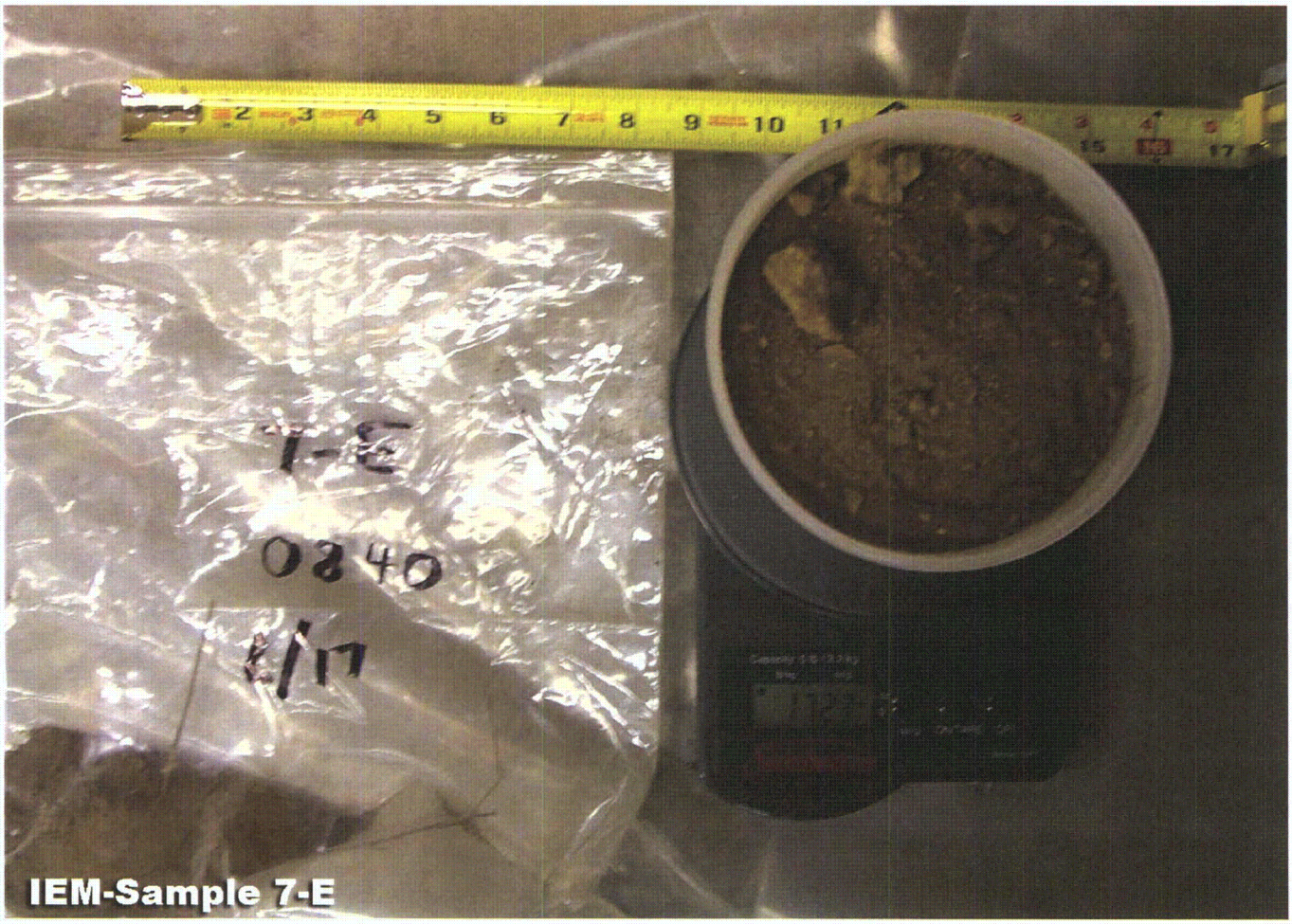
IEM-Sample 7-A

IEM-Sample 7-B

IEM-Sample 7-C

IEM-Sample 7-D



IEM-Sample 7-E

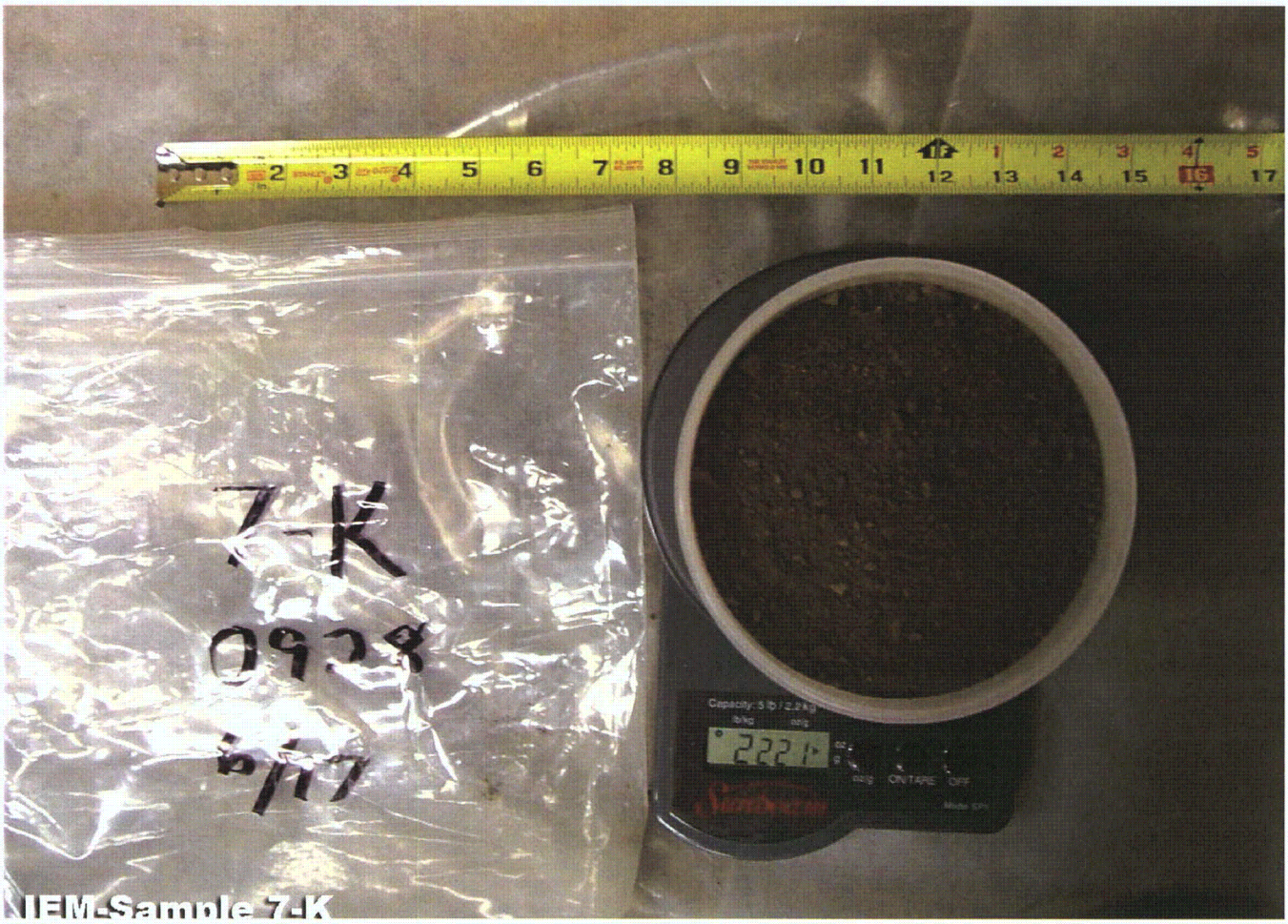
IEM-Sample 7-F

