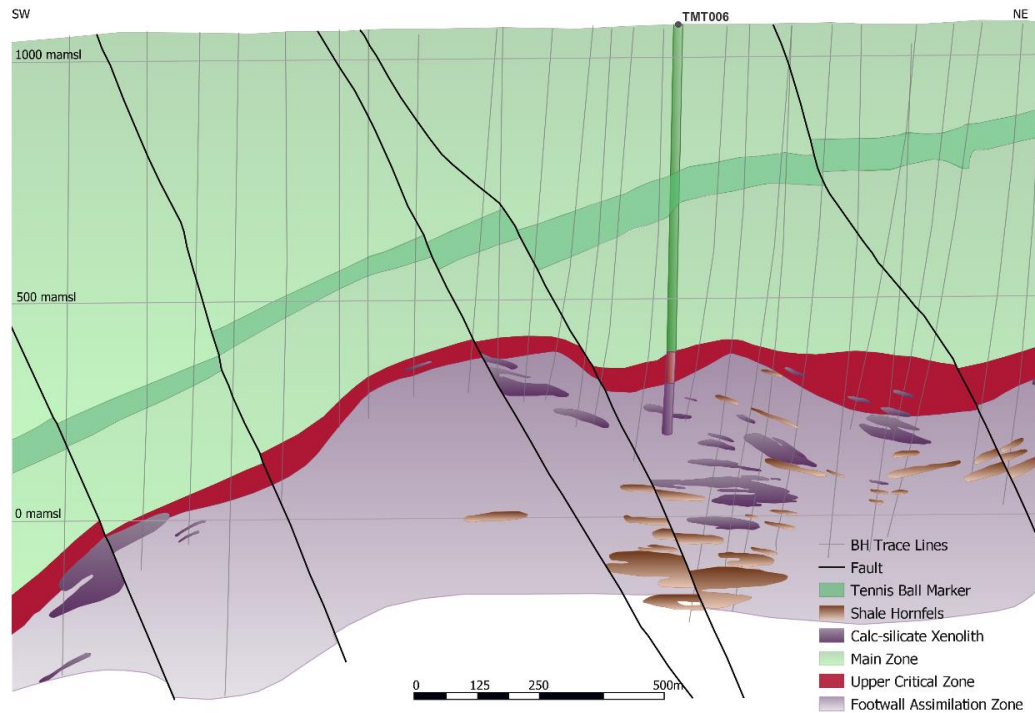


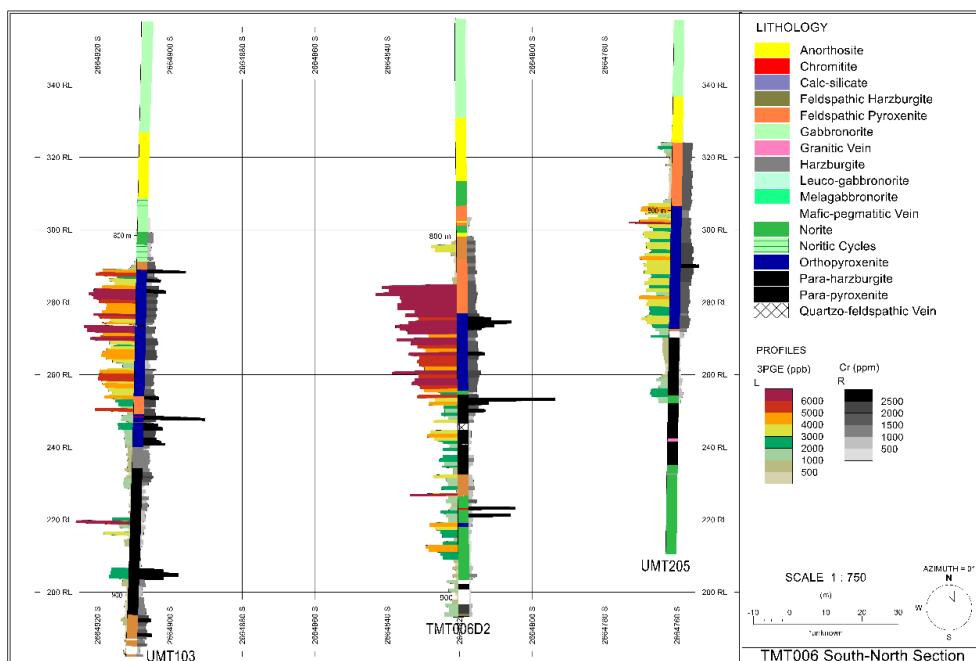
Petrogenesis of thick, high-grade PGE mineralisation in the Flatreef, northern Bushveld Complex

