



Resource Materials Testing, Inc.

"Specialists in Fly Ash Testing"

24 Fine Drive Murphy, NC 28906 828.506.7636

REPORT OF STABILIZER ANALYSIS

TO: Ash Grove Resources, LLC
Attn: Mr. Brady Pryor
5375 SW 7th Street, Suite 400
Topeka, KS 66606-2552

PROJECT NO. RMT-467
SAMPLE NO. 17199
DATE REC.: 09-15-09
DATE REP.: 01-05-10

PROJECT NAME: Ash Grove Durabase® CKD Quality Assurance Program

SAMPLE ID: Midlothian Ash Grove Durabase® CKD

CHEMICAL ANALYSIS, ignited basis, wt%: RESULTS:

Silicon Dioxide, SiO ₂	21.64
Aluminum Oxide, Al ₂ O ₃	5.96
Iron Oxide, Fe ₂ O ₃	1.99
Sum of SiO ₂ , Al ₂ O ₃ & Fe ₂ O ₃	29.59
Calcium Oxide, CaO	53.10
Magnesium Oxide, MgO	1.12
Sodium Oxide, Na ₂ O	1.93
Potassium Oxide, K ₂ O	4.04
Sulfur Trioxide, SO ₃	10.69
Moisture Content	0.16
Loss on Ignition	18.49
Available Lime Index, %CaO	7.68

PHYSICAL TESTING:

Amount Retained on A No. 325 Sieve,%	35.5
C 109 Cubes w/o cement, psi	
3-da	150
7-day	250
28-day	400
Water Requirement, ml	356
Density	2.87

By Robert L. Smith
Robert L. Smith, Ph.D.