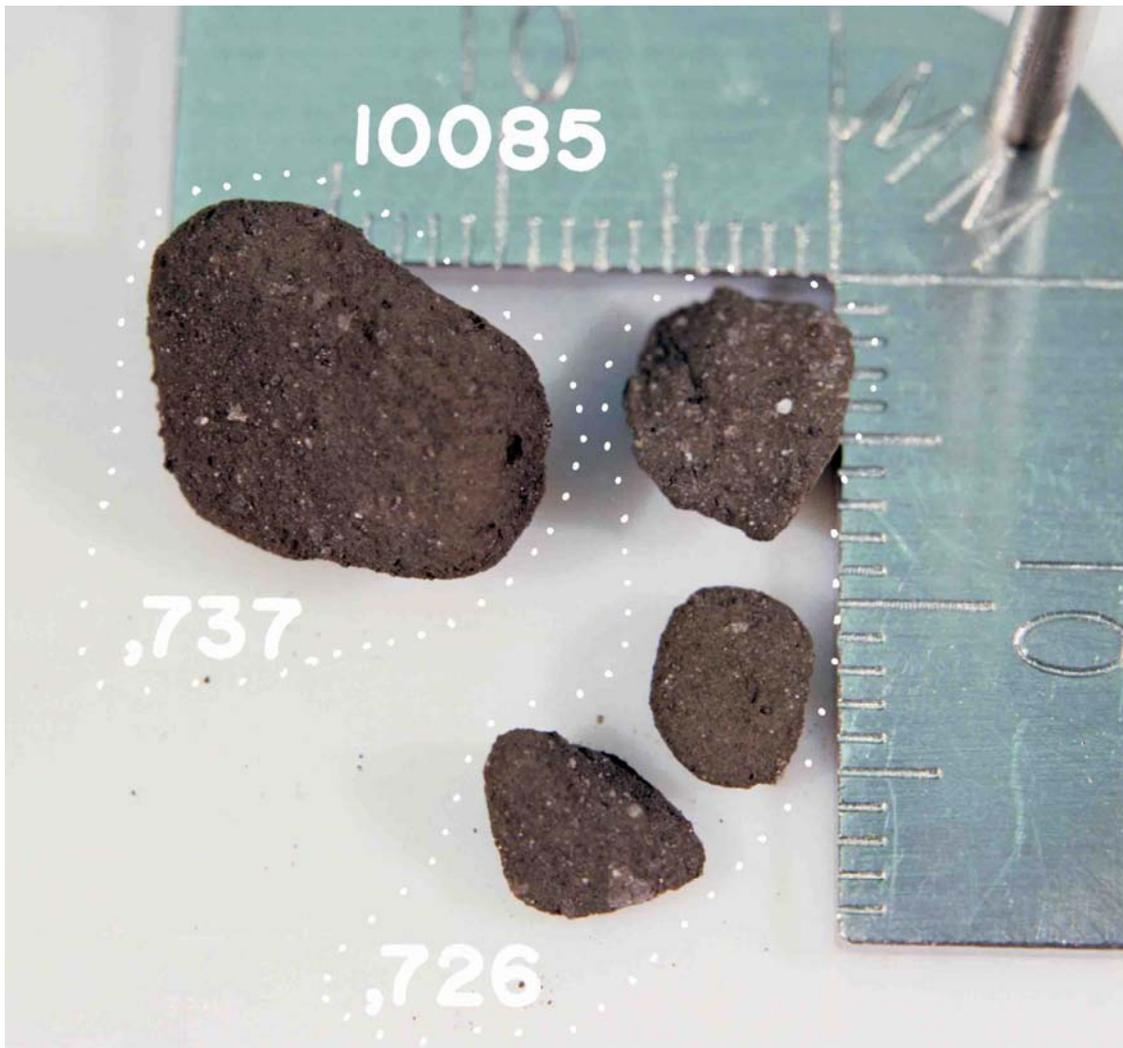
COHERENCE: Friable

SHAPE: Rounded

SURFACE: Not pitted

COLOR: Dark grey

MINERALOGY: Glass matrix with a few white clasts <1 mm in diameter.



S-76-26881

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,727 NUMBER OF PARTICLES: 2 WT.(gm): .240

COHERENCE: Coherent

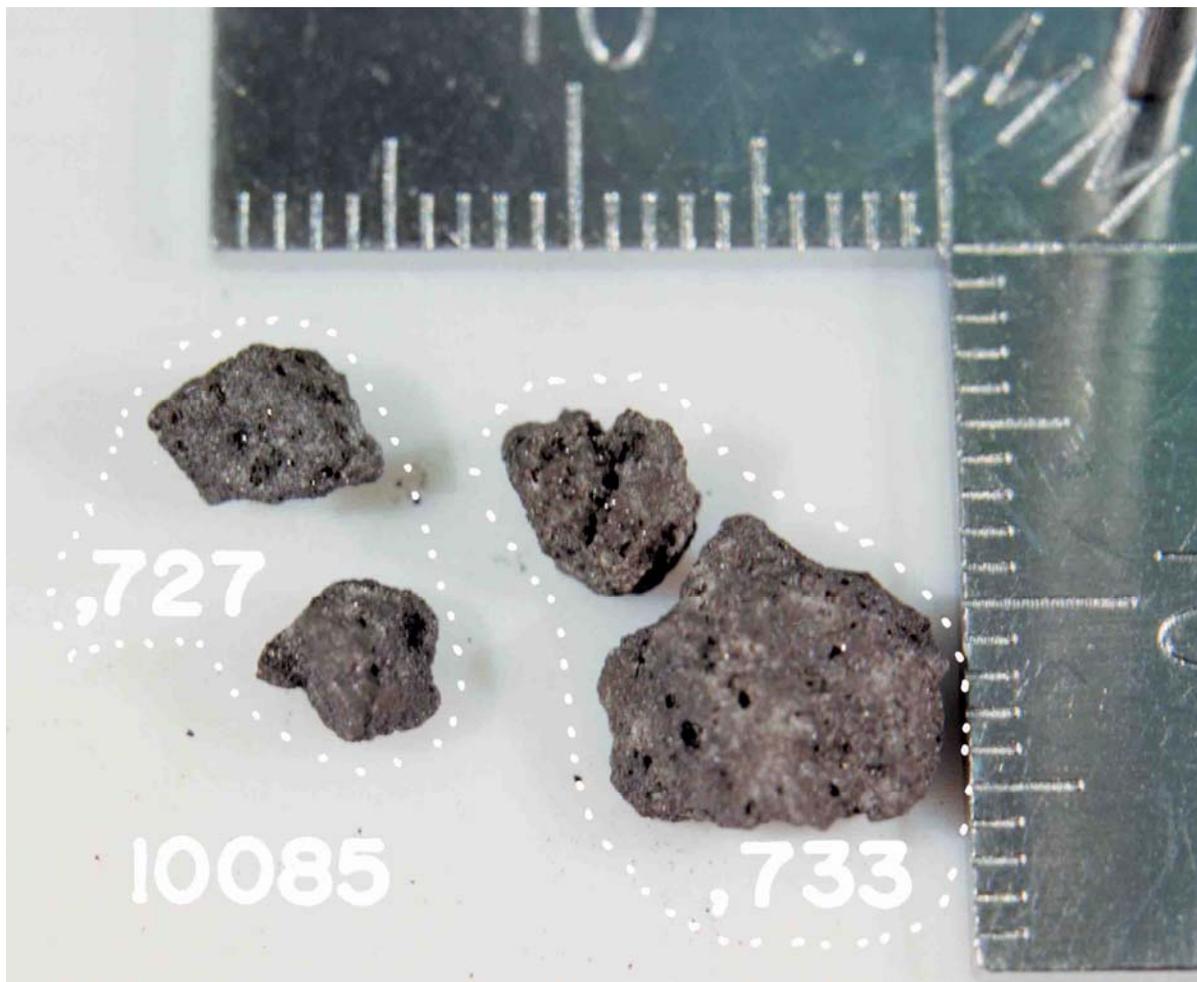
SHAPE: Irregular

SURFACE: Granulated to semi-fresh

COLOR: Dark grey

MINERALOGY: Ilmenite, plagioclase and pyroxene

REMARKS: Vuggy fine-grained microgabbro(ilmenite in vugs).



