Figure S1 Final Rietveld refinement plot of the \textit{ex situ} diffraction pattern of a plain carbon laminate after full discharge to 2.2V at a rate of 0.05mAh. The graph shows observed (red dots), calculated (black line) and difference (grey line) plots. Bragg peak positions for Li2O2, Graphite and Al(from current collector) and LiF (from binder) are indicated.

Figure S2 Surface plots from two positions across the cell 2 aperture showing the earlier onset of LiOH growth closer to the aperture edge.