Soil pit description: PF02

Images: PF02_01.jpg, PF02_02.jpg

Soil class: Ava (Poacher)
Map unit: W
Location: 15 m N of 14.5, Zetek Trail
Site position: Lower slope
Slope: 6%, linear, aspect 210°
Parent material: Andesite colluvial over & mixed with Caimito marine facies
Forest structure: Closed canopy, open understory, no palms
Litter: 85% cover, 3 layers, no root mat
Outcrops: None
Stones: None
Cracks: Continuous net, 10 mm wide, 5 - 10 cm spacing
Microrelief: Slight micro-gilga
Faunal activity: None
Other surface features: None

<table>
<thead>
<tr>
<th>Horizon [cm]</th>
<th>Samples [cm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 4</td>
<td>7.5YR 3/3 (dark brown); no mottles; silty clay; strong medium subangular blocky breaking to moderate crumb; no cutans; common coarse pores; slightly moist &amp; slightly firm; common fine &amp; medium tree roots; few fine soft orange weathered stones; common fine black ferrimanganiferous concretions; no charcoal; clear regular boundary to:</td>
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<tr>
<td>4 - 21/29</td>
<td>5YR 4/6 (yellowish red); no mottles; silty clay; strong medium subangular blocky breaking to moderate medium crumb, including patches of fine worm casts; no cutans; common coarse pores; slightly moist &amp; friable; common medium &amp; fine tree roots; few fine &amp; medium slightly hard orange weathered stones; common fine black ferrimanganiferous concretions; few fine charcoal; gradual wavy boundary to:</td>
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<tr>
<td>21/29 - 50/55</td>
<td>5YR 4/6 (yellowish red); no mottles; silty clay loam; weak medium subangular blocky breaking to moderate medium crumb, including patches of fine worm casts; weak discontinuous clayskins; many medium &amp; coarse pores; slightly moist &amp; slightly firm; few fine &amp; medium tree roots; many fine medium slightly hard orange &amp; black-coated stones &amp; few very large (50 cm+) yellowish slightly weathered boulders; common fine black ferrimanganiferous concretions; no charcoal; clear wavy boundary to:</td>
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<tr>
<td>50/55 - 75/85</td>
<td>5YR 4/6 (yellowish red); no mottles; silty clay loam; moderate medium subangular blocky breaking to moderate fine crumb; weak discontinuous clayskins; common medium &amp; coarse pores; slightly moist &amp; slightly firm; common medium &amp; fine tree roots; few fine soft orange &amp; medium slightly hard platy grey stones; few fine black ferrimanganiferous concretions; no charcoal; clear slightly wavy boundary to:</td>
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<tr>
<td>75/85 - 125/130</td>
<td>5YR 4/6 (yellowish red); no mottles; silty clay loam; weak medium subangular blocky, breaking to moderate fine crumb; no cutans; many fine pores; slightly moist &amp; slightly firm; common medium &amp; fine tree roots; many medium &amp; coarse soft &amp; slightly hard orange &amp; common slightly hard boulders to 50 cm diameter; few fine black</td>
</tr>
</tbody>
</table>
ferrimanganiferous concretions; no charcoal; clear slightly wavy boundary to:

125/130 - 160
5YR 4/8 (yellowish red); no mottles; silty loam; moderate medium subangular blocky breaking to moderate fine crumb; weak discontinuous clayskins; few medium pores; slightly moist & slightly firm; common medium & fine tree roots; few boulders to 50 cm diameters & few fine soft orange weathered stones; common fine black ferrimanganiferous concretions; no charcoal:

160 - 210
5YR 4/8 (yellowish red); no mottles; silty clay; moist & friable, few medium soft orange weathered stones

210 - 220
7.5YR 4/8 (strong brown); no mottles; silty clay loam; moist & friable, many coarse soft & hard orange & red black Mn-coated weathered stones

Correlations

Catapan (1970): O X W Lf 2
E B 1 1

World Reference Base: Hypereutric Ferralsol

Soil Taxonomy: Typic Eutrudox

Features:
Although deep and highly weathered, with low CEC and some gibbsite, this profile is bouldery and augers like a Marron. Moderately firm & compact subsoil, although colours are bright reddish & unmottled. Clay contents increase somewhat gradually from the topsoil, but textures are mainly fine loam, rather than clay. Clayskins are weak and the subsoil is probably argillic. International correlations are with the Ferralsol/Oxisol. The clast concentrations are not sufficient to give Skeletic. The andesitic- looking clasts are concentrated in 2 weak sheets. There are many ferrimanganiferous concretions. CEC is low but highly base-saturated, and is clearly eutric/hypereutric.