

# Analytical Testing Service Laboratories, Inc.

P.O. Box 1118, Joplin, Missouri 64802

(417) 782-6573

Headwaters Resources, Inc  
P.O. Box 3734  
Alpharetta, GA 30023  
1-770-475-8095

December 05, 2012

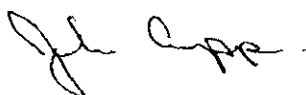
Attn: Carolyn Grant

Re: 12272 - Havana Fly Ash Sample Monthly Composite - October 2012

	ASTM C-618 Class "C" <u>Requirements</u>	<u>Actual</u>
Fineness (+325 Mesh)	34% Max	11.40%
Moisture Content	3% Max	0.09%
Specific Gravity	****	2.63
Specific Gravity Variation	5% Max	1.14%
Loss on Ignition	6% Max	0.40%
Soundness	0.8% Max	0.02%
S.A.I., 7 Days	75% Min	103.60%
S.A.I., 28 Days	75% Min	106.30%
Water Req. % Control	105% Max	93.40%
Silica SiO <sub>2</sub>	****	37.02%
Aluminum Oxide Al <sub>2</sub> O <sub>3</sub>	****	21.39%
Ferric Oxide Fe <sub>2</sub> O <sub>3</sub>	****	6.01%
Total	50% Min	64.42%
Sulfur Trioxide SO <sub>3</sub>	5% Max	1.35%
Calcium Oxide CaO	****	25.45%
Magnesium Oxide MgO	****	5.39%
Available Alkalies as Na <sub>2</sub> O	****	1.26%

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

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John K. Cupp, Manager