S-76-26882

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,728 NUMBER OF PARTICLES: 3 WT.(gm): .546

COHERENCE: Coherent

SHAPE: Irregular

SURFACE: Fresh to semi-fresh

COLOR: Light grey

MINERALOGY: Plagioclase, ilmenite, and reddish-brown pyroxene and olivine on two fragments.

REMARKS: Micro-gabbro; two of the fragments have a green mineral (probably olivine). One does not.



S-76-26892

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,729 NUMBEROF PARTICLES: 1 WT.(gm): .176

COHERENCE: Coherent

SHAPE: Rectangular prism (approximately)

SURFACE: Granulated on one end. Other surfaces semi-fresh. Vesicular

COLOR: Dark grey

MINERALOGY: Plagioclase, ilmenite, pyroxene

REMARKS: Vesicular basaltic fragments or ilmenite lines the vesicles.



S-76-26893

10085

COARSE FINES DESCRIPTION

SAMPLES: 10085,730 NUMBER OF PARTICLES: 1 WT.(gm): .321

COHERENCE: Coherent

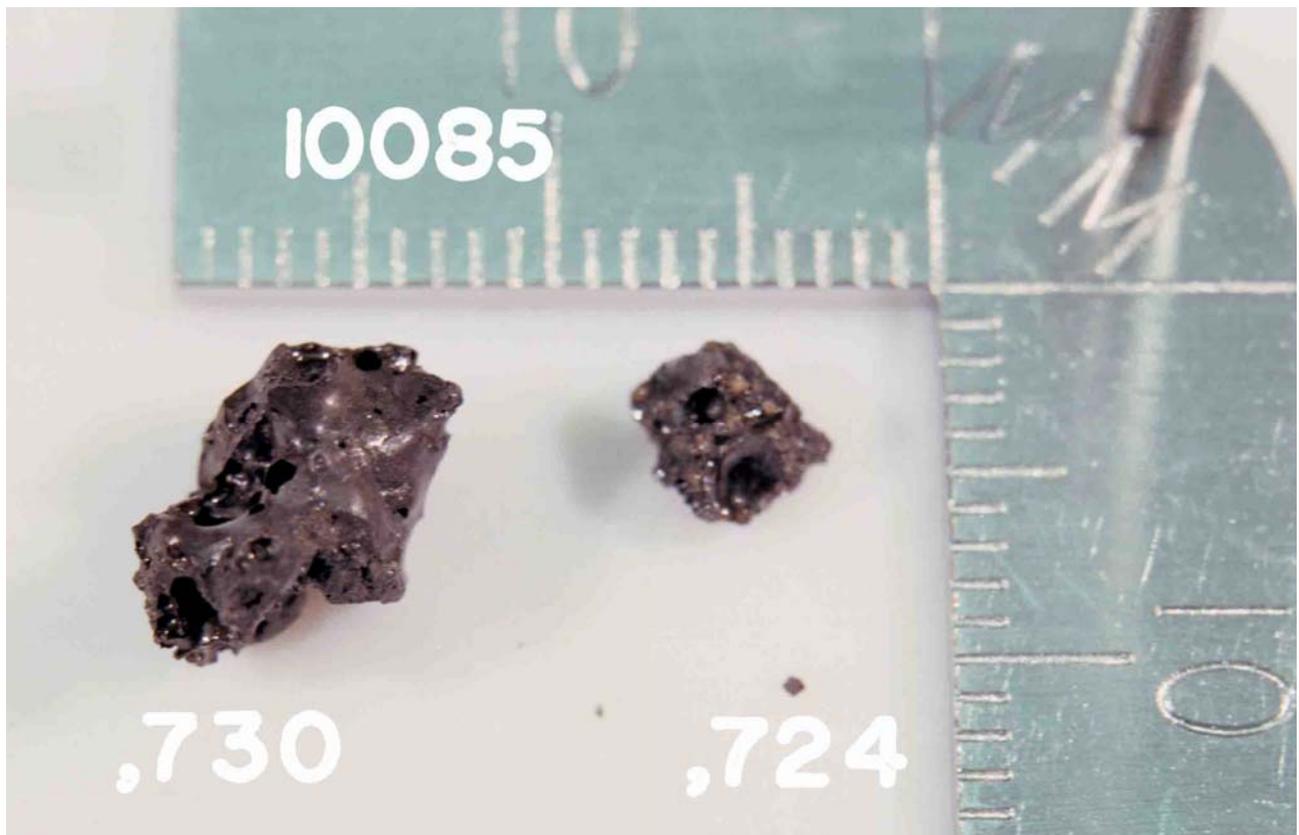
SHAPE: Jagged

SURFACE: Vesicular

COLOR: Black

MINERALOGY: Glass

REMARKS: Black, shiny vesicular glass.



S-76-26884

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,731 NUMBEROF PARTICLES: 1 WT.(gm): .150

