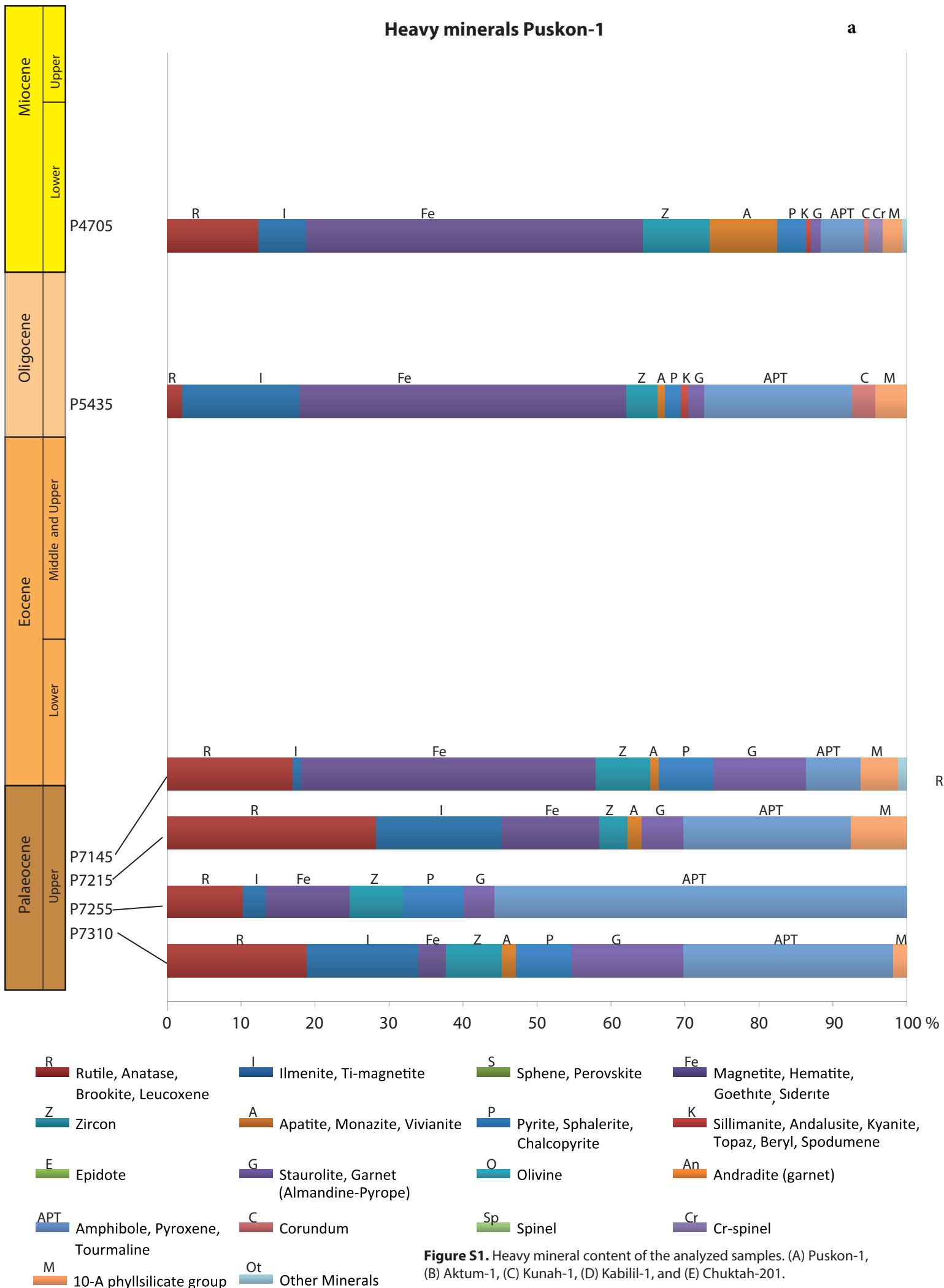


## Heavy minerals Puskon-1

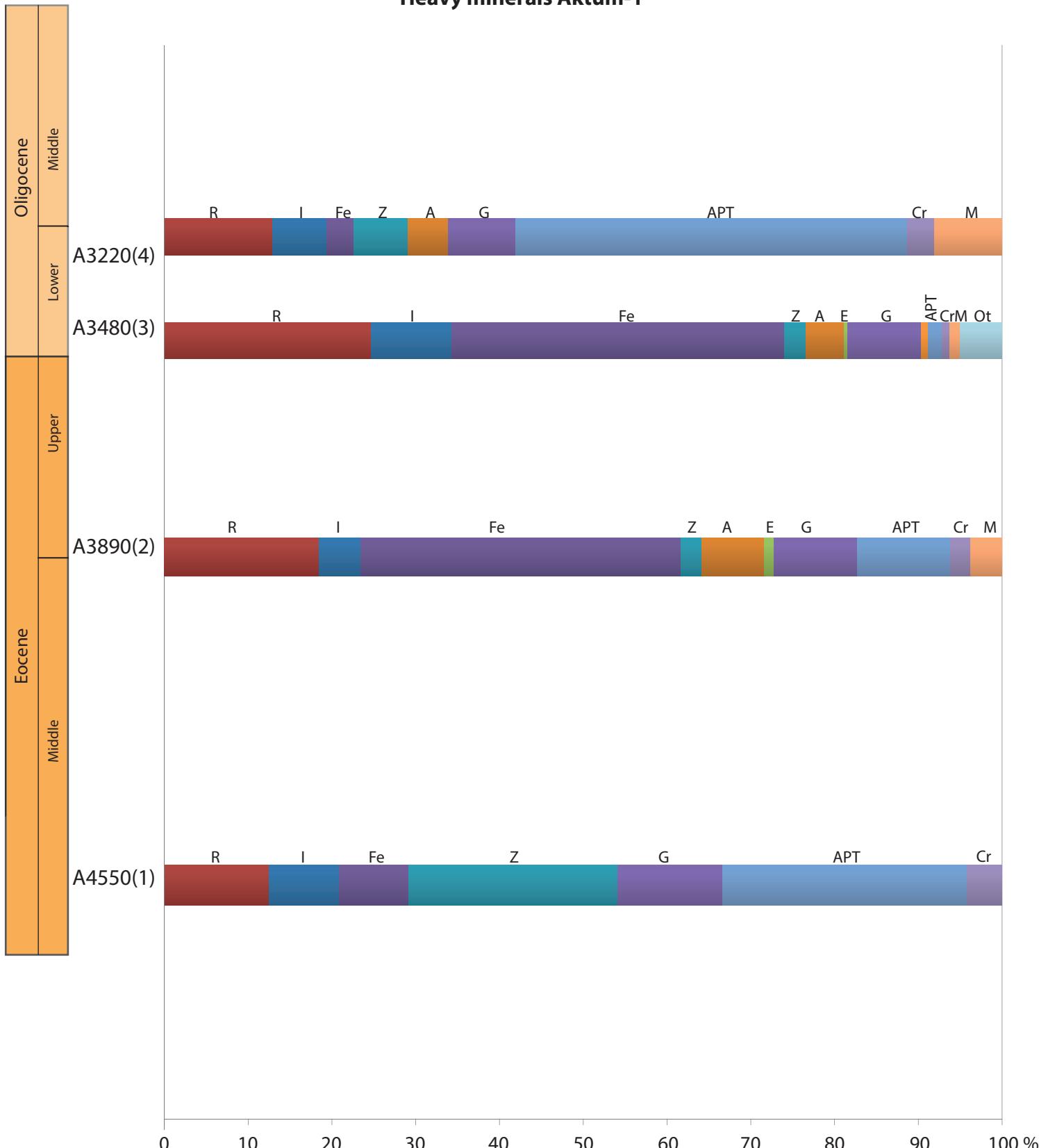
a



**Figure S1.** Heavy mineral content of the analyzed samples. (A) Puskon-1, (B) Aktum-1, (C) Kunah-1, (D) Kabilil-1, and (E) Chuktah-201.