W Maier, SJ Barnes, BM Godel, D Grobler, W Smith

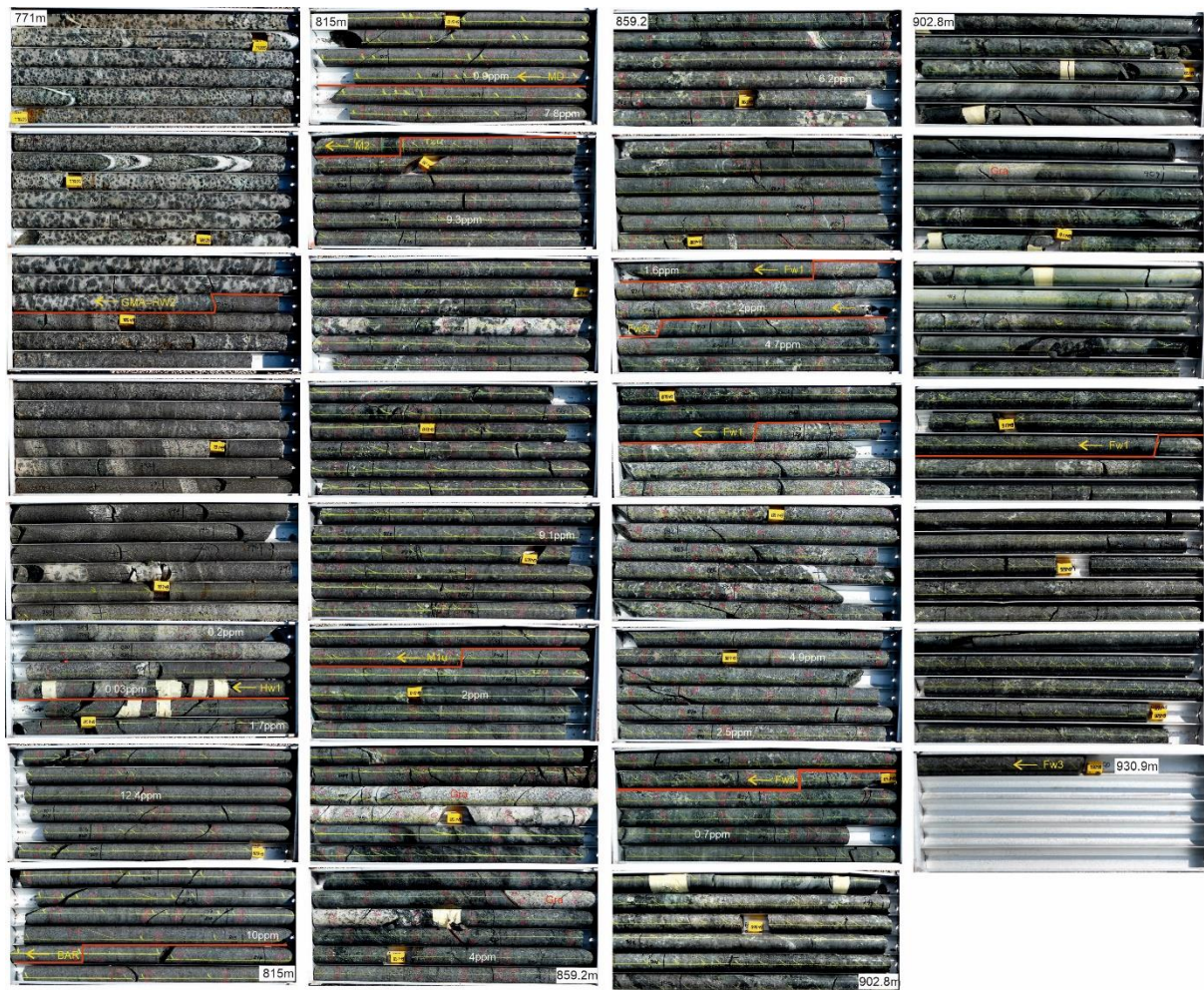
Electronic Supplementary Materials 1