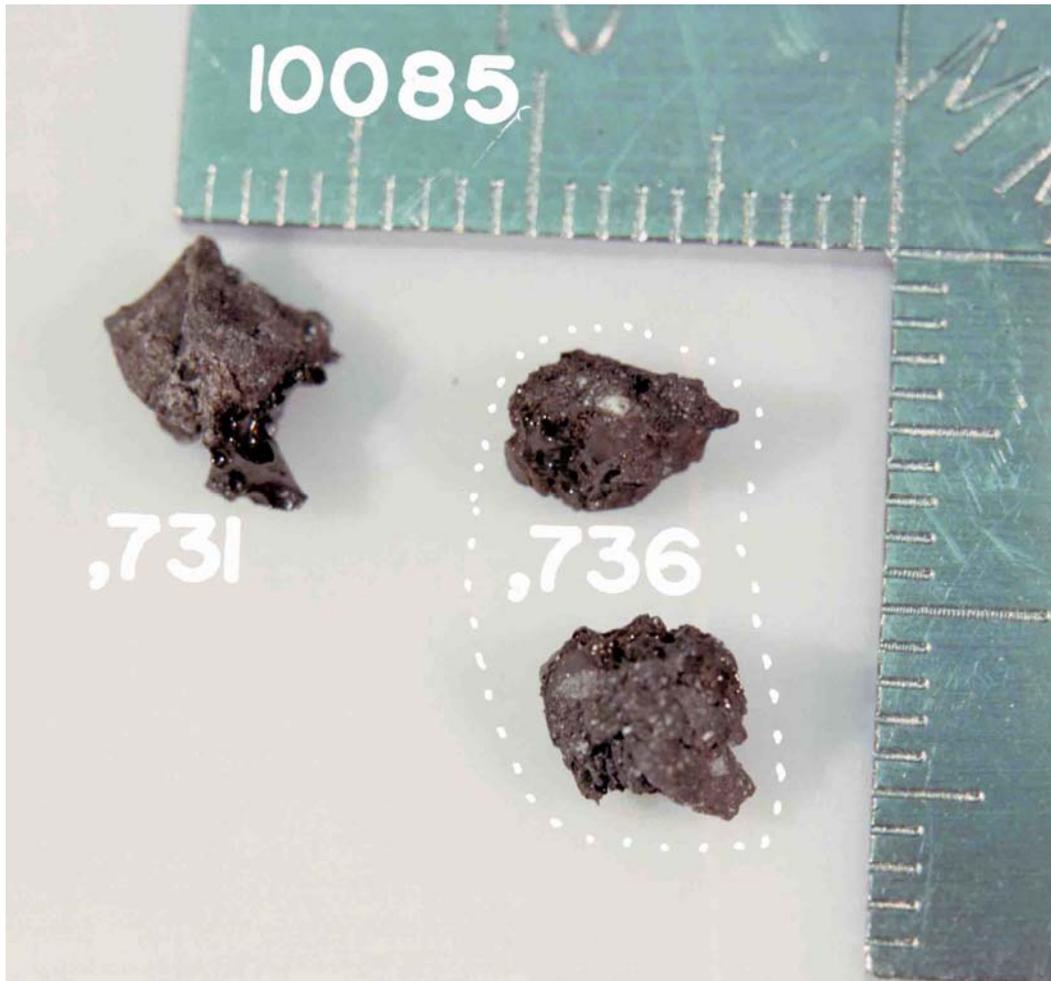
COHERENCE: Coherent

SHAPE: Irregular

SURFACE: One surface topped with shiny vesicular glass, other surfaces jagged.

COLOR: Grey with black glass

MINERALOGY: Coherent soil breccia with a few white clasts <1mm. Shiny, black vesicular glass on one surface.



S-76-26889-Image acquired by L. Carrillo from JSC Photo Lab 1/02/03.

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,733

NUMBEROF PARTICLES: 2

WT.(gm): .589

COHERENCE: Coherent

SHAPE: Irregular

SURFACE: Granulated to pitted. Finely vesicular

COLOR: Dark grey

MINERALOGY: Ilmenite, plagioclase, pyroxene

REMARKS: Vuggy fine grained microgabbro (ilmenite in vugs).



S-76-26882

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,734

NUMBEROF PARTICLES: 1

WT.(gm): .144

COHERENCE: Coherent

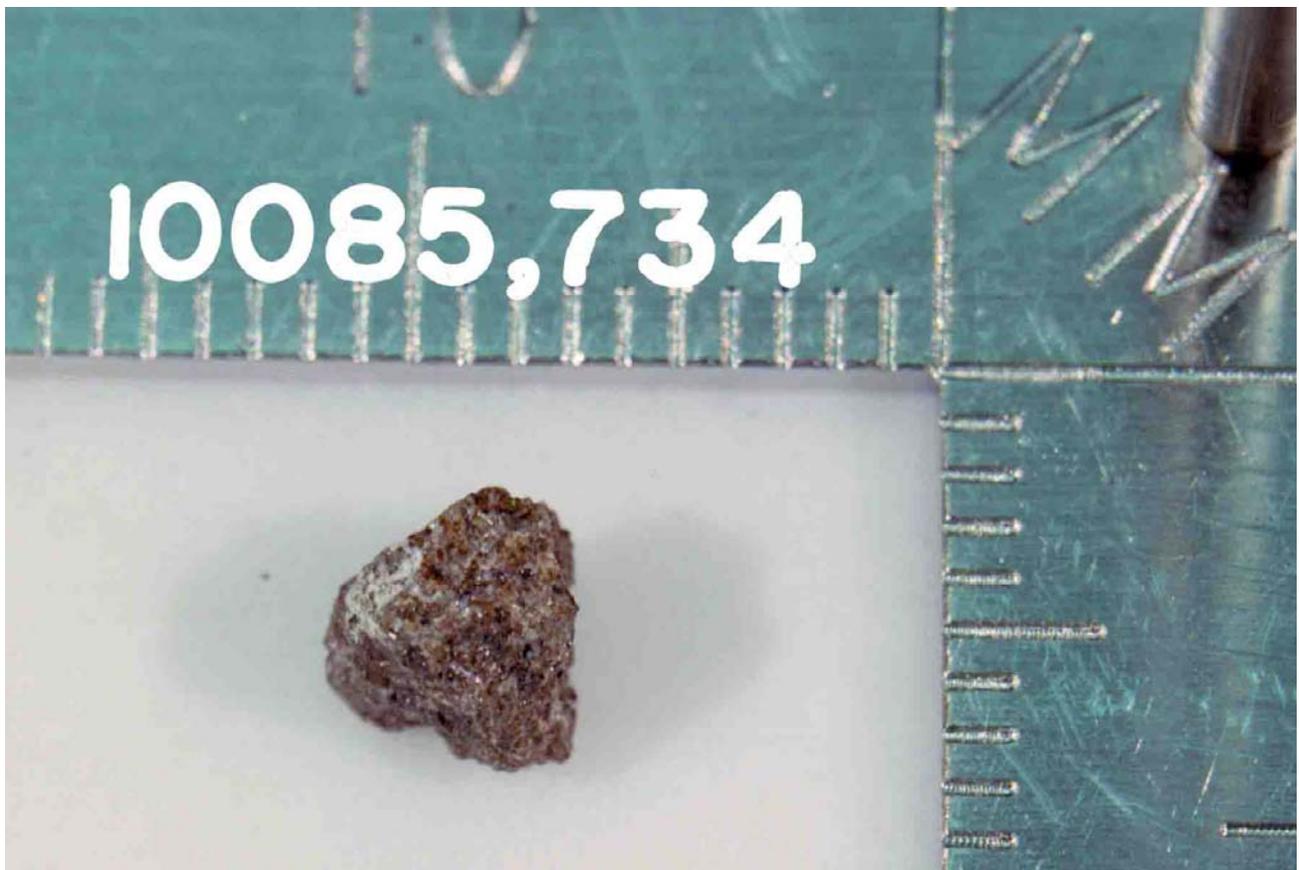
SHAPE: Trapezoidal prism

SURFACE: Highly granulated to semi-fresh. One surface has patina.

COLOR: Light grey

MINERALOGY: Ilmenite, plagioclase, reddish-brown pyroxene that looks like olivine
($<1\text{mm}$)

REMARKS: Microgabbroic fragment.



