















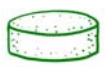








Basic Field Tests Date of Testing: Ref. / Nr. of Sample:	Sample Characteristics Location of Sample: Depth of Sample: Special Circumstances:	Address Name of Sampler: Organization and Address:
Structure and Texture	possibilities	result
 1. visual use dry sample	granular (gravelly), fragmented (sandy), or continuous colour description	structure: colour:
 2. touch use dry sample	coarse, medium coarse, fine, or fine with lumps lumps are powdery (silt), or very hard (clay)	texture: lumps:
 3. smell few drops of water	rotten, musty or agreeable does the sample contain humus (yes/no)	smell: humus:
 4. taste	sharp and gritty (coarse), or soft and powdery (fines) lumps stick to tongue (clay)	texture: stickiness:
Compressibility	possibilities	result
 5. compression little more water	gravelly soil requires much strength, but very short pressure sandy soil requires some strength, but short pressure (low) silty soil requires little strength, but medium pressure (med.) clayey soil requires very little strength, but long pressure (h.)	compressibility:
 6. ball drop enough water for cohesive ball	one lump (clay), several big pieces (well-graded) or shattered (gravel/sand)	pieces:
Plasticity	possibilities	result
 7. shape enough water for cohesive ball	gravelly soil is very difficult to shape (low) sandy soil is difficult to shape (low) silty soil is quite easy to shape (medium) clayey soil is very easy to shape (high)	plasticity:
 8. elasticity enough water for cohesive ball	gravelly soil breaks very easily, not elastic at all (low) sandy soil breaks easily, little elastic (low) silty soil breaks after some length, acts elastic (medium) clayey soil breaks after long pull, very elastic (high)	elasticity:
 9. adhesion enough water for cohesive ball	gravelly soil is very easy to penetrate, ball crumbles (low) sandy soil is easy to penetrate, knife stays almost clean (low) silty soil is harder to penetrate, stains knife easily (med.) clayey soil is hard to penetrate, stains blade a lot (high)	adhesion:
 10. shine enough water for cohesive ball	gravelly soil has a very rough surface with many voids sandy soil has a rough surface with some voids silty soil has a smooth, but dull surface clayey soil has a smooth, but shiny surface	rough, dull or shiny:
Cohesion	possibilities	result
 11. absorption enough water for cohesive ball	in gravelly soil the water disappears very quickly (low) in sandy soil the water disappears quickly (low) in silty soil water disappears slowly, the sides crack (med.) in clayey soil the water stays for a long time (high)	cohesion:
 12. sticking make quite wet	if it sticks to the hand, the sample contains a lot of silt. if it creates oily water but falls off, it is clay.	silty or clayey:
 13. hand wash keep water running	gravelly soil does not stick and is easy to wash (low) sandy soil sticks very little and is easy to wash (low) silty soil sticks a lot, is difficult to wash, but dries powdery clayey soil is easy to wash, leaves a thin oily film, dries flaky	cohesion:
Particle Size Distribution	possibilities	result
 14. hand sieving keep water running	approximate percentages of the particles	% gravel: % sand: % silt: % clay:

Additional Field Tests

Ref. / Nr. of Sample:

Structure and Texture	possibilities	result
 <p>1. ball drying enough water for cohesive ball</p>	if it quickly falls apart; more coarse particles if it stays together; more fines	coarse or fine:
Compressibility	possibilities	result
 <p>2. crumbling use 425 micron sieve mix into plastic state</p>	both sizes break easily; less clay, low dry strength only small size breaks; medium clay, dry strength is medium neither size breaks; more clay, high dry strength	dry strength:
 <p>3. biscuit use 425 micron sieve mix into plastic state</p>	cookie pulverizes easily, simply reduced to powder (low) not difficult to break, crushed with little effort (medium) difficult to break, with audible snap (high)	dry strength:
Plasticity	possibilities	result
 <p>4. consistency use 425 micron sieve mix into plastic state</p>	weak and fragile thread, breaks and crumbles (coarse) medium-strength thread, can be remodeled (more fines) tough and hard thread, does not crack or crumble (more clay)	thread:
Cohesion	possibilities	result
 <p>5. cigar use 425 micron sieve mix into plastic state</p>	less than 5 cm; more fine sand and silt (low) between 5 and 15 cm; the soil has good consistency (med.) longer than 15 cm; (too) much clay (high)	cohesion:
 <p>6. ribbon use 425 micron sieve mix into plastic state</p>	no ribbon can be made; very little clay (low) between 5 to 10 cm; low to medium amount of clay 25 cm or more; (too) much clay (high)	cohesion:
 <p>7. wet tapping use 425 micron sieve make cohesive ball</p>	rapid reaction: 5 to 10 taps; fine sands and coarse silt slow reaction: 20 to 30 taps; some clay no reaction: much clay	reaction:
Particle Size Distribution	possibilities	result
 <p>8. jar shake use jar with flat bottom</p>	approximate percentages of the particles	% gravel: % sand: % silt: % clay:
 <p>9. wet sieving use 75 micron sieve keep running water</p>	accurate percentage of coarse versus fine particles weight before: weight after:	% coarse: % fine:

note: the soil analyzed is just a small sample. However, the composition and characteristics of a soil may vary greatly, even when found nearby or at the same location. It is therefore recommended to take at least 3 representative samples per site. Then, after modification and stabilization of the soil, it is recommended to make and examine some test blocks, in order to find out the actual behaviour of the finished product.

Overall Findings	structure:	compressibility:	plasticity:
	cohesion:	particle size distribution:	

Classification of Sample	e.g. sandy silt or clayey gravel e.g suitable or unsuitable
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Soil Modification	earth technique proposed: modification / stabilization of soil: other comments:
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