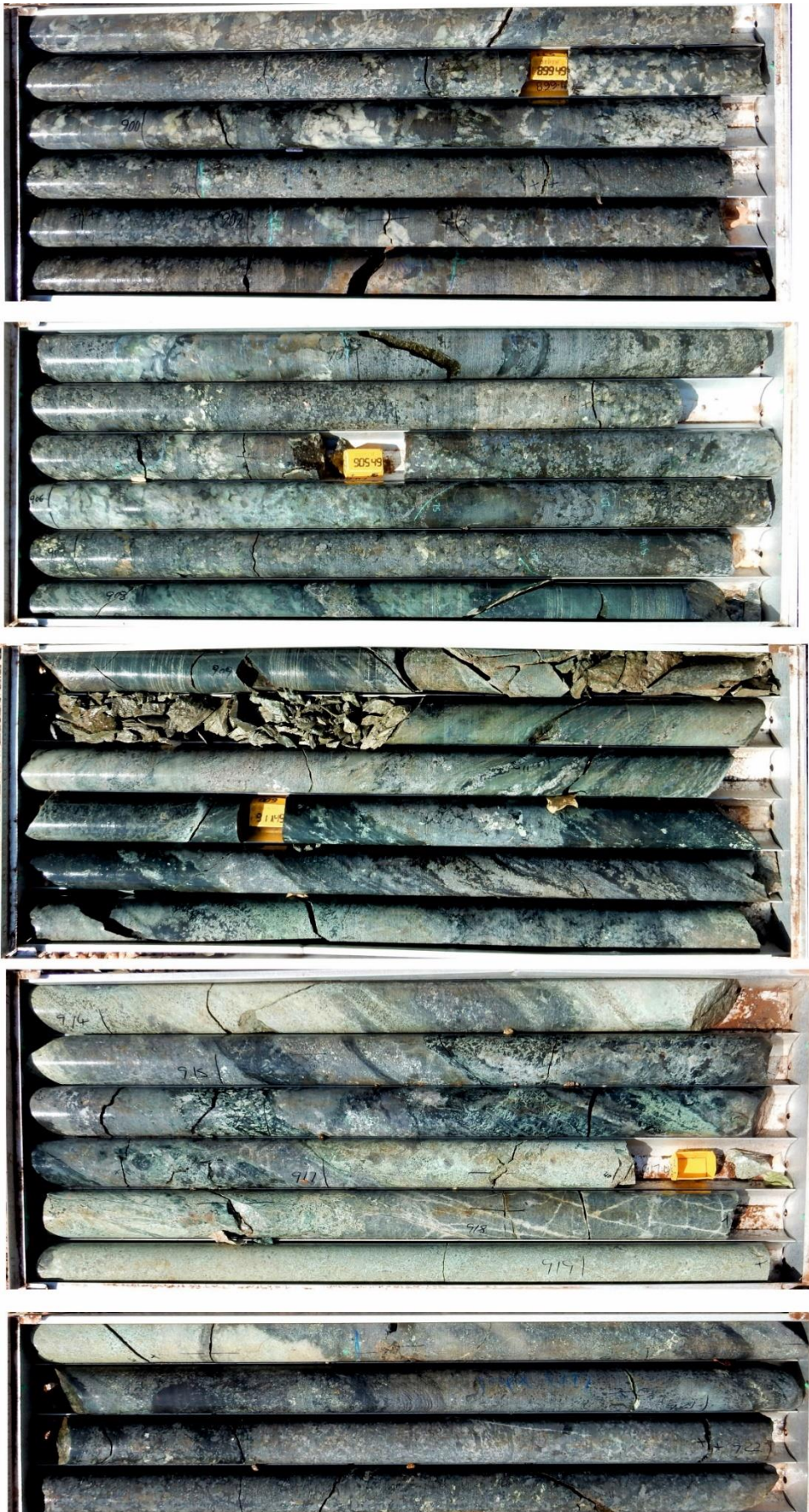
S1a: Flatreef dip section, showing location of Borehole TMT006.