S-76-26891

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,735

NUMBEROF PARTICLES: 1

WT.(gm): .095

COHERENCE: Coherent

SHAPE: Irregular

SURFACE: Rough

COLOR: Black

MINERALOGY: Dull black glass with one clast <1 mm



S-76-26890

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,736 NUMBEROF PARTICLES: 2 WT.(gm): .262

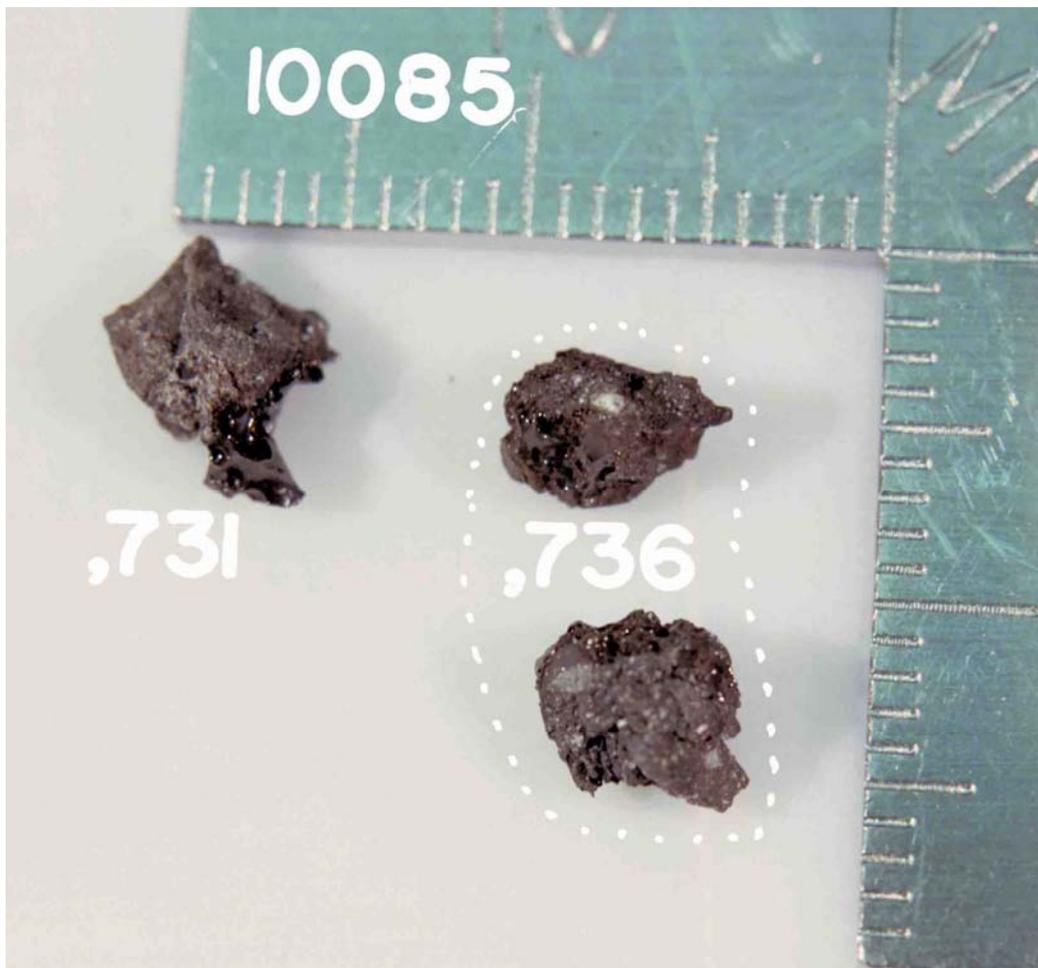
COHERENCE: Coherent

SHAPE: Irregular

SURFACE: Each has one surface rough with black shiny vesicular glass.

COLOR: Grey with black glass

MINERALOGY: Coherent soil breccia fragments with a few white clasts <1mm. Shiny, black vesicular glass on one surface of each fragment.



S-76-26889

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,737

NUMBEROF PARTICLES: 1

WT.(gm): .758

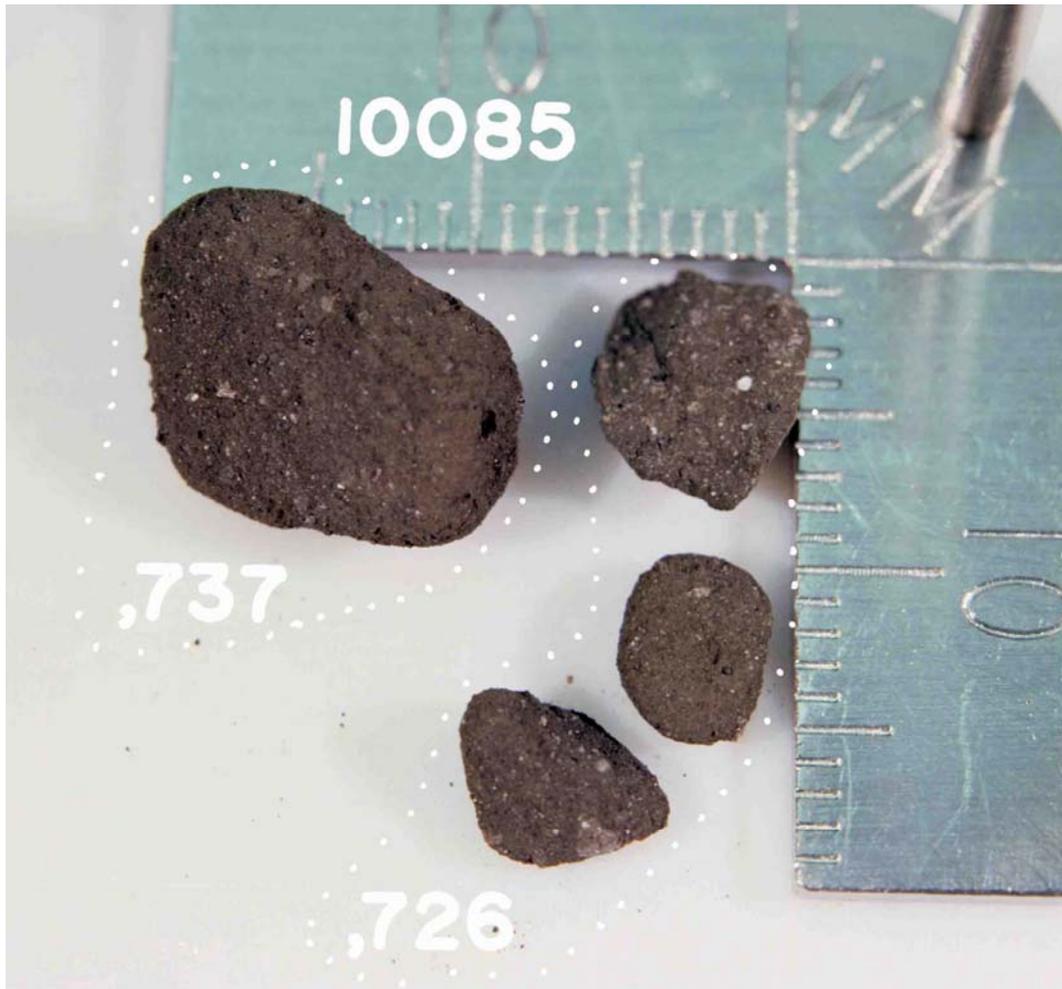
COHERENCE: Friable

SHAPE: Rounded

SURFACE: Not pitted

COLOR: Dark grey

MINERALOGY: Glass matrix with a few white clasts <1 mm in diameter.



