

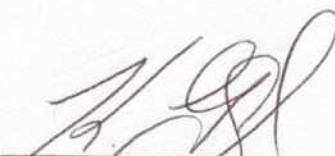
VESSEL: SOUTHERN ALPS  
 PORT: Sheet Harbour, N.S. , Canada  
 BERTH: Sheet Harbour, N.S. , Canada  
 INVOICE NO.: 133707  
 CARGO: Canadian Woodchip Biomass

Page :10

Ref. #'(s): L/C No. CRED1518909  
 OFFICE: Halifax, N.S. Canada

**CALORIFIC VALUE ASTM E-711**

	Original sample numbers	Result	Units	ASTM-Method
Sample 1	1-12	19.505	MJ/kg	E-711
Sample 2	13-24	19.607	MJ/kg	E-711
Sample 3	25-36	19.545	MJ/kg	E-711
Sample 4	37-48	19.584	MJ/kg	E-711
Sample 5	49-60	19.564	MJ/kg	E-711
Sample 6	61-72	19.341	MJ/kg	E-711
Sample 7	73-84	19.544	MJ/kg	E-711
Sample 8	85-96	19.525	MJ/kg	E-711
Sample 9	97-108	19.943	MJ/kg	E-711
Sample 10	109-120	19.684	MJ/kg	E-711
Sample 11	121-132	19.045	MJ/kg	E-711
Sample 12	133-144	19.571	MJ/kg	E-711
Sample 13	145-156	19.498	MJ/kg	E-711
Sample 14	157-168	19.668	MJ/kg	E-711
Sample 15	169-180	19.47	MJ/kg	E-711
Sample 16	181-192	19.565	MJ/kg	E-711
Sample 17	193-204	19.947	MJ/kg	E-711
Sample 18	205-216	19.463	MJ/kg	E-711
Sample 19	217-228	19.618	MJ/kg	E-711
Sample 20	229-240	19.606	MJ/kg	E-711
Sample 21	241-252	19.604	MJ/kg	E-711
Sample 22	253-264	19.491	MJ/kg	E-711
Sample 23	265-276	19.544	MJ/kg	E-711
Sample 24	277-288	19.531	MJ/kg	E-711
Average		19.561	MJ/kg	E-711



**KEITH GREENHALGH**  
SAYBOLT CANADA

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Page 12

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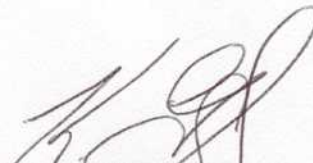
**INERTS**

Original sample numbers	Result	Units
220	2.0	Grams
240	0.5	Grams
245	0.3	Grams
250	2.5	Grams
255	2.0	Grams
<b>Total</b>	<b>7.3</b>	<b>Grams</b>

Total Sample quantity                    290822.7       Grams  
 Total Inerts                                    7.3               Grams

% of Cargo Inerts                            0.00251%

Comments: Inerts found were small pieces of rock.



**KEITH GREENHALGH**  
**SAYBOLT CANADA**



**Saybolt**  
A CORE LABORATORIES COMPANY

**FAST TO THE POINT.**

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Page :11

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### ASH CONTENT ASTM D-482

	Original sample numbers	Result	Units	ASTM-Method
Sample 1	1-12	1.040	Mass %	D-482
Sample 2	13-24	1.220	Mass %	D-482
Sample 3	25-36	0.869	Mass %	D-482
Sample 4	37-48	1.100	Mass %	D-482
Sample 5	49-60	0.933	Mass %	D-482
Sample 6	61-72	0.811	Mass %	D-482
Sample 7	73-84	0.968	Mass %	D-482
Sample 8	85-96	0.796	Mass %	D-482
Sample 9	97-108	1.280	Mass %	D-482
Sample 10	109-120	0.974	Mass %	D-482
Sample 11	121-132	0.635	Mass %	D-482
Sample 12	133-144	0.831	Mass %	D-482
Sample 13	145-156	0.620	Mass %	D-482
Sample 14	157-168	0.922	Mass %	D-482
Sample 15	169-180	0.807	Mass %	D-482
Sample 16	181-192	0.653	Mass %	D-482
Sample 17	193-204	1.540	Mass %	D-482
Sample 18	205-216	0.596	Mass %	D-482
Sample 19	217-228	1.06	Mass %	D-482
Sample 20	229-240	0.941	Mass %	D-482
Sample 21	241-252	0.696	Mass %	D-482
Sample 22	253-264	0.731	Mass %	D-482
Sample 23	265-276	0.667	Mass %	D-482
Sample 24	277-288	0.603	Mass %	D-482
Average		0.887	Mass %	D-482

Note: 24 Hours @ 525 C

  
MARCELLO FABRIZI  
SAYBOLT CANADA