## Heavy minerals Aktum-1

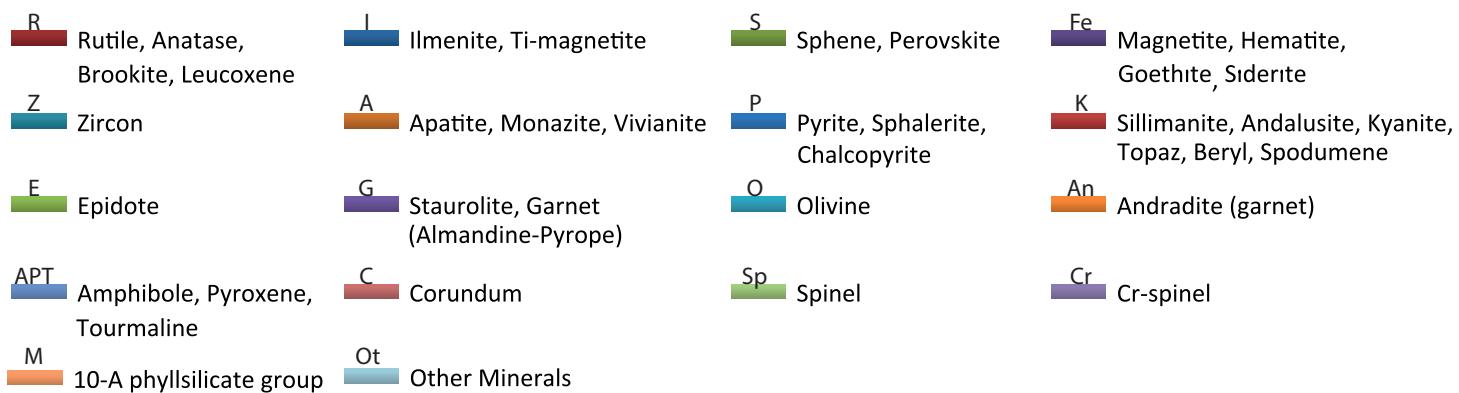