S-76-26881

10085

COARSE FINES DESCRIPTION

SAMPLE: 10087,739

NUMBEROF PARTICLES: 1

WT.(gm): .179

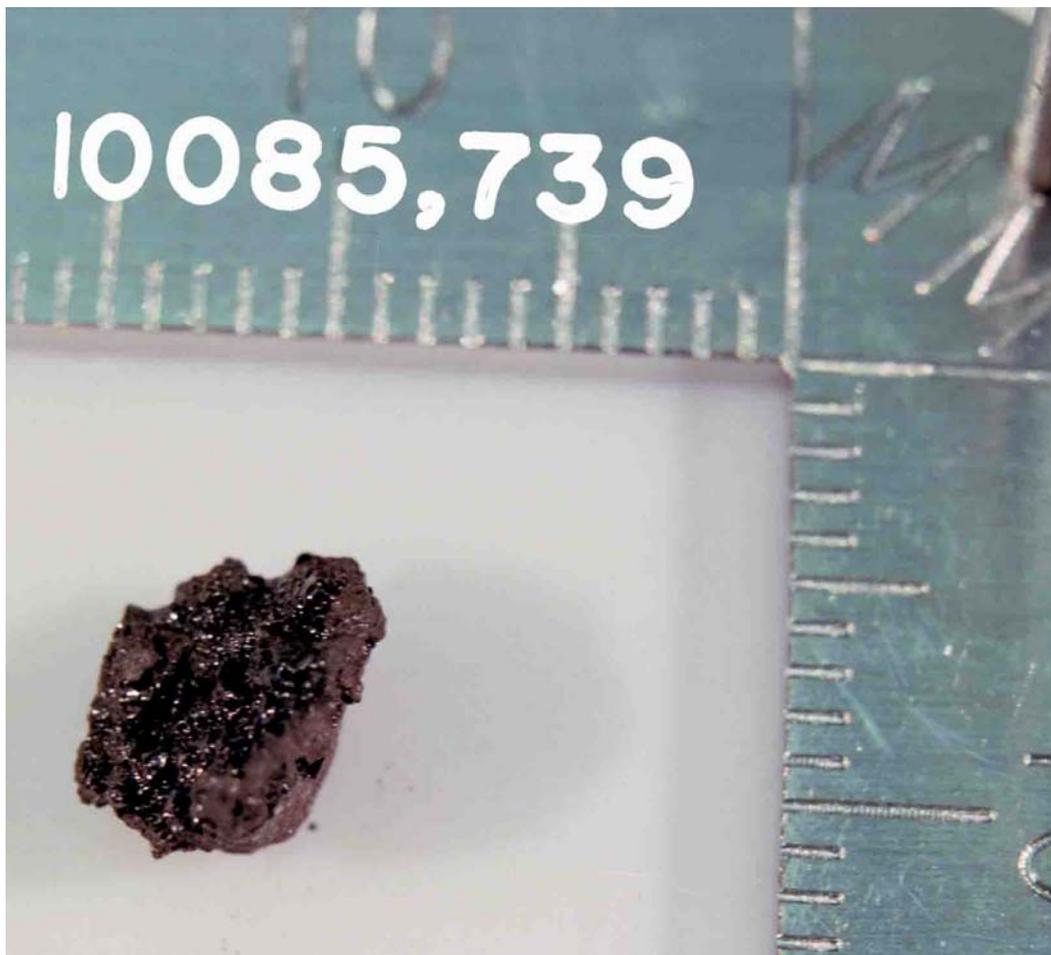
COHERENCE: Coherent

SHAPE: Semi-domed

SURFACE: One surface covered with vesicular black glass; the other surface is fractured.

COLOR: Glass black, breccia grey

MINERALOGY: Coherent soil breccia with white clasts <1mm topped on one side with vesicular black glass.



S-76-26888- Image acquired by L. Carrillo from JSC Photo Lab 1/02/03.

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,740

NUMBEROF PARTICLES: 2

WT.(gm): .687

COHERENT: Coherent

SHAPE: Rounded

SURFACE: Exposed, with some patina.

COLOR: Medium grey

MINERALOGY: Ilmenite, plagioclase, reddish brown pyroxene.

REMARKS: Microgabbroic fragments with a few ilmenite lined vugs.



S-76-26887

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,741 NUMBER OF PARTICLES: 1 WT.(gm): .266

COHERENCE: Coherent

SHAPE: Irregular and jagged-flat

SURFACE: Pitted on one side, fresh looking on the other.

COLOR: Dark grey

MINERALOGY: Ilmenite, plagioclase, pyroxene

REMARKS: Vesicular-vuggy basalt



S-76-26894

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,742 NUMBER OF PARTICLES: 1 WT.(gm): .274

COHERENCE: Friable

SHAPE: Rounded pyramid

SURFACE: Two pits on one surface.

COLOR: Dark grey

MINERALOGY: Soil breccia with a few white clasts >1mm.



S-76-26895

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,744

NUMBEROF PARTICLES: 1

WT.(gm): .105

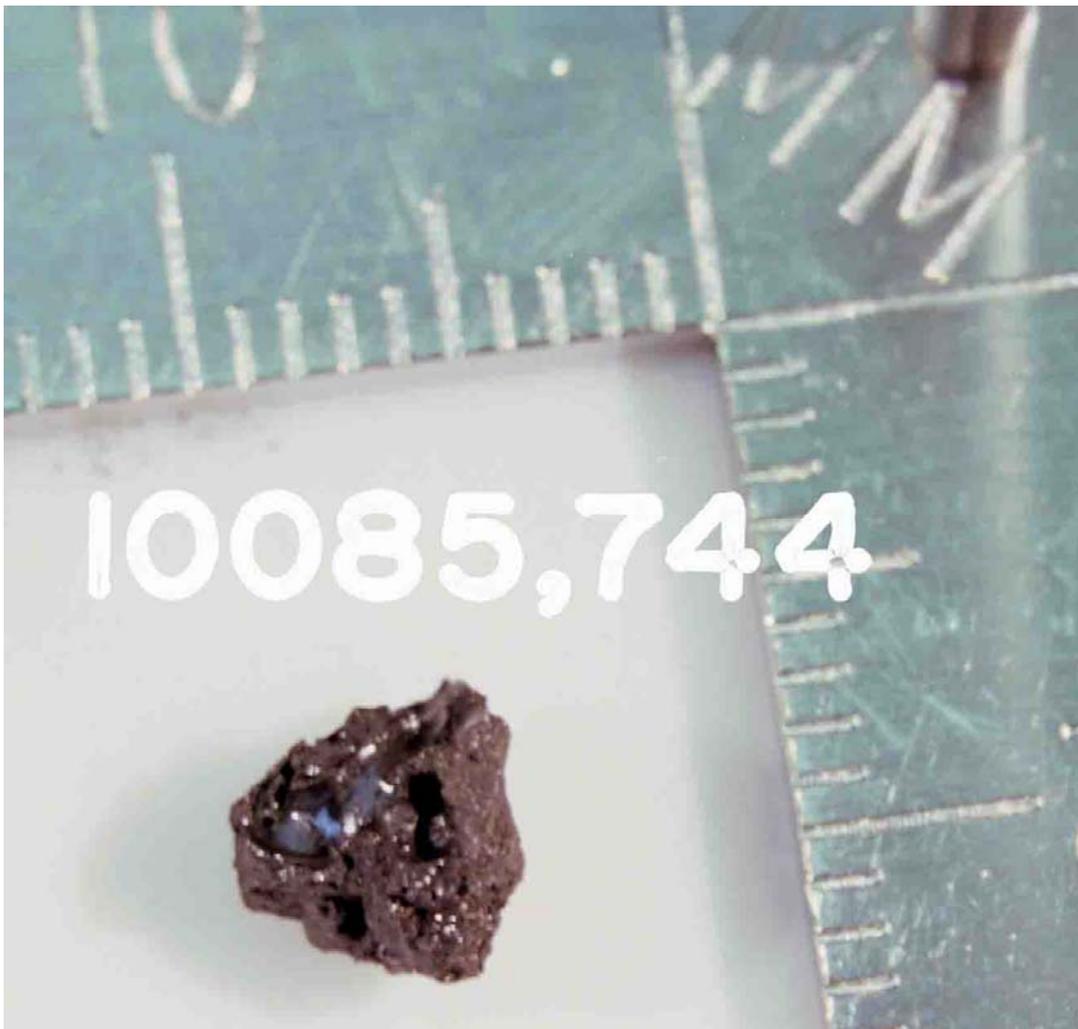
COHERENCE: Coherent

SHAPE: Irregular

SURFACE: Vesicular

COLOR: Black

MINERALOGY: Black vesicular glass, dull in some places, shiny in others.



