

**Analytical Testing Service Laboratories, Inc.**

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Headwaters Resources  
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August 02, 2011


Attn: Kristy Rotramel

Re: 40842 Louisa Fly Ash Sample Monthly Composite June 2011

	ASTM C-618 Class C <u>Requirements</u>	<u>Actual</u>
Fineness (+325 Mesh)	34% Max	14.50%
Moisture Content	3% Max	0.12%
Specific Gravity	****	2.67
Loss on Ignition	6% Max	0.26%
Soundness	0.8% Max	0.00%
S.A.I., 7 Days	75% Min	99.10%
S.A.I., 28 Days	75% Min	103.30%
Water Req. % Control	105% Max	94.20%
Silica SiO <sub>2</sub>	****	35.38%
Aluminum Oxide Al <sub>2</sub> O <sub>3</sub>	****	22.90%
Ferric Oxide Fe <sub>2</sub> O <sub>3</sub>	****	6.15%
Total	50% Min	64.43%
Sulfur Trioxide SO <sub>3</sub>	5% Max	1.76%
Calcium Oxide CaO	****	24.74%
Magnesium Oxide MgO	****	4.89%
Available Alkalies as Na <sub>2</sub> O	****	1.21%

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

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John K. Cupp, Manager