IEM-Sample 7-G

IEM-Sample 7-H

IEM-Sample 7-I

IEM-Sample 7-J



IEM-Sample 7-K

IEM-Sample 7-L

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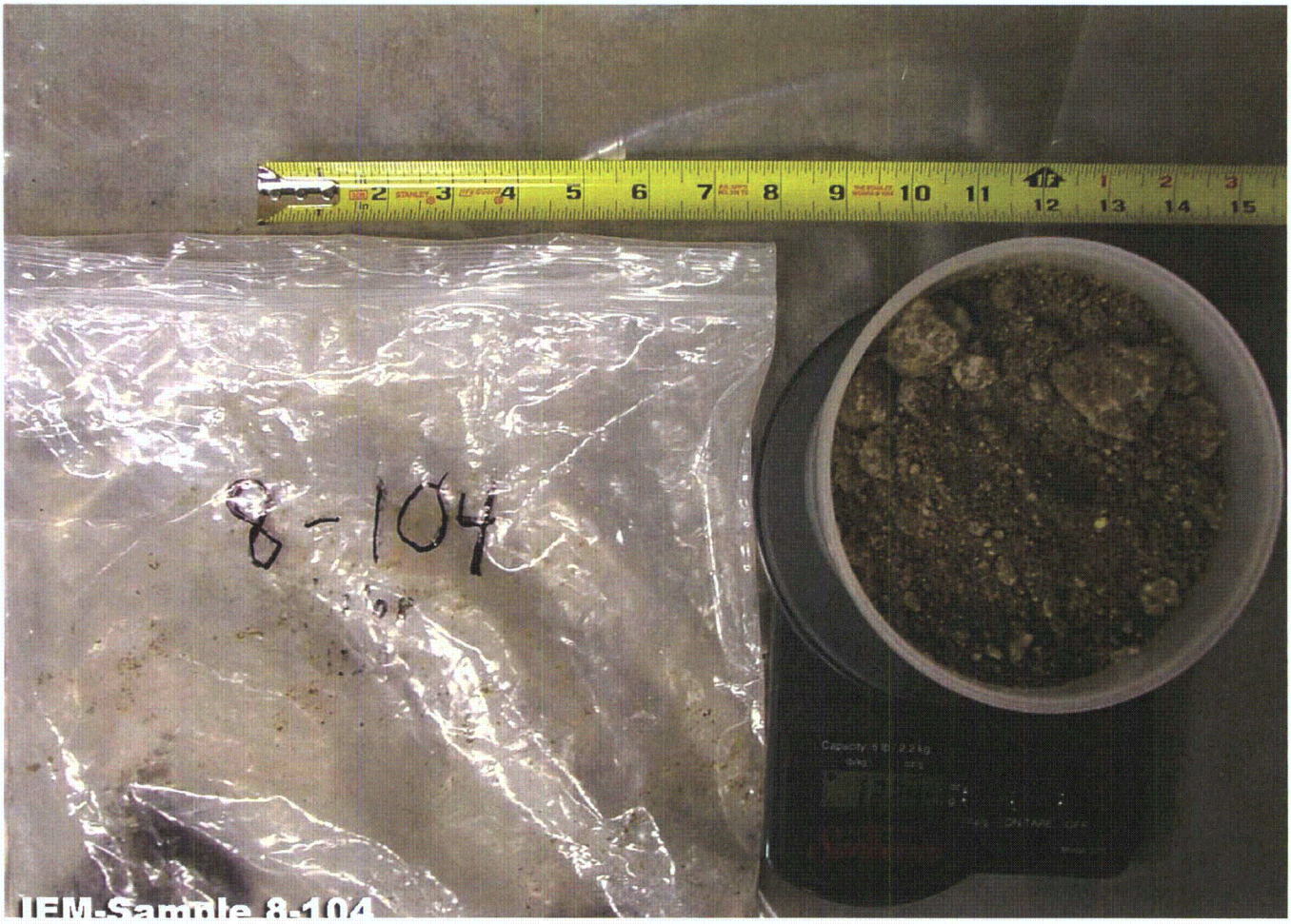

