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.
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.
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.
COARSE FINES DESCRIPTION

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

COHERENCE: Coherent
SHAPE: Jagged
SURFACE: Vesicular
COLOR: Black
MINERALOGY: Glass

REMARKS: Black, shiny vesicular glass
COARSE FINES DESCRIPTION

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

COHERENCE: Friable
SHAPE: Rounded
SURFACE: Smooth
COLOR: Black

MINERALOGY: Soil breccia black matrix glass (no clasts)
COARSE FINES DESCRIPTION

SAMPLE: 10085,726  NUMBER OF 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.
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
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.
10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,729          NUMBER OF 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 vesicules.
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.
COARSE FINES DESCRIPTION

SAMPLE: 10085,731
NUMBER OF 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.
COARSE FINES DESCRIPTION

SAMPLE: 10085,733
NUMBER OF 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).
10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,734  
NUMBER OF 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 (<1mm)

REMARKS: Microgabbroic fragment.
10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,735  NUMBER OF PARTICLES: 1  WT.(gm): .095

COHERENCE: Coherent
SHAPE: Irregular
SURFACE: Rough
COLOR: Black

MINERALOGY: Dull black glass with one clast <1 mm
COARSE FINES DESCRIPTION

SAMPLE: 10085,736  NUMBER OF 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.
COARSE FINES DESCRIPTION

SAMPLE: 10085,737
NUMBER OF 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.
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.
COARSE FINES DESCRIPTION

SAMPLE: 10085,740  NUMBER OF PARTICLES: 2  WT.(gm): 0.687

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.
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
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.
10085

COARSE FINES DESCRIPTION

SAMPLE: 10085,744
NUMBER OF PARTICLES: 1
WT.(gm): .105

COHERENCE: Coherent

SHAPE: Irregular

SURFACE: Vesicular

COLOR: Black

MINERALOGY: Black vesicular glass, dull in some places, shiny in others.
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)
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.
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.
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.
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.
COARSE FINES DESCRIPTION

SAMPLE: 10085,756  NUMBER OF PARTICLES: 1  WT. (gm): 0.2593

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 ~0.5mm
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
    -Lineation of white clasts in medium grey matrix.
    -One side covered with splashed glass and patina, but zap pits not observed.
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
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
COARSE FINES DESCRIPTION

SAMPLE: 10085,760  NUMBER OF 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).
COARSE FINES DESCRIPTION

SAMPLE: 10085,761    NUMBER OF PARTICLES: 2    WT.(gm): .3191

COHERENCE: Coherent

SHAPE: Angular

SURFACE: On each piece is one weathered surface containing whitened plagioclase and more rounded appearance, and light patina. Vugs <5%, zap pits on 1 piece.

COLOR: Medium grey

MINERALOGY: First piece: 55% known pyroxene, 30% plagioclase, 15% ilmenite. Grain size is 0.1-0.2mm.
Second piece: 50-55% pyroxene, 35-40% plagioclase, remainder ilmenite.

REMARKS: Fine grain basalt, fractured in several directions.
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 preceeding pages.

CHEMICAL ANALYSES

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