Introduction
Soil sample 72160 – 72164 was collected from the mare surface at LRV-3 (figure 1).

Petrography
Morris (1978) determined the maturity index (I/FeO = 87). Basu et al. (1975) performed a detailed study, finding that the agglutinate content (31%) was generally less than expected for a very mature soil.

Chemistry
The bulk composition of 72161 is intermediate between mare and highland material (figures 2 and 4).

Moore et al. (1974) determined 200 ppm carbon (figure 3). Basu et al. (1975) studied the distribution of hydrogen and carbon, finding that it was very high in the finest fraction. This is a very mature soil.

Modal content of soil 72160 (90-124 micron).

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Cosmogenic isotopes and exposure ages
Eldridge et al. (1975) determined the cosmic-ray-induced activity of $^{22}\text{Na} = 190 \text{ dpm/kg}$, $^{26}\text{Al} = 166 \text{ dpm/kg}$ and $^{54}\text{Mn} = 220 \text{ dpm/kg}$.

Other Studies

Heymann et al. (1974) reported the rare gas content.
Figure 3: Carbon content and maturity index for soil sample 72161 compared with other Apollo soils samples.

Figure 4: Normalized rare-earth-element diagram for 72161 showing contamination of mare soil with some highland material.
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<th>Hubbard74</th>
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**technique:** (a) IDMS, (b) XRF, (c) INAA, (d) radiation count., (e) RNAA
References for 72161


