

Analytical Testing Service Laboratories, Inc.
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Headwaters Resources, Inc
P.O. Box 3734
Alpharetta, GA 30023
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July 06, 2011

Attn: Carolyn Grant

Re: 40674 - Havana Fly Ash Sample Monthly Composite - May 2011

	ASTM C-618 Class "C" <u>Requirements</u>	<u>Actual</u>
Fineness (+325 Mesh)	34% Max	10.50%
Moisture Content	3% Max	0.16%
Specific Gravity	****	2.65
Specific Gravity Variation	5% Max	0.68%
Loss on Ignition	6% Max	0.41%
Soundness	0.8% Max	0.02%
S.A.I., 7 Days	75% Min	98.40%
S.A.I., 28 Days	75% Min	104.10%
Water Req. % Control	105% Max	93.40%
Silica SiO ₂	****	34.50%
Aluminum Oxide Al ₂ O ₃	****	21.89%
Ferric Oxide Fe ₂ O ₃	****	6.01%
Total	50% Min	62.40%
Sulfur Trioxide SO ₃	5% Max	1.45%
Calcium Oxide CaO	****	26.17%
Magnesium Oxide MgO	****	6.30%
Available Alkalies as Na ₂ O	****	1.38%

We certify the above was tested in accordance with ASTM C-618 and AASHTO M295.

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John K. Cupp, Manager