The gridded data was converted to image processing format (real) and displayed in 256 colours using in-house image processing software. The data was stretched interactively using both linear and log look up tables.

A stretch was selected for each element which clearly highlighted features of interest and this was then printed at 1:10,000 scale on a colour inkjet printer.

Multivariate statistics were computed for the full element suite and principle components images generated.

A number of three element RGB combinations, ratios and the PC's were examined by image processing techniques with the objective of enhancing rock type and alteration signatures. More work is planned in this area.

3.4 Diamond Drilling

3.4.1 Core Grind Geochemistry

To follow-up discrepencies between logged rock types and classifications based on core-grind geochemistry, using Cr vs Ti/Zr, in McNeill (1990), a selection of thin sections have been described from DDH's HAT-1, 2 and MAC-10 (see Appendix 7 for description and locations).

HAT-1

Footwall lithologies in this hole were logged as andesites but have low Cr, <20 ppm, and Ti/Zr 15, i.e. on the border between andesite and dacite. Sample 563788 was described as a glassy silic andesitic lava while 563787 is a polymict andesitic-dacitic lava breccia, confirming the andesitic nature of the footwall.

HAT-2

Lithologies below 140m in this hole have equivocal geochemistry, on the andesite/dacite border, however descriptions of samples 563790 and 791 suggests lithologies are altered plagioclase-augite phyric andesite lavas.

MAC-10

Description of sample 383705 confirms that the interval 260.7-310m is dacitic however, further work is required on the interval 310-352.8m to determine its compositional affinities.

3.4.2 Core Geochemical Data Base

Studies of the Que-Hellyer district have indicated several potential geochemical vectors for both hangingwall and footwall alteration and/or mineralisation (Jack, 1989; Gemmell, 1990; McNeill, 1990 and Henley, section 3.2.4 this volume). A programme of systematic data collection from