S1b: Flatreef N-S section, showing grades in TMT006D2 and adjacent drill cores UMT103 and UMT205.



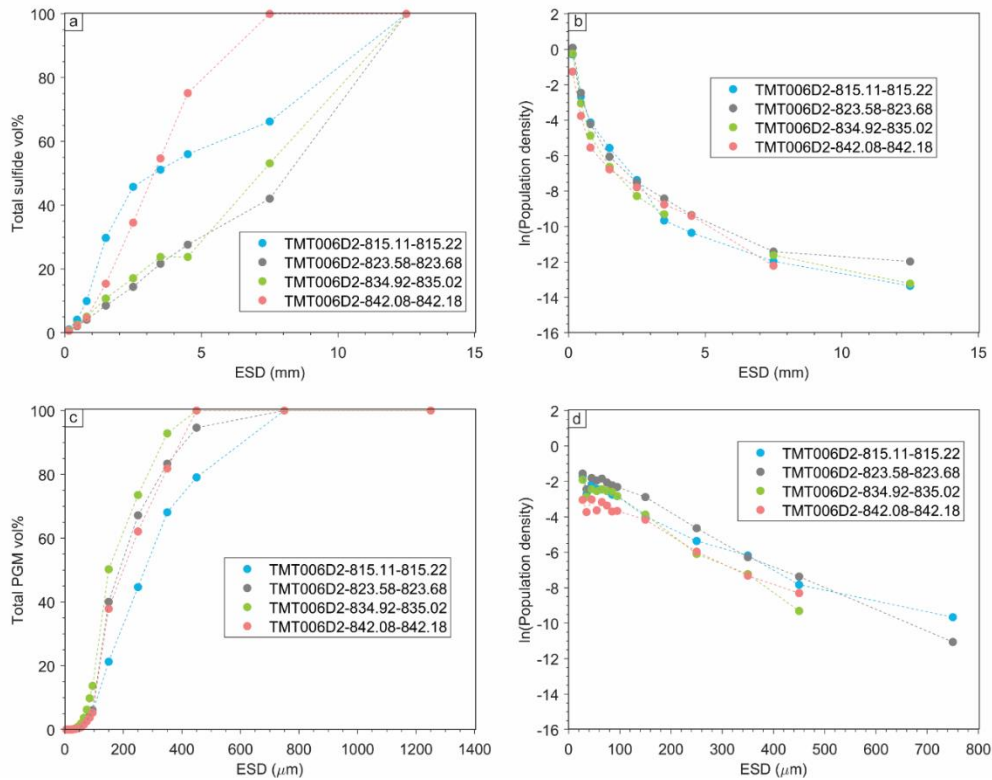
S2: Images of all core boxes intersecting Flatreef in TMT006 D1. Boundaries between major stratigraphic units are shown in red.