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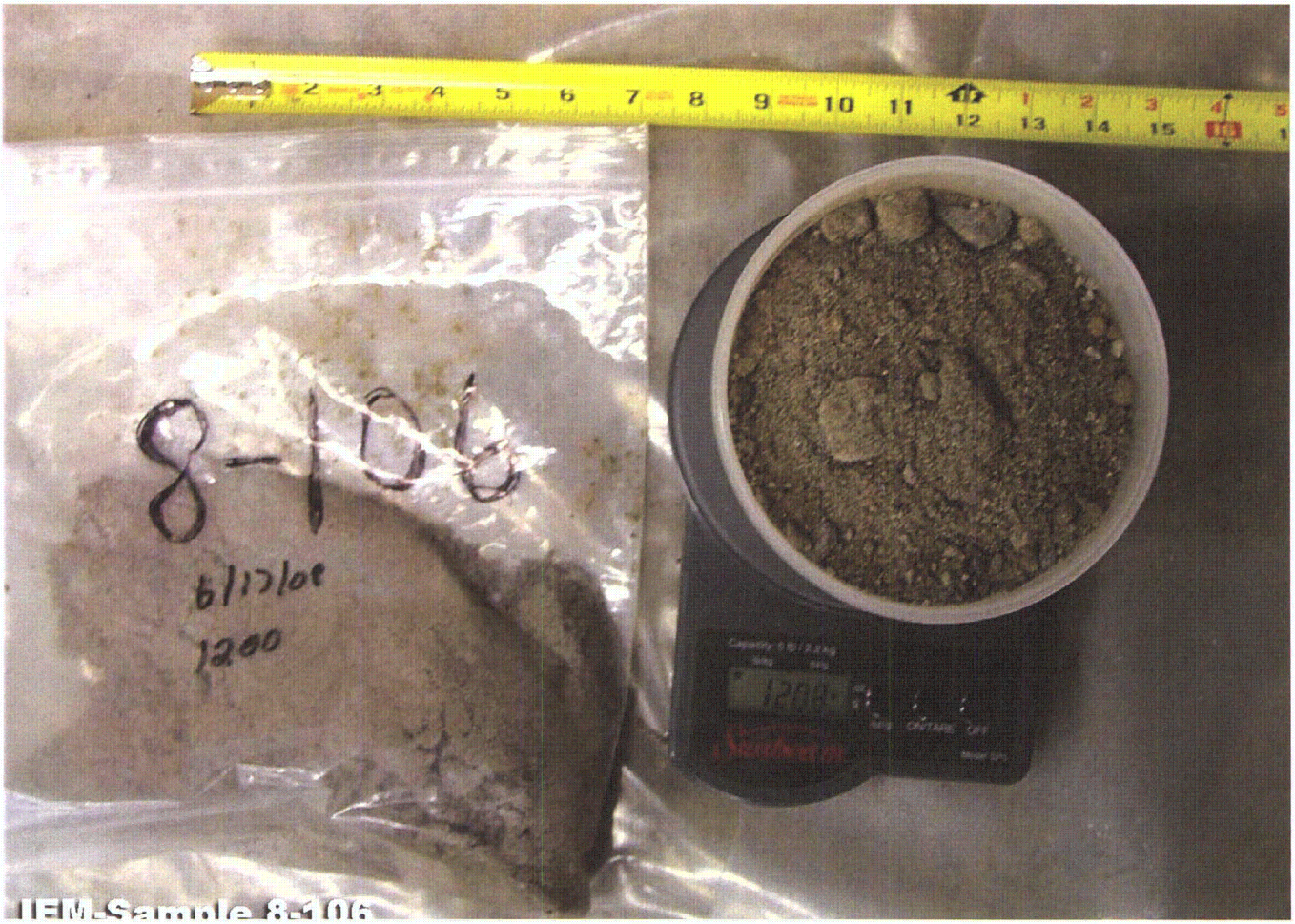