S-76-2689

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,745

NUMBER OF PARTICLES: 1

WT.(gm): .655

COHERENCE: Coherent

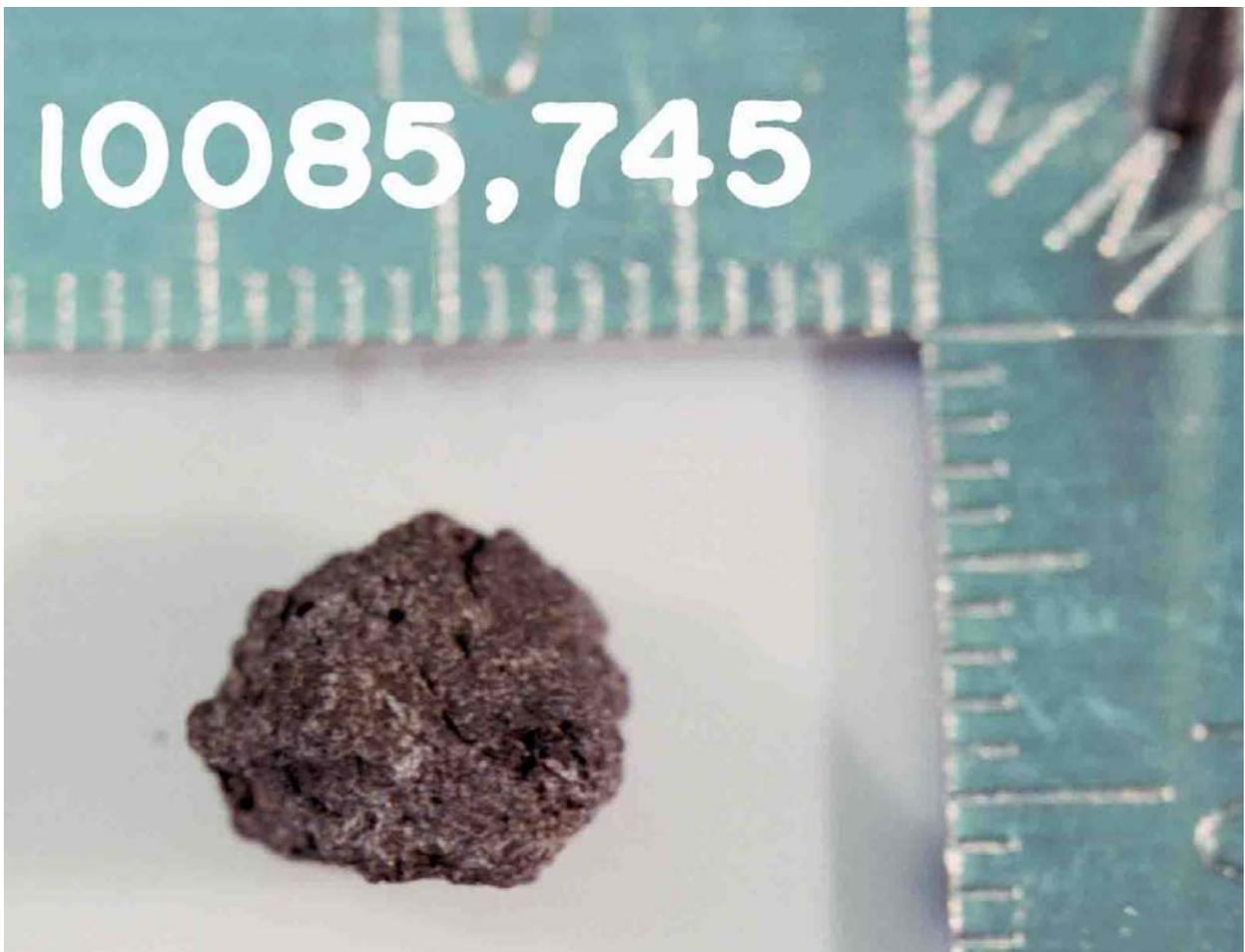
SHAPE: Rounded

SURFACE: Granulated with some patina.

COLOR: Dark grey

MINERALOGY: ilmenite, plagioclase, pyroxene

REMARKS: Vuggy, basaltic fragment.(Basalt to microgabbro in grain size)



S-76-26885

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,746

NUMBER OF PARTICLES: 2

WT.(gm): .728

COHERENCE: Coherent

SHAPE: The largest in fragment is prismatic, disc-like. The smaller one is non-descript, irregular.

SURFACE: The larger one has pits on one surface. Other surfaces have granulation and patina. The smaller fragment also has some patina.

COLOR: Medium grey

MINERALOGY: Ilmenite, reddish brown pyroxene, plagioclase

REMARKS: Two microgabbro fragments.



S-76-26886

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,753 NUMBER OF PARTICLES: 1 WT.(gm): .7912

COHERENCE: Moderately coherent

SHAPE: Sub-rounded

SURFACE: Smooth-all surfaces appear to be fresh except for some glassy splatter.

COLOR: Dark grey

MINERALOGY: Breccia with following clast types present: White clast, grey and white clast, salt and pepper clast and glass spherules. One clast is a grey and white, combined with a salt and pepper clast.



S-76-26848

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,754

NUMBER OF PARTICLES: 1

WT.(gm): .5941

COHERENCE: Tough

SHAPE: Angular

SURFACE: All surfaces fresh

COLOR: Dark grey

MINERALOGY: Approximately 70% dark minerals and 30% light

REMARKS: Very fine grained vesicular basalt. Vesicles comprise only about 5% of the surface area. Grain size is too small to determine exact percentages of components present.



S-76-26850

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,755 NUMBER OF PARTICLES: 3 WT.{gm): .2774

