

1641 Sigman Road
 PO Box 919
 Conyers, GA 30012
 1-770-922-8000 ext 164
 www.biomassenergylab.com



Report of Analysis

BEL2611
 COGENT
 20 Brodwood Drive
 Stamford, CT 06902

Company Contact: Robert Mantrop
 Brian Cartee

BEL ID Number(s):	BEL146019-1	Sample Weight (kg):	2.27
Product/Commodity:	Wood Chips	Sample Received:	12/19/2014
Sample Designation:	Hard Hardwood Cogent	Report Date:	12/31/2014
Packaging:	Plastic Bag		
Date Sampled:	12/16/2014	Purchase Order #	N/A

Compositional Analysis: Proximate/Ulimate Analysis

Parameter	As-Received	Oven Dry	Analytical Method
Total Moisture (%)	33.76		CEN/EN 14774-1
Ash (%)	0.79	1.20	CEN/EN 14775
Volatiles (%)	55.59	83.92	CEN/EN 15148
Fixed Carbon (%)	9.85	14.88	By Difference
Gross Calorific Value (GJ/Tonne)	12.97	19.59	CEN/EN 14918
Gross Calorific Value (KJ/kg)	12975	19588	
Net Calorific Value (cV)(GJ/Tonne)	11.38	18.36	CEN/EN 14918
Net Calorific Value (cP)(GJ/Tonne)	11.29	18.29	CEN/EN 14918
Carbon (%)	32.97	49.78	CEN/EN 15104
Hydrogen (%)	3.94	5.95	CEN/EN 15104
Nitrogen (%)	0.20	0.31	CEN/EN 15104
Sulfur (%)	< 0.01	0.01	CEN/EN 15289
Oxygen (%)	28.33	42.76	By Difference
Chlorine (%)	< 0.005	< 0.005	CEN/EN 15289

Prepared By: Chris Wiberg

Results shown on this certificate represent only the quantity of sample which was submitted for analysis. BEL does not assume responsibility for selection, representation, and/or sample identifications. Analyses are carried out within the scope of Principal's instructions and with due care and skill in conformity with BEL Terms and Conditions of Business. Claims in respect of services provided will be considered only if based upon failure to take due care proven by the Principal. Liability shall in no circumstances whatsoever exceed a total aggregate sum equal to 10 (ten) times the amount of the fee paid for the service.

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Major and Minor Elements:

Analyte	Dry Basis	Units	CEN/EN 15297
Potassium (K)	191	mg/kg	Reported on a whole sample basis
Sodium (Na)	120	mg/kg	

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