

Result Sheet



Telephone: 03-9565 9888 International: +61-3-9565 9888
Facsimile : 03-9565 9777 International: +61-3-9565 9777
Web Site: www.hrl.com.au

HRL Technology Pty Ltd
(ACN 062 076 199)
(ABN 95 062 076 199)

677 Springvale Road
Mulgrave Victoria 3170
AUSTRALIA

Date: **14th November 2005** File No. **67000007** Job No. **CMM/05/892**

To: Name **Jim French**
Company **Gunns Limited**
Address **Locked Bag 25 Burnie Tasmania 7320**
Fax No. **03 6434 3400** Tel No. **03 6434 3422**
From: Name **Nick Miller** Tel No. **(03) 9565 9912**

Number of pages including this page:

Analysis of wood samples

Introduction:

Wood samples were received from Gunns Limited. The analysis required, was for the determination of major inorganic components, Cu, Ba and Mn and Chlorine. The methodology and results of the testing are presented in the following pages.

Signed:.....
Nick Miller
Senior Analyst

Approved:.....
Danny Hibbert
Business Unit Manager

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The results presented in this report relate exclusively to the samples selected by the client for the purpose of testing. No responsibility is taken for the representativeness of these samples.

HRL's Quality Management System is certified by NATA to ISO9001

Methodology:

Determination of the major inorganic components including Si, Fe, Al, Mg, Na, Ca, K, Ti and P was performed by ICP-AES, following a borate fusion and acid dissolution.

Determination of the major inorganic components including Cu, Ba and Mn was performed by ICP-AES, following low temperature ashing, borate fusion and acid dissolution.

Determination of moisture was conducted according to AS2434.1, which involves heating the samples to a temperature of 105°C and measurement of weight loss.

Determination of ash yield was conducted according to AS2434.8, however the final ashing temperature used was 450°C.

Determination of chlorine content was conducted by ICPAES following combustion in a bomb and adsorption into an acid solution.

Results:

Results of the analysis of the wood samples are presented in Appendix One, Table One.

Appendix One

Table 1: Analysis of wood samples.

HRL Sample ID		CMM/05/892-1	CMM/05/892-2	CMM/05/892-3
Client's Sample Description	Units	DS0194 E. nitens	DS0195 native Eucalypt	DS0196 P. radiata
Moisture	%	9.2	9.4	11.5
Ash Yield	%	0.30	0.23	0.31
SiO₂	%	0.010	0.044	0.004
Al₂O₃	%	0.004	0.006	0.005
Fe₂O₃	%	0.004	0.023	0.003
TiO₂	%	0.0002	0.0004	0.0002
K₂O	%	0.094	0.053	0.099
MgO	%	0.022	0.017	0.038
Na₂O	%	0.016	0.012	0.003
CaO	%	0.059	0.032	0.071
SO₃	%	0.007	0.005	0.009
P2O5	%	TBA	TBA	TBA
MnO	mg/kg	45.6	26.7	63.6
CuO	mg/kg	9.6	4.8	10.5
BaO	mg/kg	2.3	2.3	0.3
Chlorine	%	<0.01	<0.01	<0.01

Note: All results reported on a dry weight basis except moisture which is as received.