

Chemical Transformations as Related to the Oxidation-Reduction Potential in  
Central California Organic Soils

By

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soil profile is a shown in Table 3.1a.

The soil selected on Rindge Tract is classified as Staten peaty muck (Weir, 1952) and is different from the Bouldin Island soil in that it has a mineral layer at approximately 90 cm. The soil profile is described in Table 3.1b.

Table 3.1a. Description of Venice Peaty Muck, Bouldin Island.

| Depth(cm) | Visual Description   | % loss on ignit. |
|-----------|--|------------------|
| 0 - 30    | dark grey, fluffy, decomposed peaty muck                                     | 52.50            |
| 30 - 60   | brown, matted fibrous peat; less decomposed than surface layer               | 56.30            |
| 60 - 90   | similar to above layer but less decomposed, brown with light brown mottling. | 63.23            |
| 90 - 120  | waterlogged fibrous peat   | 75.00            |

Table 3.1b. Description of Staten peaty muck, Rindge Tract.

| depth (cm) | Visual Description   | % loss on ignit. |
|------------|--|------------------|
| 0 - 35     | dark grey, loose, fluffy, well decomposed peat                       | 56.20            |
| 35 - 60    | dark brown fibrous peaty material less decomposed then surface layer | 58.32            |
| 60 - 90    | fibrous peaty material, dark brown                                   | 56.21            |
| 90 - 120   | grey, mottled mineral layer, sandy loam in texture                   | 2.50             |