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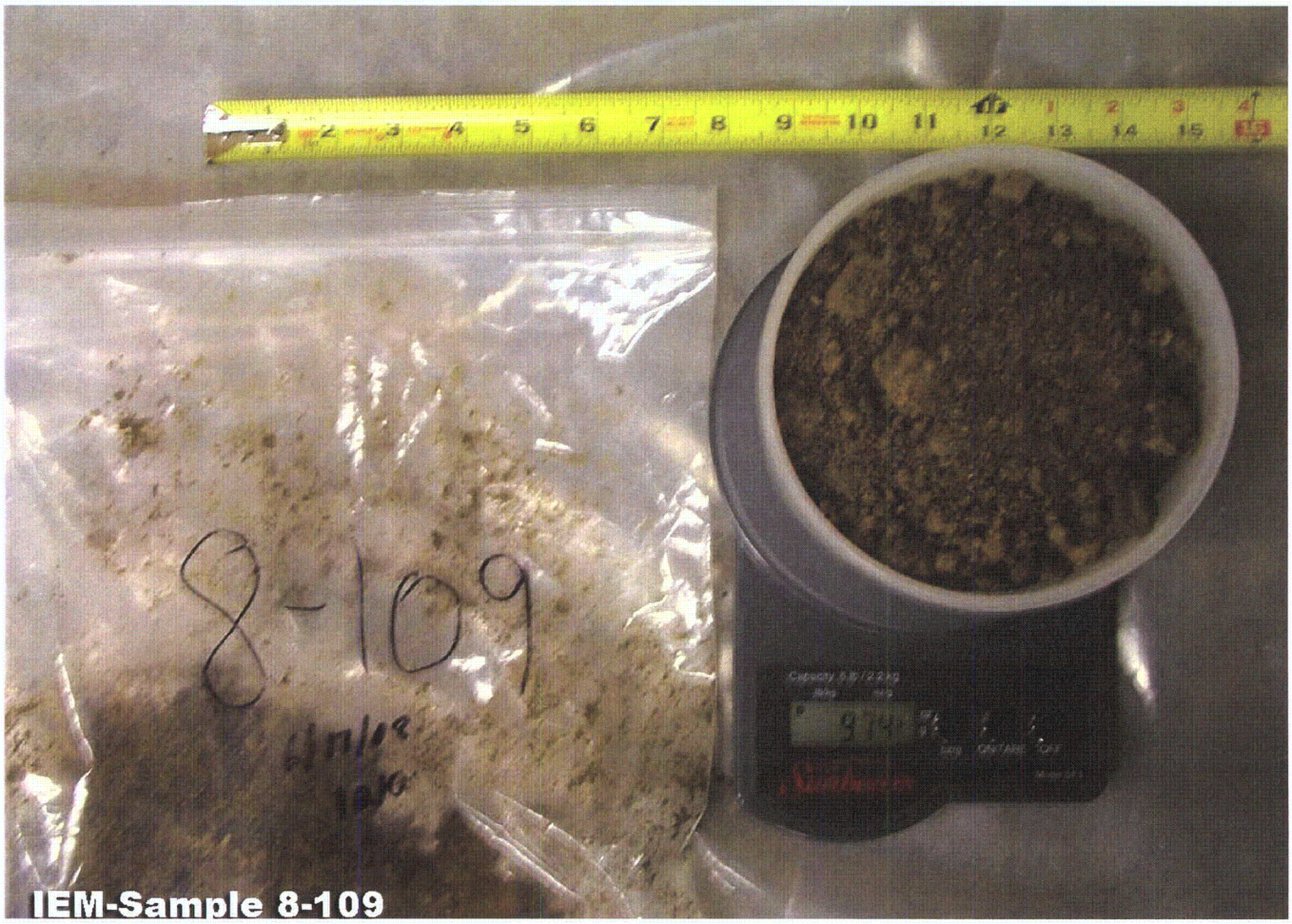

