Soil Texture by Feel

Place soil in palm of hand. Add water drop-wise and knead the soil into a smooth and plastic consistency, like moist putty.

Place ball of soil between thumb and forefinger, gently pushing the soil between with the thumb, squeezing it upward into a ribbon. Form a ribbon of uniform thickness and width. Allow ribbon to emerge and extend over the forefinger, breaking from its own weight.

Moisten pinch of soil in palm and rub with forefinger.

Does the soil remain in a ball when squeezed?

- Yes: Add water
  - Is the soil too dry?
    - Yes: Add dry soil
    - No: Is the soil too wet?
      - Yes: Add water
      - No: Add dry soil

- No: Add water

Does the soil form a ribbon?

- Yes: What kind of ribbon does it form?

  Forms a weak ribbon less than 1" before breaking
  - Yes: Sandy Loam
  - No: Loam

  Forms a 1 - 2" ribbon before breaking
  - Yes: Clay Loam
  - No: Loam

  Forms a ribbon 2" or longer before breaking
  - Yes: Sandy Clay Loam
  - No: Silty Clay Loam

If platy structure then soil type 5

Does it feel very gritty?

- Yes: Loam
- No: Sandy Loam

Does it feel equally gritty and smooth?

- Yes: Loam
- No: Sandy Clay Loam

Does it feel very smooth?

- Yes: Silt Loam
- No: Silty Clay Loam
## Long-term Acceptance Rates

<table>
<thead>
<tr>
<th>Soil Type</th>
<th>USDA Soil Texture</th>
<th>USDA Soil Structure-Shape</th>
<th>USDA Soil Structure-Grade</th>
<th>Percolation Rate (MPI)</th>
<th>Treatment Level 1</th>
<th>Treatment Level 2</th>
<th>Treatment Level 2N</th>
<th>Treatment Level 3</th>
<th>Treatment Level 3N</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Soil Type 1 with more than 35% rock &gt;2 mm Soil Types 2-5 with more than 50% rock (&gt;2 mm)</td>
<td>--</td>
<td>Single Grain</td>
<td>&lt;5</td>
<td>1.0 (minimum 3' deep unlined sand filter required 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Sand Loamy Sand</td>
<td>--</td>
<td>Single Grain</td>
<td>5-15</td>
<td>0.80</td>
<td>1.25</td>
<td>1.25</td>
<td>1.40</td>
<td>1.40</td>
</tr>
<tr>
<td>2</td>
<td>Sandy Loam Loam Silt Loam</td>
<td>Prismatic Blocky Granular</td>
<td>Moderate Strong</td>
<td>16-25</td>
<td>0.60</td>
<td>0.90</td>
<td>0.90</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>2A</td>
<td>Sandy Loam Loam Silt Loam</td>
<td>Prismatic Blocky Granular None</td>
<td>Weak Massive</td>
<td>26-40</td>
<td>0.50</td>
<td>0.70</td>
<td>0.70</td>
<td>0.80</td>
<td>0.80</td>
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<tr>
<td>3</td>
<td>Sandy Clay Loam Clay Loam Silty Clay Loam</td>
<td>Prismatic Blocky Granular</td>
<td>Moderate Strong</td>
<td>41-60</td>
<td>0.35</td>
<td>0.50</td>
<td>0.50</td>
<td>0.60</td>
<td>0.60</td>
</tr>
<tr>
<td>3A</td>
<td>Sandy Clay Loam Clay Loam Silty Clay Loam</td>
<td>Prismatic Blocky Granular None</td>
<td>Weak Massive</td>
<td>61-75</td>
<td>0.30</td>
<td>0.40</td>
<td>0.40</td>
<td>0.50</td>
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<tr>
<td>4</td>
<td>Sandy Clay Clay Silty Clay</td>
<td>Prismatic Blocky Granular</td>
<td>Moderate Strong</td>
<td>76-90</td>
<td>0.20</td>
<td>0.30</td>
<td>0.30</td>
<td>0.30</td>
<td>0.30</td>
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<tr>
<td>4A</td>
<td>Sandy Clay Clay Silty Clay</td>
<td>Prismatic Blocky Granular None</td>
<td>Weak Massive</td>
<td>91-120</td>
<td>0.15</td>
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<td>0.20</td>
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<tr>
<td>5</td>
<td>Soil Types 2-4A</td>
<td>Platy</td>
<td>Weak Moderate Strong</td>
<td>121+</td>
<td>0.10</td>
<td>0.15</td>
<td>0.15</td>
<td>0.15</td>
<td>0.15</td>
</tr>
</tbody>
</table>

### Based on CDPHE WQCC Regulation 43 Table 10.1 Soil Treatment Area Long-term Acceptance Rates by Soil Texture, Soil Structure, Percolation Rate and Treatment Level

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### Textural Triangle

- **Sand Loam**: Represented by the lower left triangle.
- **Sandy Loam**: Represented by the lower middle triangle.
- **Sandy Clay Loam**: Represented by the lower right triangle.
- **Loam**: Represented by the middle triangle.
- **Silt Loam**: Represented by the upper middle triangle.
- **Silt**: Represented by the upper right triangle.
- **Clay**: Represented by the upper left triangle.
- **Silty Clay**: Represented by the upper middle triangle.
- **Sandy Clay**: Represented by the upper right triangle.
- **Silty Clay**: Represented by the upper right triangle.

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