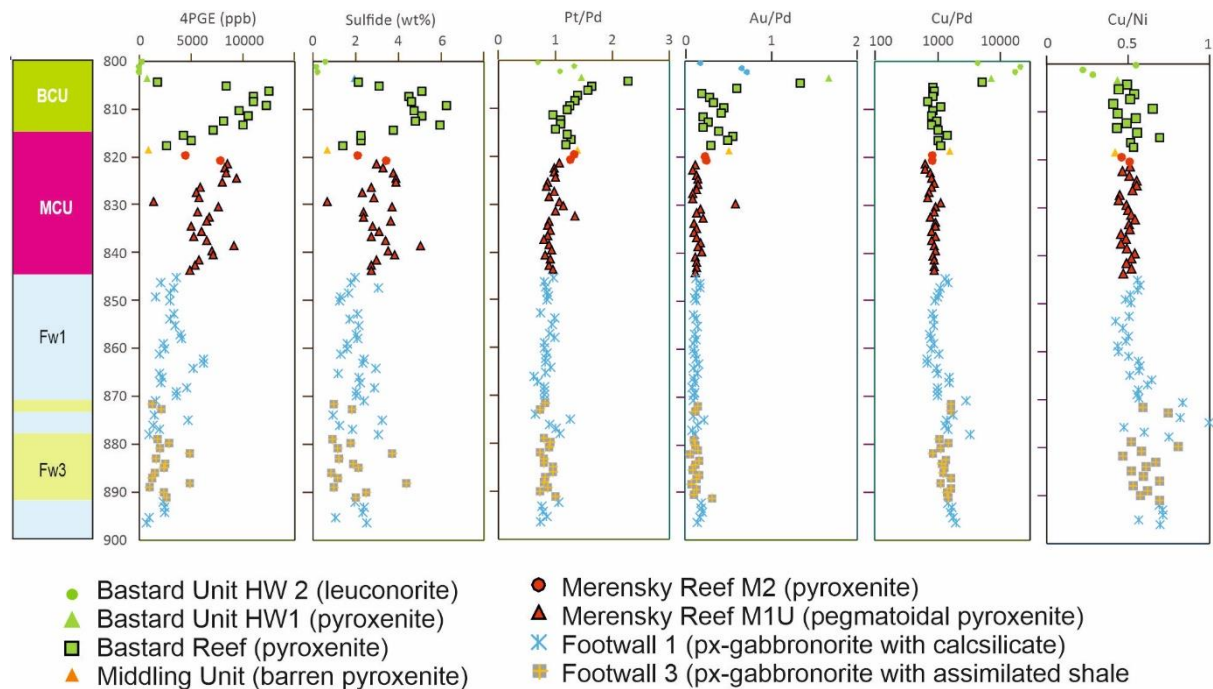
S3: Interval of calcsilicate in TMT006 D₀ (~898-921 m).



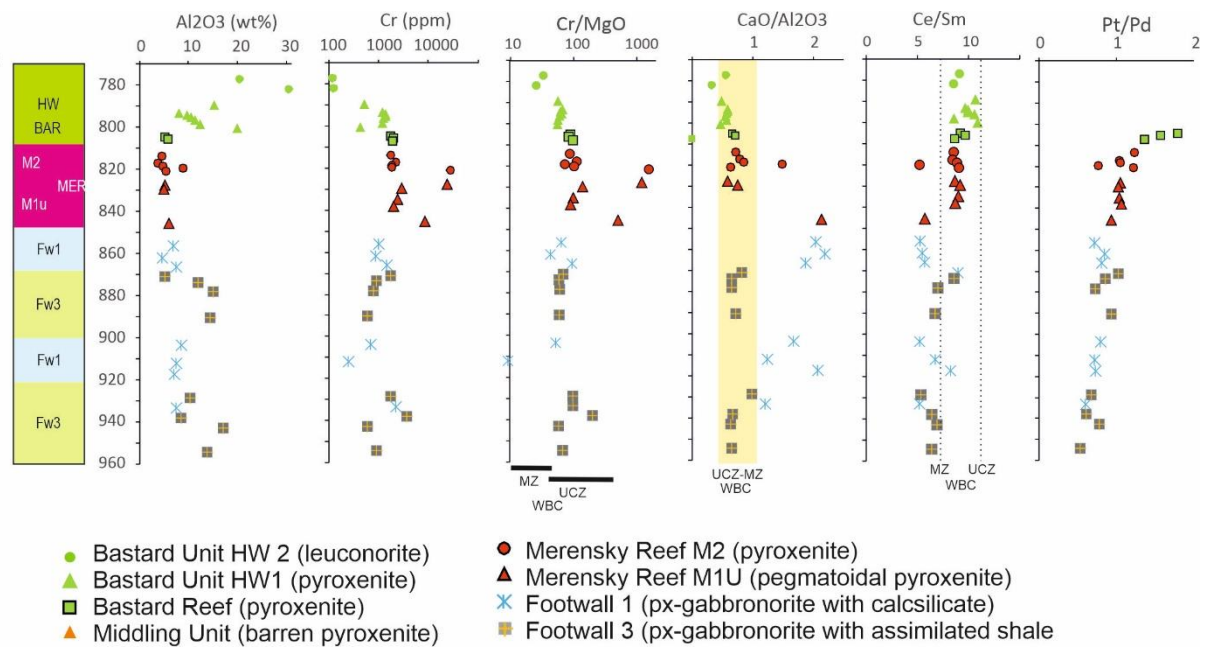
S4: Images of pegmatoidal pods in Footwall Unit of drill core TMT006 D₀.



