

**Report of Analysis**  
**From the Research and Technical Services Department**  
**of the Asbury Graphite Mills, Inc.**

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RD# 18585E

**Distribution**

Grade 3203

Company Asbury Technical Services

Type FLAKE,CHINESE

Lot 10754

Resistivity (ohm·cm) 0.1173

Micron Screens Microtrac Analysis

Carbon / Ash 95.029 / 4.97

Scott Volume (g/in<sup>3</sup>)

-15m MT10

% Moisture 0.095

True Density (g/cm<sup>3</sup>)

-20m MT50

% Volatile 1.17

Surface Area (m<sup>2</sup>/g)

-30m MT90

MTMV

% Sulfur 0.15737 Press Density (g/cc @ 6,500 PSI)

MTSTD

Wetability Press Density (g/cc @ 32,500 PSI)

% N

Popping Expansion

% H

pH Total Silica (MilG155A)

Expansion Ratio 450 C 0 650 C 0 950 C Surface Coefficient (g/100ml) 0.00

**Ash Analysis (ICP)**

Oxide 1		PPM 2	
Al <sub>2</sub> O <sub>3</sub>	13.79%	Al	3948
BaO	0.05%	Ba	25
CaO	7.76%	Ca	3002
CoO	0.01%	Co	4
Cr <sub>2</sub> O <sub>3</sub>	0.04%	Cr	14
CuO	0.07%	Cu	29
Fe <sub>2</sub> O <sub>3</sub>	13.47%	Fe	5098
K <sub>2</sub> O	3.29%	K <sub>2</sub>	1479
MgO	6.40%	Mg	2088
MnO <sub>2</sub>	0.14%	Mn	46
MoO <sub>3</sub>	1.26%	Mo	453
Na <sub>2</sub> O	0.65%	Na	259
NiO	0.22%	Ni	94
PbO	0.03%	Pb	14
SiO <sub>2</sub>	51.90%	Si	13129
TiO <sub>2</sub>	0.66%	Ti	213
V <sub>2</sub> O <sub>5</sub>	0.20%	V <sub>2</sub>	61
ZnO	0.07%	Zn	31

1 - Oxide Analysis - Note that this "theoretical" oxide analysis is not indicative of the actual mineralogical form of ash constituents.

2 - Represents the concentration, in parts per million, in the original sample.

Comments