

## Soil pit description: PF08

**Images:** PF08\_01.jpg, PF08\_02.jpg

**Soil class:** Barbour  
**Map unit:** B  
**Location:** 200 m N of marker 12, Barbour (East) Trail  
**Site position:** Flat step on midslope of moderate N scarp down to lake  
**Slope:** 0%, linear, general slope aspect 320°  
**Parent material:** Caimito formation, possibly volcanic colluvium over marine sedimentary facies  
**Forest structure:** Closed canopy, moderately thick understory, few palms  
**Litter:** 100% cover, 5 layers, thin root mat  
**Outcrops:** None  
**Stones:** Few hard boulders (to 30 cm diameter)  
**Cracks:** None  
**Microrelief:** None  
**Faunal activity:** Common fine worm casts  
**Other surface features:** None

<b>Horizon [cm]</b>		<b>Samples [cm]</b>
<b>0 - 5</b>	7.5YR 3/2 (dark brown); no mottles; (silty) clay loam; moderate medium subangular blocky breaking to moderate fine & medium crumb, including many fine worm casts; no cutans; many fine pores; slightly dry & friable; many fine & medium tree roots; few medium hard grey stones; few fine & medium black ferrimanganiferous concretions; common medium charcoal in clusters; clear regular boundary to:	[0-5]
<b>5 - 30</b>	10YR 3/4 (dark yellowish brown); no mottles; (silty) clay loam; moderate medium subangular blocky breaking to moderate fine crumb; no cutans; many coarse pores; slightly moist & friable; common fine & medium & few coarse tree roots; common fine black-coated stones & few coarse stones; patches of many fine black ferrimanganiferous concretions; no charcoal; clear regular boundary to:	[5-10] [10-20] [20-30]
<b>30 - 50</b>	10YR 5/3 (brown) with many medium distinct brown, red & orange mottles; silty clay loam; weak medium & fine subangular blocky breaking to moderate fine crumb, including common medium & coarse worm casts; very weak discontinuous clayskins; few fine pores & common old termite nest channels; slightly moist & friable; common fine & few medium tree roots; common fine & medium & few coarse hard stones; many fine black ferrimanganiferous concretions; no charcoal; clear regular boundary to:	[30-40] [40-50]
<b>50 - 60</b>	5Y 7/2 (light grey) with few fine distinct red & orange mottles; silty clay loam; weak fine & medium subangular blocky breaking to moderate fine crumb; weak continuous clayskins; common coarse pores; moist & friable; common fine tree roots; few fine & medium hard stones; many fine black ferrimanganiferous concretions; patches with common fine & medium charcoal; diffuse boundary to:	[50-60]
<b>60 - 113</b>	2.5Y 7/2 (light grey) with common fine distinct orange red & few medium & coarse prominent dark red mottles; clay loam; weak fine & medium subangular blocky breaking to moderate fine crumb; strong continuous clayskins; common fine pores; moist & friable; few fine tree roots; few fine red soft weathered stones; no concretions; no charcoal; clear wavy boundary to:	[60-70] [70-80] [80-90] [90-100] [100-110]
<b>113 - 140</b>	5Y 7/3 (pale yellow) with common fine & medium distinct red & orange mottles; silty clay; moderate fine & medium subangular blocky breaking to moderate fine crumb; strong continuous clayskins; few fine pores; moist & friable; few fine tree roots; few fine red soft weathered stones; no concretions; no charcoal; clear wavy boundary to:	[110-120] [120-130] [130-140]
<b>140 - 158</b>	2.5Y 7/1 (light grey) with common fine & medium distinct orange mottles; clay (loam); moderate medium & coarse breaking to moderate fine subangular blocky; strong continuous clayskins; few fine pores; moist & friable; few fine tree roots; few fine & medium orange soft weathered stones; no concretions; no charcoal:	[140-150] [150-158]
<b>158 - 180</b>	2.5Y 7/2 (light grey) with common fine & medium distinct red & orange mottles; sandy clay; slightly moist & slightly firm & sticky; no stones	None
<b>180 - 230</b>	5Y 7/3 (pale yellow) with few medium distinct dark red & orange mottles; clay; moist & slightly firm; no stones	None
<b>230 - 240</b>	5Y 7/3 (pale yellow) with common medium distinct red & orange mottles; clay; moist & slightly firm; common fine & medium hard stones.	None
<b>240 - 270+</b>	5Y 7/3 (pale yellow) with common medium distinct red & orange mottles; clay; moist & firm; common fine & medium hard stones	None

### **Correlations**

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**Catapan (1970):**      O T M-N Cf 1  
                                 M C        1 0

**World Reference Base:** Vertic Hyperdystric Gleyic Alisol

**Soil Taxonomy:**        Vertic Oxyaquic Hapludult

**Features:**                Like the Lake profiles, this soil is friable to below 1.5 m. The mottles below 230 are slightly hard and may be remnants of weathering rock. Chemically intermediate with EBS indicating eutric to 60 cm, and marginally dystic below. Transitional Alisol/Luvisol