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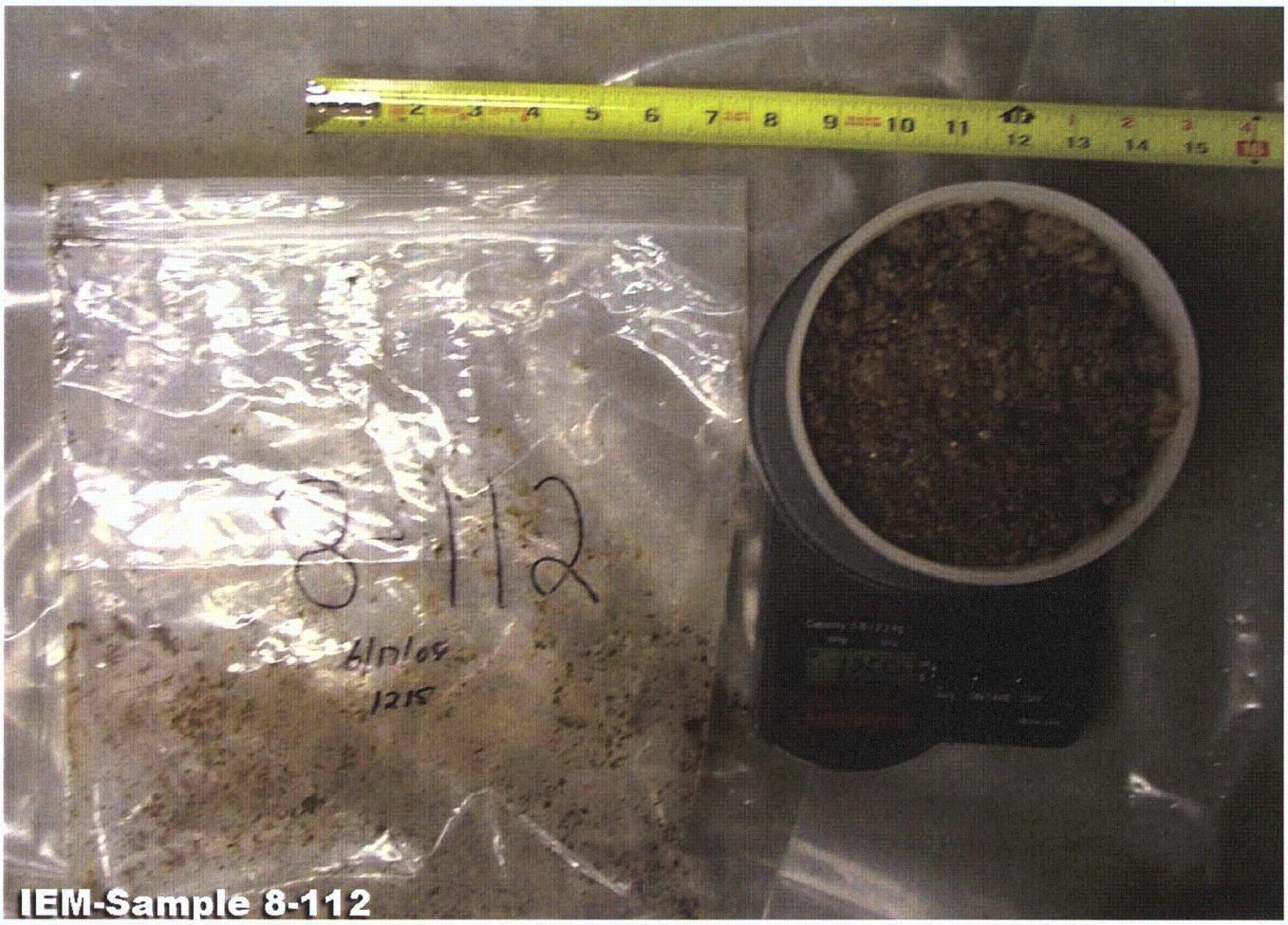
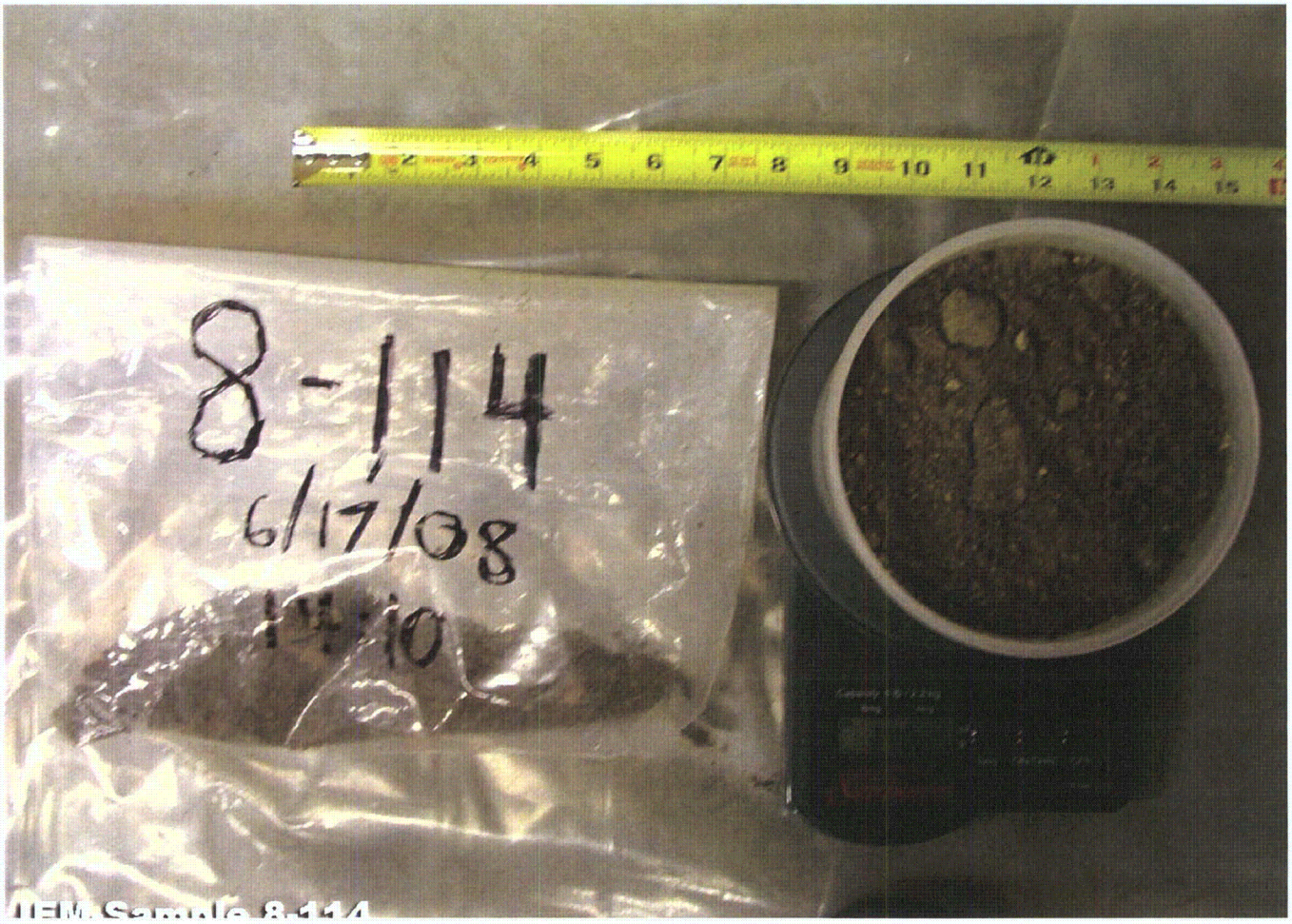
IEM-Sample 8-110



