

3/. Assay Results

Full seam proximate analyses plus Relative Density, Specific Energy and % Sulfur were performed by S.G.S. Sydney. Photographs of the core sent for assay, together with the S.G.S. report and a table of core lengths for each of the 25 plies assayed, are included in Appendicies 4 and 5. Ply no's. 14,20,23 are mudstone samples in all cases the mudstone unit separating coal seams A and B. For the purpose of assay caluculations, mudstone units with a "true" thickness of 15cms or less are treated as contaminants to a combined seam A and seam B, whereas if the thickness is greater than 15cms, the unit is treated as interburden which could be mined as a discrete unit. The "true" thickness measurements are taken from Bed Resolution Density logs.

A summary of the analytical data, combined with that from the 1983 drilling is shown on Table 2. The table shows that total coal thickness (seams A+B+C) for the Langloh series ranges from 3.44 metres to 4.97 metres. For individual seams the raw coal (air dried) % ash ranges from 14.1% (1.60 metres, seam B, H-10) to 41.1% (1.07 metres, seam A, H-24). On the same basis, full seam volatiles range from 9.3% to 27.8% and Specific Energy ranges from 18.40 Mj/Kj to 26.48Mj/Kj. The maximum sulfur content recorded was 0.41%.

General trends in coal grade across both East Hill and West Hill are shown on the set of grade maps (Dwgs. 83/11-83/14 in Appendix 6)

Using the raw coal ash% as the measure of "coal grade" it is apparent that seam A is inferior to the other two seams. It is also apparent that the main reason for West Hill having higher overall grade than East Hill is the fact that on East Hill the mudstone unit separating seams A and B (ie., Shale I) is <15cms in thickness and this is included in the ash calculation for seams A and B, significantly increasing their ash content. If seam C is considered alone the ash content is uniformly quite low, with only one value (H-14 on West Hill) exceeding 25%.

4/. Structure

The final interpretation of the geometry of the coal seams, overburden and interburden thickness plus the fault pattern through the area of interest is presented as a set of maps, Dwgs. 83/3 to 83/10. Three categories of faults are recognised -

1/. Proven faults. These can be mapped from air photos and have been proven by field mapping and be drilling.