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Report No: USR:W215-1259-03
Issue No: 1

Analytical Test Report

Client: ALLIANCE FOR GREEN HEAT
 512 Elm Avenue
 Takoma Park, MD 20912
Attention: John Ackerly
PO No:

Signed: *Stephen Sundeen*
 Stephen Sundeen
 Chemistry Laboratory Manager
 Date of Issue: 12/4/2015
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Sample Details
Sample Log No: W215-1259-03 **Sample Date:**
Sample Designation: Sample #3 **Sample Time:**
Sample Recognized As: Pellets **Arrival Date:** 11/30/2015

Test Results

	METHOD	UNITS	MOISTURE FREE	AS RECEIVED
Moisture Total	ASTM E871	wt. %		5.12
Ash	ASTM D1102	wt. %	0.30	0.29
Volatile Matter	ASTM D3175	wt. %		
Fixed Carbon by Difference	ASTM D3172	wt. %		
Sulfur	ASTM D4239	wt. %	0.007	0.007
SO ₂	Calculated	lb/mmbtu		0.015
Net Cal. Value at Const. Pressure	ISO 1928	GJ/tonne		
Net Cal. Value at Const. Pressure	ISO 1928	J/g		
Gross Cal. Value at Const. Vol.	ASTM E711	J/g	20686	19628
Gross Cal. Value at Const. Vol.	ASTM E711	Btu/lb	8894	8439

Carbon	ASTM D5373	wt. %		
Hydrogen*	ASTM D5373	wt. %		
Nitrogen	ASTM D5373	wt. %		
Oxygen*	ASTM D3176	wt. %		

*Note: As received values do not include hydrogen and oxygen in the total moisture.

Chlorine	ASTM D6721	mg/kg		
Fluorine	ASTM D3761	mg/kg		
Mercury	ASTM D6722	mg/kg		

Bulk Density	ASTM E873	lbs/ft ³		
Fines (Less than 1/8")	TPT CH-P-06	wt. %		
Durability Index	Kansas State	PDI		
Sample Above 1.50"	TPT CH-P-06	wt. %		
Maximum Length (Single Pellet)	TPT CH-P-06	inch		
Diameter, Range	TPT CH-P-05	inch		to
Diameter, Average	TPT CH-P-05	inch		
Stated Bag Weight	TPT CH-P-01	lbs		
Actual Bag Weight	TPT CH-P-01	lbs		

Comments