Characterization of Crustal Components in the Vestan Megaregolith: Implications for Remote Sensing

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SUMMARY AND CONCLUSIONS

- Petrologic characterization of Dominion Range 2010 howardite
- Diverse array of lithologies — complete spectrum of HED lithologies
- 21 distinct lithologies identified (Table 1)
- Dacite lithology — Crustal partial melt and Stannern trend contaminant
- Differentiation?, MAPS, In Review.
- Hahn et al. (2017) Mg-rich Harzburgites from Vesta: Mantle Residua or Cumulates from Planetary

| Figure 1 | Diverse array of lithologies — complete spectrum of HED lithologies |
| Figure 2a | Basaltic Eucrite component (basaltic cumulate) |
| Figure 2b | Modal mineralogy of Dominion Range 2010 howardites |
| Figure 3 | Cumulate vs. basaltic eucrite abundances in the same meteorites. Sections from each pairing appear to cluster around particular values, possibly reflecting original ratios before brecciation. Data for PCA 02 howardites from [9], and for all other howardites from [10]. |