COHERENCE: Coherent

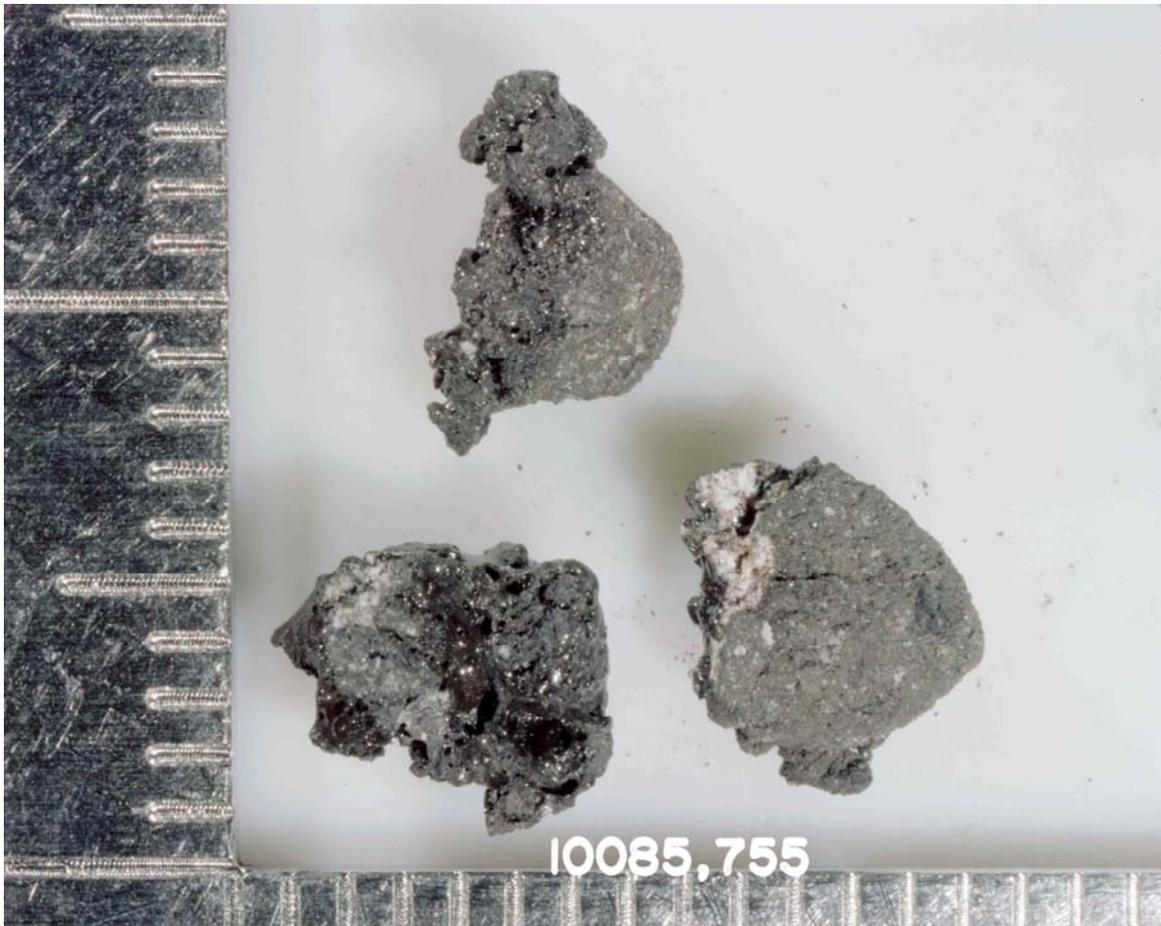
SHAPE: Equant, rounded

SURFACE: Fresh where not glass coated.

COLOR: Dark grey

MINERALOGY: Glass coated breccias:

1. Glass is vesicular, black.
2. 2 pieces consist of rounded dark grey breccias containing mostly mineral clasts .1-.4mm except one large salt and pepper clast 4.mm long. Glass coating on one side only.
3. 1 piece is 60% vesicular glass matrix enclosing grey and white clasts and a dark grey vesicular glassy breccia with a few white clasts.



S-76-26852

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,756 NUMBER OF PARTICLES: 1 WT. (gm): .2593

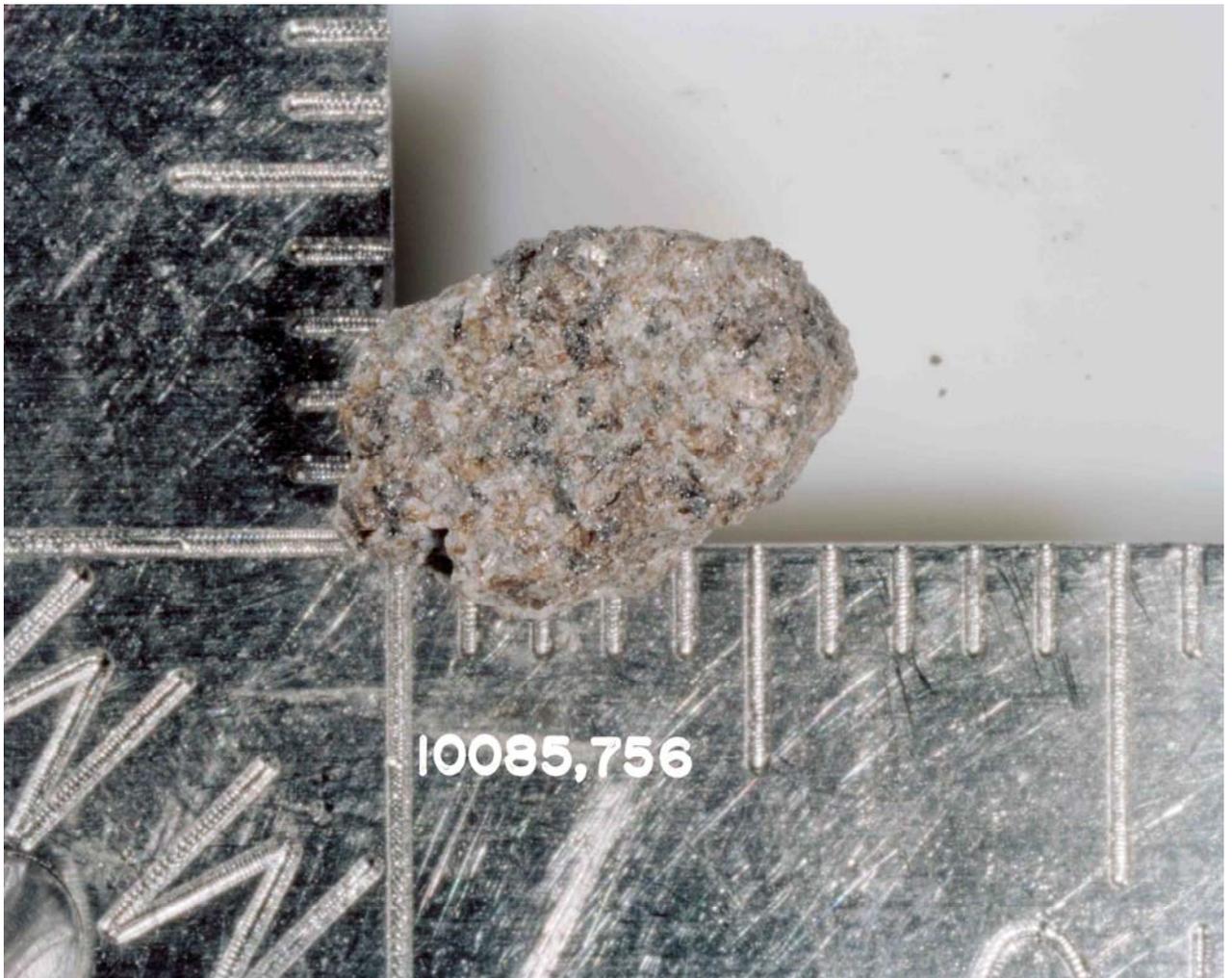
COHERENCE: Coherent

SHAPE: Equant, sub-rounded

SURFACE: Fresh

COLOR: Medium grey

MINERALOGY: Medium grain basalt
55-60% brown pyroxene
30-35% plagioclase
25% ilmenite
Grain size for all minerals ~.5mm



