

Result Sheet



Telephone: 03-9565 9888 International: +61-3-9565 9888
Facsimile: 03-9565 9777 International: +61-3-9565 9777

HRL Technology Pty Ltd
(ACN 062 076 199)

677 Springvale Road
Mulgrave Victoria 3170
AUSTRALIA

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To: Name **GARRY KINDLEY**
Company **ECO LOGS**
Address **BOX 79**
WILLIAMSTOWN, VIC, 3016
Fax No. **9398 0324** Tel No. **9391 4416**
From: Name **W D HIBBERT** Tel No. **9565 9758**

Number of pages including this page: 1

ANALYSIS OF ECO LOG SAMPLE:

1 Sample Preparation


A sample of an "Eco log", was submitted on 17 March 1999, for analysis for moisture, ash, volatile matter and calorific value. The log sample was broken into pieces using a large mortar and pestle, then these pieces were ground in a knife mill and then a hammer mill, to produce a sample that was nominally <212 microns. This sample was thoroughly mixed and a representative sub-sample was taken for analysis.


2 Analysis Methodology

Moisture content and ash yield were determined in duplicate according to HRL Method 1.6, using a Leco MAC400 Analyser.

Calorific value was determined in duplicate according to AS 1038.5, using a Leco AC350 Calorimeter.

Volatile matter was determined in duplicate according to AS 2434.2.

Signed: 
W D Hibbert
Senior Analytical Chemist

Approved: 
Dr Fedir Woskoboenko
Coal Evaluation 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.

The analysis results are presented in Table 1, with ash, volatile matter and fixed carbon values reported on a dry basis (db). Mean results are reported for the wet calorific values, which were calculated from the mean gross dry result.

The hydrogen (and carbon) contents of the sample were determined on a Leco CHN Analyser in order to permit calculation of net wet calorific value, for which a hydrogen content is required. The determined values were 6.2 % db for hydrogen and 49 % db for carbon.

An assumed dry basis values of 0.2 % for sulphur was used in calculating the reported calorific values. This assumed sulphur value results in a correction of -0.02 MJ/KG (1/10th of sulphur value) to the gross dry calorific value.

Table 1 - Analysis Results

CLIENT SAMPLE ID	MOISTURE (%)	ASH YIELD (% DB)	VOLATILE MATTER (% DB)	FIXED CARBON (%DB)	GROSS DRY CALORIFIC VALUE (MJ/KG)	GROSS WET CALORIFIC VALUE (MJ/KG)	NET WET CALORIFIC VALUE (MJ/KG)
ECOLOG	8.9, 8.9	0.4, 0.4	79.4, 79.6	20.1	19.66, 19.78	18.0	16.6