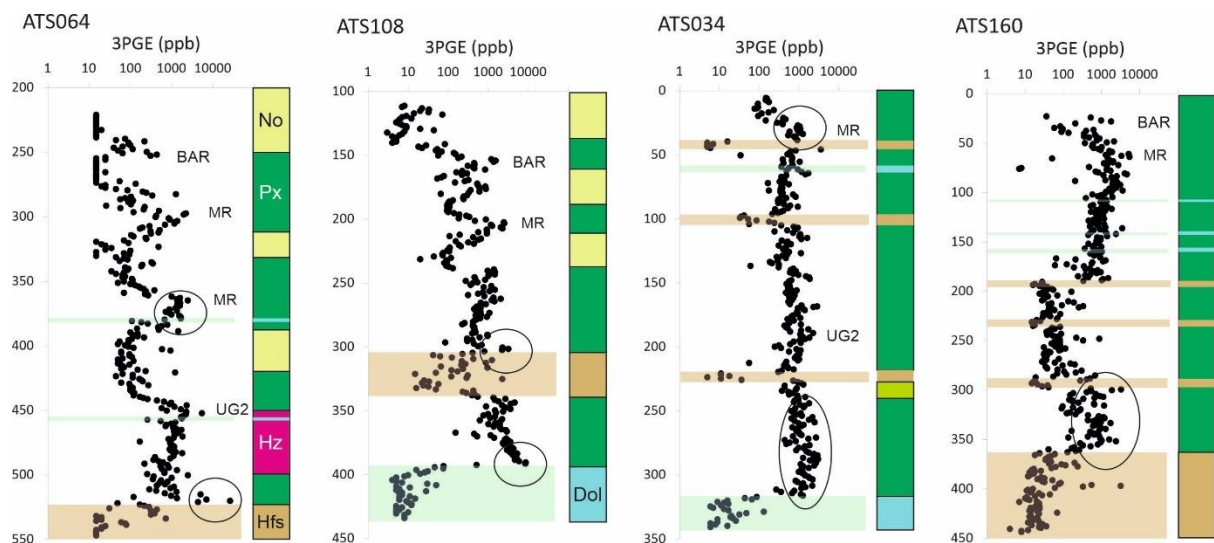
S5: (A) Size distribution of sulfides in CT scans. Note that relatively few of the blebs are larger than 2 times the pyroxene grain size of 5-10mm, and that there is also a population (~5% of the total volume) of very small blebs (<1mm). (B) CSD plot of sulfide grains. Note similar shape for samples suggesting similar growth rates. (C) Size distribution of Pt grains) indicating that the majority of grains are <~350 microns. (D) CSD plot of Pt grains, showing straight lines indicative of homogenous populations.



S6: Chalcophile element variation in drill core TMT006-D1.



S7: Variation in major and trace elements, and element ratios, in the TMT006 mother hole (D0).



S8: Bottom-loaded PGE enrichments in drill cores intersecting the Platreef. No=norite, Px=pyroxenite, Hz=harzburgite, Hfs=hornfels