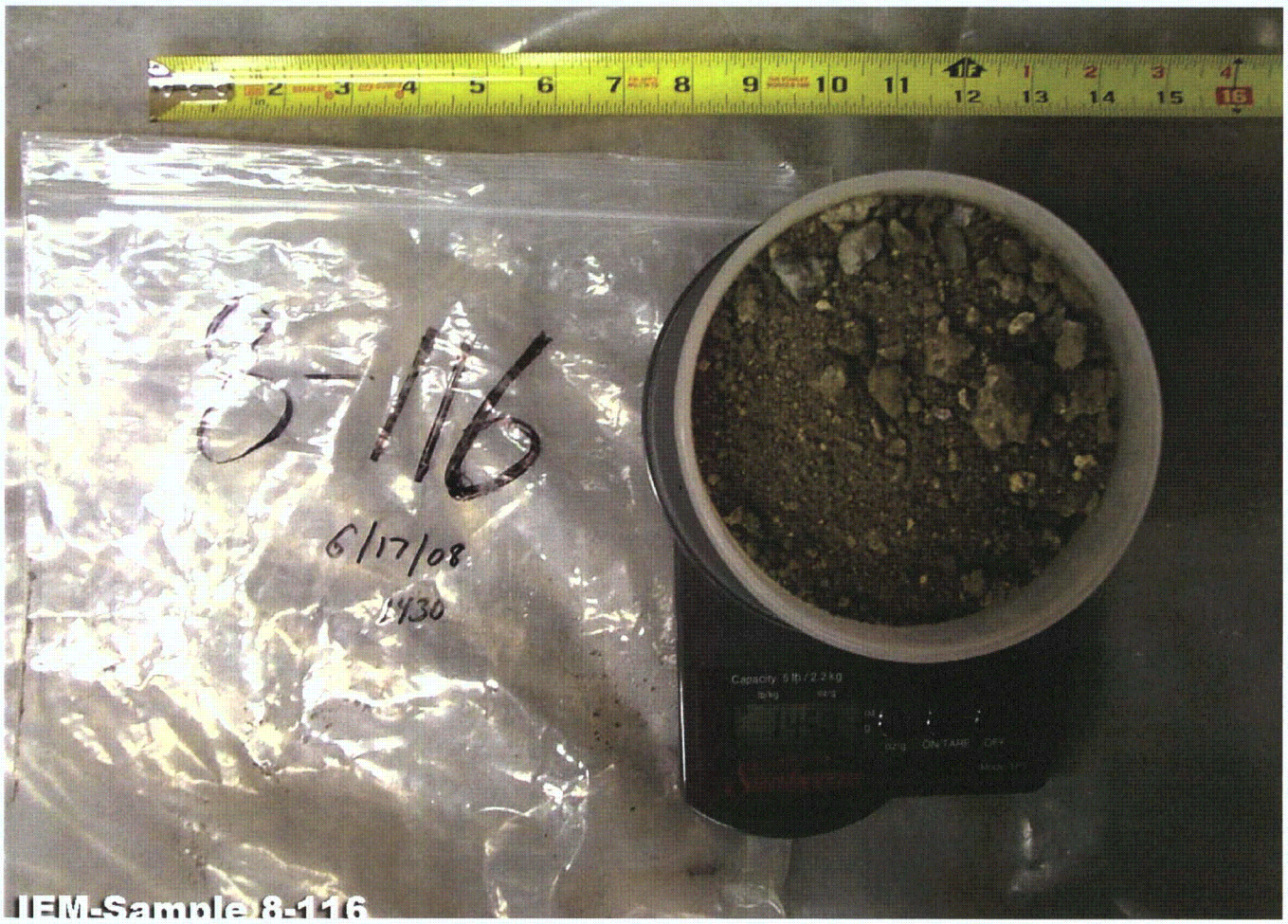
IEM-Sample 8-112

IEM Sample 8-113



IEM Sample 8-114

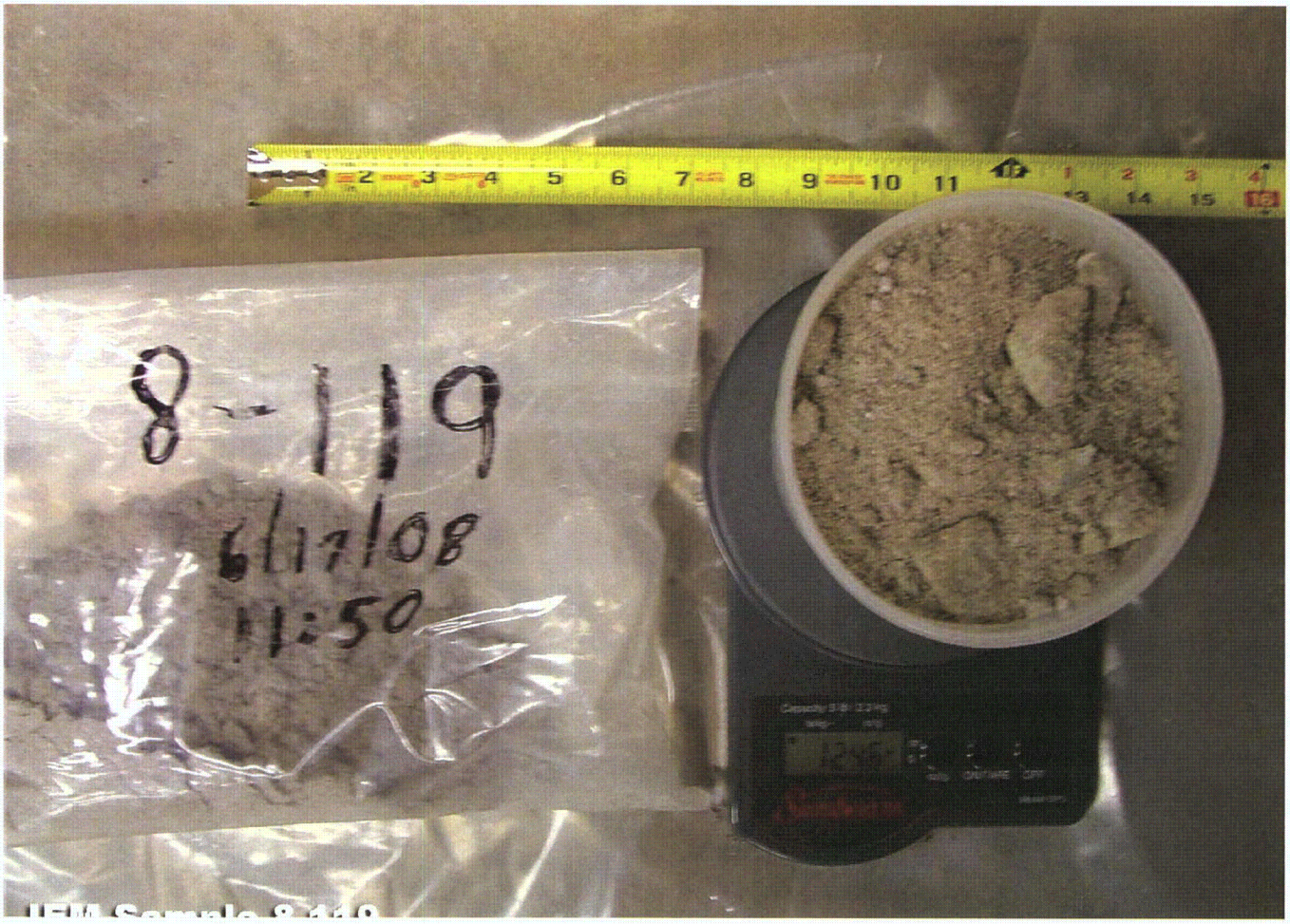
IEM-Sample 8-115



IEM-Sample 8-116

IEM-Sample 8-117

IEM-Sample 8-118



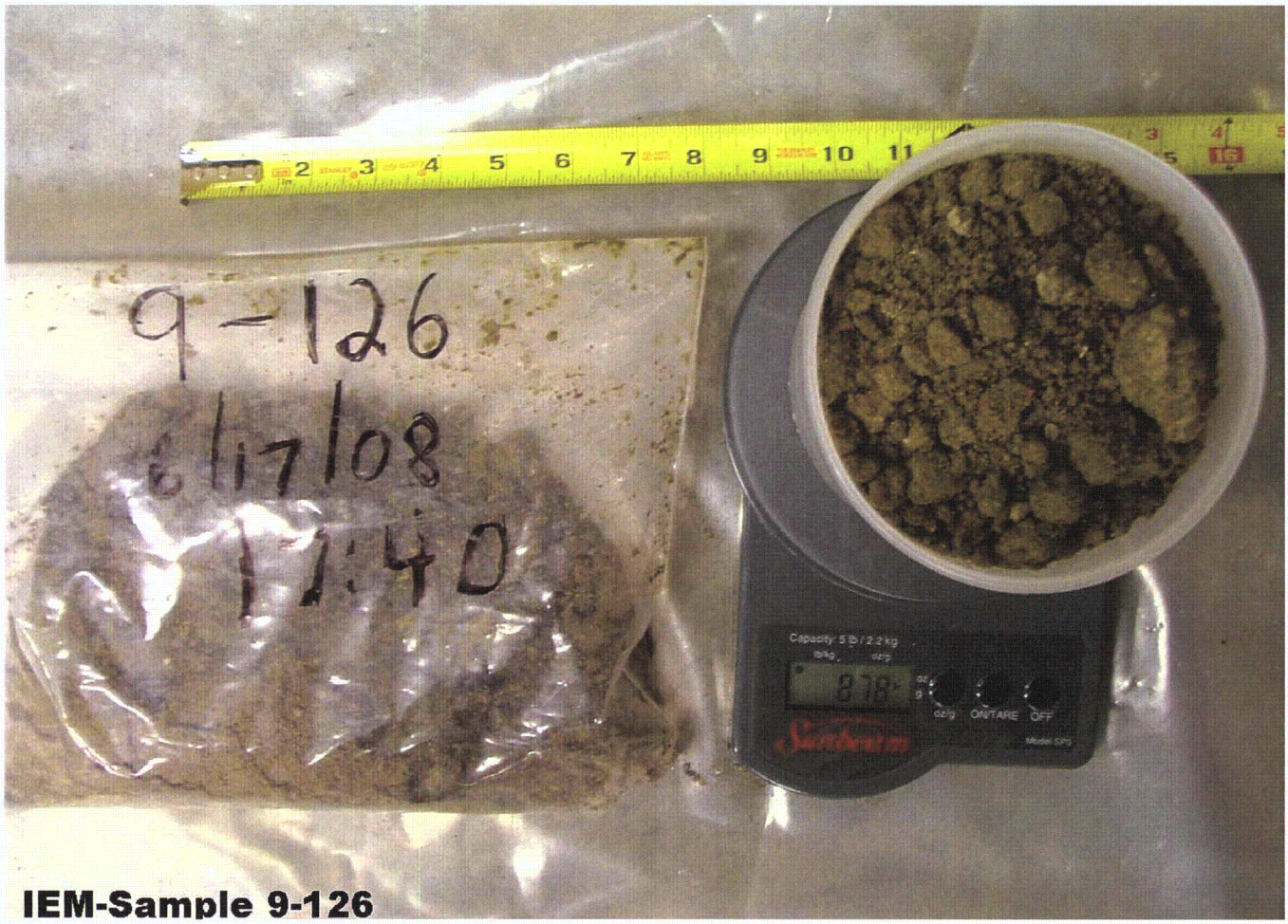
IEM-Sample 8-119

IEM-Sample 8-A

IEM Sample 9-123

IEM Sample 9-124

IEM-Sample 9-125



IEM-Sample 9-126

IEM-Sample 9-A

IEM-Sample 9-B

APPENDIX C

AREA 4 AND AREA 6 SLAG CLASSIFICATIONS

Area 4 and Area 6 Slag Classifications

The following is a compilation of close-up photographs of pieces of slag collected from Areas 4 and 6 of the Storage Yard at the SMC facility. As the materials within Area 3 (crushed Area 4 slag) were determined to be homogeneous, they are not addressed in this Appendix.

Following the collection of the slag samples, the detailed sample descriptions were evaluated in conjunction with the photographs of the slag pieces in order to classify the various types of slag found within Areas 4 and 6. As indicated by the descriptions and photos, certain materials found in the piles were readily distinguishable based on grain size, texture and color. Other materials, typically those that comprise the majority of the slag materials in each of Areas 4 and 6, required further scrutiny in order to classify them. The characteristics used to distinguish between these various slag types included (in order of decreasing importance) grain size, the degree of fracturing, evidence of secondary mineralization, color, and the amount of vesicles. Overall, this analysis resulted in the characterization of six types or classes of materials within Area 4 (as shown on Figure 3) and seven classes of materials within Area 6 (as shown on Figure 4). To further support this delineation of slag classes, this Appendix contains additional photographs of the various classes of slag identified in Areas 4 and 6. Therefore, these photos should be viewed in conjunction with Figures 3 and 4 of this report.