S-76-26851

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,757

NUMBER OF PARTICLES: 1

WT.(gm): 0.946

COHERENCE: Coherent

SHAPE: Equant, angular

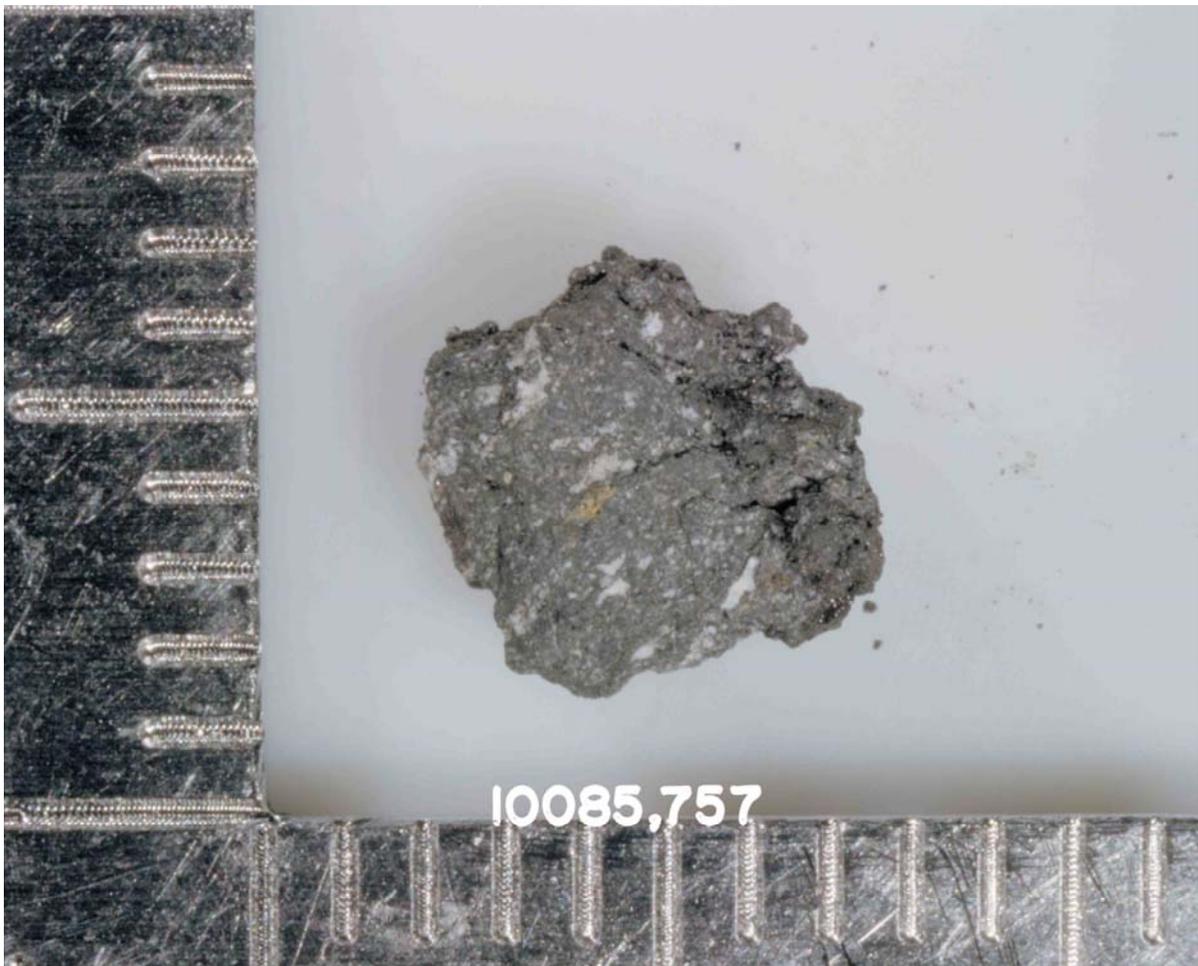
SURFACE: Fresh on all but one side

COLOR: Medium grey

MINERALOGY: Metamorphosed breccia

-Lamination of white clasts in medium grey matrix.

-One side covered with splashed glass and patina, but zap pits not observed.



S-76-26854

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,758 NUMBER OF PARTICLES: 2 WT.(gm): .4840

COHERENCE: Coherent

SHAPE: Equant, sub-angular.

SURFACE: Some fresh, some more rounded with patina but no zap pits.

COLOR: Medium grey

MINERALOGY: Fine grain basalt:

1 piece finer grained with larger crystals of ilmenite and pale green transparent plagioclase about .2mm long.

Well formed cinnamon crystals also present. <5% vugs 70% pyroxene
20% plagioclase, 10% ilmenite

1 piece larger grained bladed ilmenites, brown pyroxenes; elongated plagioclase crystals up to .8mm, >5% vugs. 60-65% pyroxene, 25% plagioclase
10-15% ilmenite



S-76-26853

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,759 NUMBER OF PARTICLES: 1 WT.(gm): .0987

COHERENCE: Coherent

SHAPE: Sub-rounded

SURFACE: Fresh, small amount of patina, vugs ~5%.

COLOR: Medium grey

MINERALOGY: Medium grain basalt:

Elongated plagioclase crystals (.4mm), some large pale green transparent plagioclase, equant brown pyroxene (.1mm), some ilmenites (.5mm). 70-80% shocked pyroxene
10-15% euhedral ilmenite, Remainder plagioclase



S-76-26855

10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,760 NUMBEROF PARTICLES: 1 WT.(gm): .5154

COHERENCE: Moderately coherent

SHAPE: Sub-rounded

SURFACE: Appears patina-covered all over. 2 faces have zap pits ~.5mm.

COLOR: Dark grey

MINERALOGY: Fine matrix (soil breccia) containing mineral clasts 0.2mm and larger grey basalt clasts (1.5-2mm).



S-76-26857

PRISTINE SAMPLES:

40	2.09	gm	Fines
45	1.03	gm	Fines
101	26.08	gm	Fines
102	0.83	gm	Fines
103	4.96	gm	Fines
104	171.95	gm	1-3mm Fines
105	28.19	gm	Fines
106	79.78	gm	Fines
141	1.22	gm	Fines
142	0.39	gm	Fines
143	2.44	gm	Fines
144	7.61	gm	Fines
145	4.05	gm	Fines

RETURNED SAMPLES:

10	7.308	gm	Fines
14	5.906	gm	Fines
20	9.822	gm	Fines
23	9.707	gm	Fines
146	14.394	gm	Fines
236	5.515	gm	Fines
256	7.729	gm	Fines
374	10.34	gm	Fines

723-726 Individually described in preceding pages.

CHEMICAL ANALYSES

<u>Element</u>	<u>Number of Analyses</u>	<u>Mean</u>	<u>Units</u>	<u>Range</u>
SiO ₂	1	42.13	PCT	0
Al ₂ O ₃	1	13.64	PCT	0
TiO ₂	1	7.69	PCT	0
FeO	1	15.29	PCT	0
MnO	1	.21	PCT	0
MgO	1	7.38	PCT	0
CaO	1	11.32	PCT	0

CHEMICAL ANALYSES

<u>Element</u>	<u>Number of Analyses</u>	<u>Mean</u>	<u>Units</u>	<u>Range</u>
Na ₂ O	1	.54	PCT	0
K ₂ O	1	.16	PCT	0
P ₂ O ₅	1	.1	PCT	0
Rb	2	2.98	PPM	.034
Sr	1	159.0	PPM	0
Ba	2	195.5	PPM	123.
Cr ₂ O ₃	1	.33	PCT	0
Ni	1	150.0	PPM	0
Cu	1	16	PPM	0
Zn	1	19	PPM	0
Y	1	124	PPM	0
Zr	1	351.0	PPM	0
Nb	1	15.0	PPM	0
S	1	.31	PCT	0

Analysts: Brown et al., (1970); Papanastassiou et al., (1970); Compston et al., (1970).

No Age References