



Twin Ports Testing, Inc.  
 1301 North 3rd Street  
 Superior, WI 54880  
 p: 715-392-7114  
 p: 800-373-2562  
 f: 715-392-7163  
 www.twinportstesting.com

**Report No:** USR:W212-0496-01  
**Issue No:** 2  
*This report replaces all previous issues*

# Analytical Test Report

**Client:** WOOD FUEL DEVELOPERS  
 13151 North Enon Church Rd  
 Chester VA 23836  
**Attention:** Craig Newcomb  
**PO No:**

**Signed:** *Amanda Sayles*  
 Amanda Sayles  
 Chemistry Lab Technician  
**Date of Issue:** 5/3/2012  
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

**Sample Details**  
**Sample Log No:** W212-0496-01      **Sample Date:**  
**Sample Designation:** 40lb pellet bag      **Sample Time:**  
**Sample Recognized As:** Pellets      **Arrival Date:** 4/19/2012

## Test Results

	METHOD	UNITS	MOISTURE FREE	AS RECEIVED
Moisture Total	ASTM E871	wt. %		7.59
Ash	ASTM D1102	wt. %	0.35	0.32
Volatile Matter	ASTM D3175	wt. %		
Fixed Carbon by Difference	ASTM D3175	wt. %		
Sulfur	ASTM D4239	wt. %	0.027	0.025
SO <sub>2</sub>	Calculated	lb/mmbtu		0.058
Net Cal. Value at Const. Pressure	ISO 1928	GJ/tonne	19.24	17.60
Net Cal. Value at Const. Pressure	ISO 1928	J/g	19244	17598
Gross Cal. Value at Const. Vol.	ASTM E711	J/g	20581	18938
Gross Cal. Value at Const. Vol.	ASTM E711	Btu/lb	8849	8142
Carbon	ASTM D5373	wt. %	50.55	46.52
Hydrogen	ASTM D5373	wt. %	6.14	5.65
Nitrogen	ASTM D5373	wt. %	< 0.20	< 0.18
Oxygen	ASTM D3176	wt. %	> 42.73	> 39.70
Chlorine	ASTM D6721	mg/kg	51	47
Fluorine	ASTM D3761	mg/kg		
Mercury	ASTM D6722	mg/kg		
Bulk Density	ASTM E873	lbs/ft <sup>3</sup>		44.18
Fines (Less than 1/8")	TPT CH-P-06	wt.%		0.35
Durability Index	Kansas State	PDI		98.4
Sample Above 1.50"	TPT CH-P-06	wt.%		0.0
Maximum Length (Single Pellet)	TPT CH-P-06	inch		1.098
Diameter, Range	TPT CH-P-05	inch	0.254 to	0.262
Diameter, Average	TPT CH-P-05	inch		0.258
Stated Bag Weight	TPT CH-P-01	lbs		40.0
Actual Bag Weight	TPT CH-P-01	lbs		40.1

**Comments**