

assumed chronostratigraphic lithologies (coal seams, tuffs), mutually diachronous relationships have been inferred between these sequences; this interpretation awaits confirmation by microfossil studies.

4.1. Previous drilling within the area of the EL's was either specifically directed at coal discovery, or at finding water; both classes of drilling encountered coal, but which may have been reasonably inferred from the proximity to old coal mines at both Colebrook and York Plains.

4.2. The methods used in generating drilling targets have proved to be successful, with the discovery of coal in 19 out of 23 holes drilled to their objective depths; approximately half of these discoveries were made in areas well removed from known coal occurrences. A total of 71 coal intersections were obtained, of which 43 were in Sequence 1, 15 in Sequence 2, and 10 in Sequence 3.

5.1. The coal content, vol%, and (proportions of the non arenite fraction) are $\approx 7\%$ (22%) in Sequence 1, $\approx 4\%$ (4%) in Sequence 2, $\approx 3\%$ (5%) in Sequence 3, and $\approx 1\%$ (1.5%) in Sequence 4.

6.1. The coal seams in Sequence 1 were found to be the thickest, with all of the "significant" ($\geq 2.0m$) and most of the "major" (1.0-2.0m) seams discovered within it.

6.2. Seam widths range up to 4m (median value 0.6m) in Sequence 1, up to 1.5m (median 0.24m) in Sequence 2, up to 1.7m (median 0.18m) in Sequence 3, and up to 0.2m in Sequence 4.

6.3. The distribution of seam widths in Sequence 1, 2 and 3 approximate, and were assumed to be, log normal; interpretation of this distribution model showed Sequence 1 to be superior in probabilistic terms, such that the chance of finding a seam $\geq 1m$ thick is 30%, compared to 8% and 12% for Sequences 2 and 3 respectively. In addition, seam continuity appears to have been optimised in Sequence 1.

7.1. Within Sequence 1, a total of 6 coal seams $\geq 0.5m$ thick have been recognised in the Jericho area, 3 in the Colebrook area, and 4 in the vicinity of York Plains. Seam correlations in Sequence 1 are A,B,C,D and E (Jericho area), L,M and N (Colebrook) and U, V and W (York Plains).