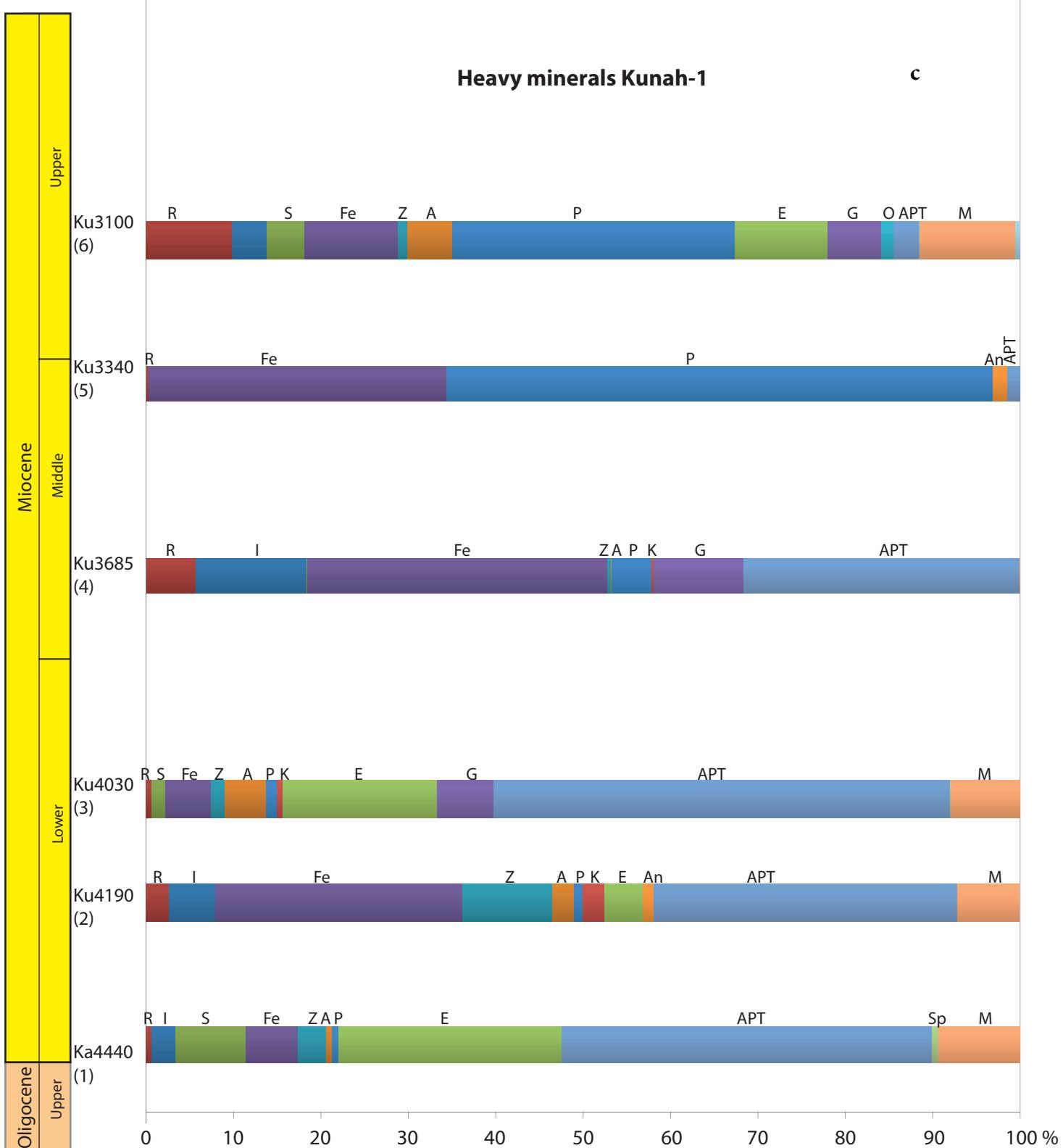
**b**