Sample 4-82

Darker colored slag located at base of main pile, slag seems to be very isolated in the pile. Exterior of slag is dark brown-dark grey, interior is fine-grained and crystalline, very dense.

Sample 4-B

White coarse-grained material, possibly some sort of refractory material.

Sample 4-A

Hexagonal-shaped slag which tapers to ~ 1-2" diameter on one end and ~4-8" on the other end. The hexagonal slag structures are contained within a larger "dome"-like structure. Interior of hexagonal structure contains green fine-grained crystals with small (1-5 mm) black crystals. A 0.5-1 inch thick lt. grey, fine-grained cooling rind on exterior.

Sample 4-69

Light blue/grey fine-grained slag, highly fractured, little secondary mineralization (white clayey).

Sample 4-70

Sample 4-72 Light grey to grey fine-grained slag, trace vesicles to dense/solid, lightly to moderately fractured, slight secondary mineralization along fracture lines.

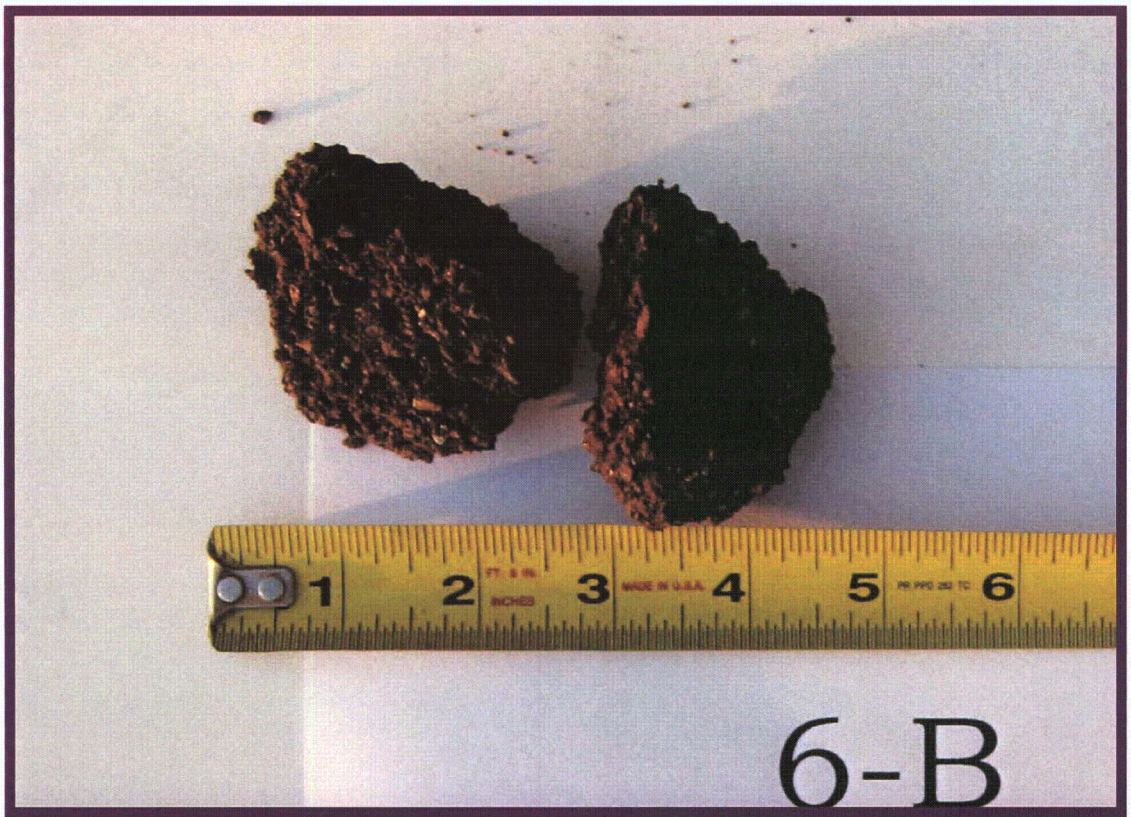
Sample 4-76

Sample 4-79

Light grey to grey fine-grained slag, trace vesicles to dense/solid, no evidence of fracturing.

Sample 4-81

Sample 4-81 Light grey to grey fine-grained slag, trace vesicles to dense/solid, no evidence of fracturing.



Sample 6-B Outer cooling rind of slag "button" - Brown to purple crystalline texture, moderately friable.

Sample 6-D White refractory brick which is often found at the base of "buttons".

Sample 6-101

Sample 6-101

Light brown exterior to purple interior medium-grained, sandy-textured material, moderately friable.

Sample 6-A Partial slag "buttons" - Grey to dark grey fine-grained, highly vesicular slag that exhibits a green-colored tinge (even on broken surfaces).

Sample 6-100 Grey fine-grained slag, variable amount of vesicles, lightly to moderately fractured.

Sample 6-92 Grey fine-grained slag, lightly to highly vesicular, no evidence of fracturing.

Sample 6-86 Smaller slag "button" - Grey to dark grey fine to coarse-grained slag, highly vesicular, some pieces are lightly fractured, secondary mineralization (white) along fractures and/or vesicles, most pieces exhibit platy crystals within.

Sample 6-86

Sample 6-94

Smaller slag "button" - Grey to dark grey fine to coarse-grained slag, highly vesicular, some pieces are lightly fractured, secondary mineralization (white) along fractures and/or vesicles, most pieces exhibit platy crystals within.

Sample 6-94

Smaller slag "button" - Grey to dark grey fine to coarse-grained slag, highly vesicular, some pieces are lightly fractured, secondary mineralization (white) along fractures and/or vesicles, most pieces exhibit platy crystals within.