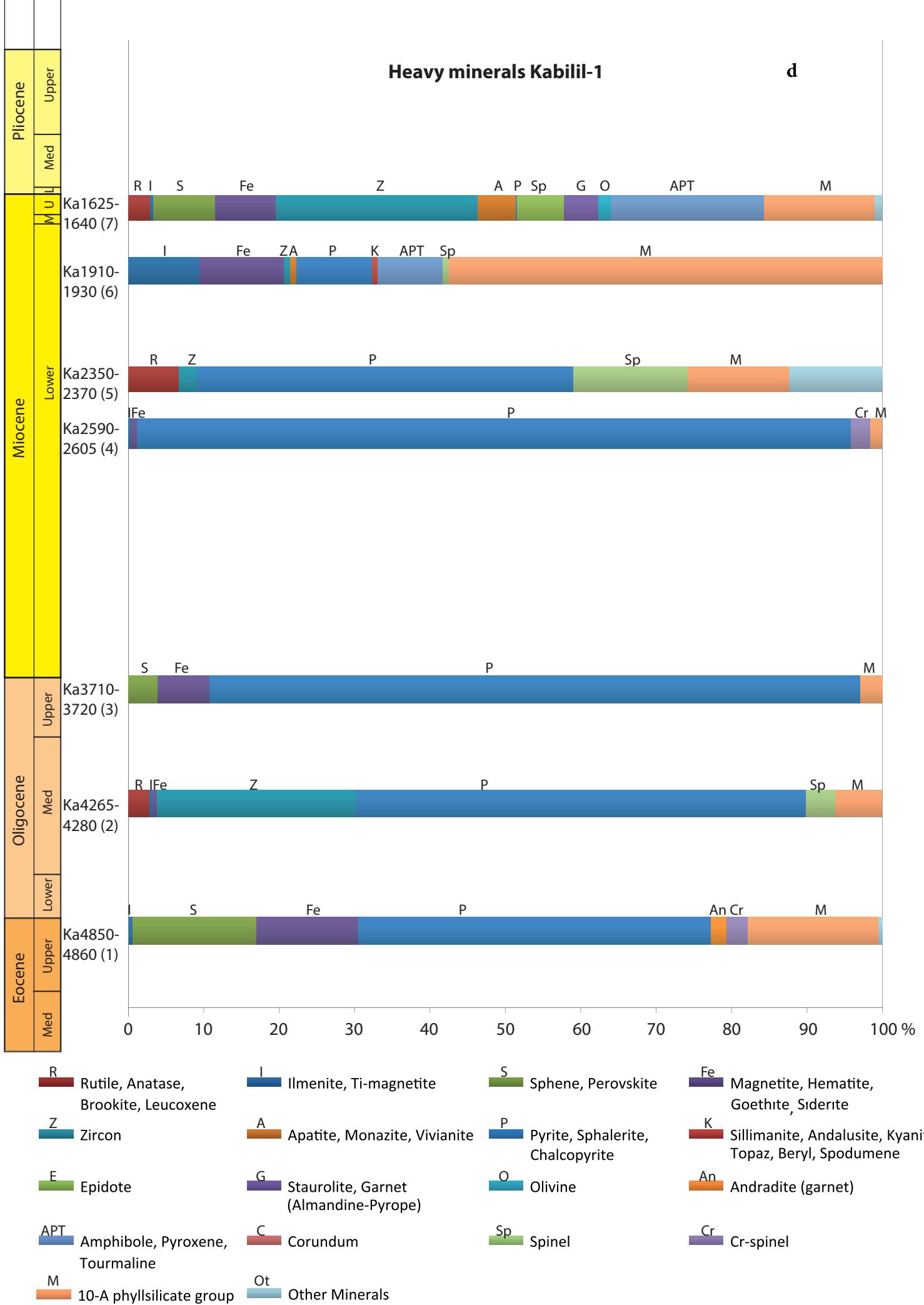


|     |                                      |    |                                       |    |                                  |    |   |
|-----|--------------------------------------|----|---------------------------------------|----|----------------------------------|----|---|
| R   | Rutile, Anatase, Brookite, Leucoxene | I  | Ilmenite, Ti-magnetite                | S  | Sphene, Perovskite               | Fe | Magnetite, Hematite, Goethite, Siderite                   |
| Z   | Zircon                               | A  | Apatite, Monazite, Vivianite          | P  | Pyrite, Sphalerite, Chalcopyrite | K  | Sillimanite, Andalusite, Kyanite, Topaz, Beryl, Spodumene |
| E   | Epidote                              | G  | Staurolite, Garnet (Almandine-Pyrope) | O  | Olivine                          | An | Andradite (garnet)  |
| APT | Amphibole, Pyroxene, Tourmaline      | C  | Corundum                              | Sp | Spinel                           | Cr | Cr-spinel   |
| M   | 10-A phyllsilicate group             | Ot | Other Minerals                        |    |                                  |    |   |

## Heavy minerals Kunah-1

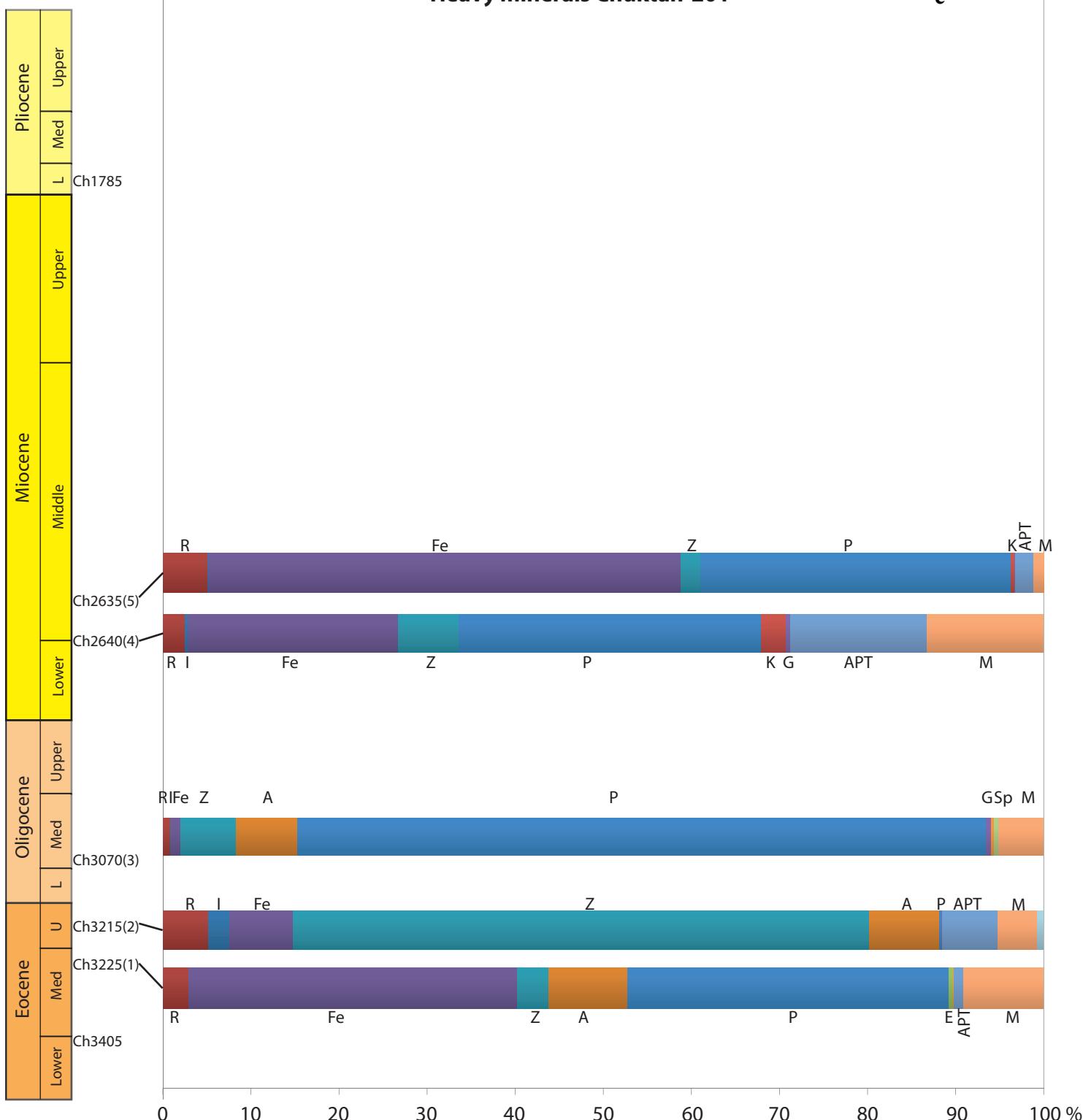
c





# Heavy minerals Chuktah-201

e



|     |                                      |    |                                       |    |                                  |    |   |
|-----|--------------------------------------|----|---------------------------------------|----|----------------------------------|----|---|
| R   | Rutile, Anatase, Brookite, Leucoxene | I  | Ilmenite, Ti-magnetite                | S  | Sphene, Perovskite               | Fe | Magnetite, Hematite, Goethite, Siderite                   |
| Z   | Zircon                               | A  | Apatite, Monazite, Vivianite          | P  | Pyrite, Sphalerite, Chalcopyrite | K  | Sillimanite, Andalusite, Kyanite, Topaz, Beryl, Spodumene |
| E   | Epidote                              | G  | Staurolite, Garnet (Almandine-Pyrope) | O  | Olivine                          | An | Andradite (garnet)  |
| APT | Amphibole, Pyroxene, Tourmaline      | C  | Corundum                              | Sp | Spinel                           | Cr | Cr-spinel   |
| M   | 10-A phyllsilicate group             | Ot | Other Minerals                        |    |                                  |    |   |