

Nailsea

SOIL PIT DESCRIPTIONS

Pit No 1

Topsoil :

0-18 cm  
Medium sandy silt loam  
10YR 4/3  
2% stones 2-6 cm

Subsoil 1

18-42 cm  
Medium clay loam  
7.5YR 4/4  
6% stones 2-6 cm; 1% stones < 2 cm  
Weak medium subangular blocky; very friable  
< 0.5% biospores > 0.5 mm

Subsoil 2

42-80 cm  
30% stones 2-6 cm; 3% stones 2 cm  
(soft med/coarse grained sandstone)

Subsoil 3

80+ cm  
Sandstone

AP wheat = 137 mm; MD wheat = 95 mm; MB wheat = +42 mm  
AP potatoes = 112 mm, MD potatoes = 85 mm, MB potatoes = +27 mm  
Grade According to Droughtiness = 1

Pit No 2

Topsoil : 0-23 cm  
Medium Clay Loam  
10YR42

Subsoil 1 : 23-33 cm  
Medium Clay Loam  
7.5YR44  
approx. 10% stones, 2-6 cm (Visual estimate)

Subsoil 2 : 33-48 cm  
Medium Clay Loam  
7.5YR44  
approx 50% stones (Sieve); hard sandstone  
Good structure assumed (high stone content prevented assessment)

Subsoil 3 : + 48 cm  
Rock (ie greater than 70% stone), hard sandstone

AP Wheat = 81 mm (using TAV/EAV values of 1%/0.5% for the rock and stones)  
AP Pots = 79 mm  
MB Wheat = 14 mm  
MB Pots = 6 mm  
Grade according to Droughtiness = 3A

Pit No 3

Topsoil : 0-20 cm  
Medium Clay Loam  
10YR43

Subsoil : 20-47 cm  
Sandy Clay Loam  
7.5YR44  
approx. 10% stones, 2-6 cm (sieve), hard sandstone  
Coarse and Medium Sub-angular Blocky; Weakly developed; friable  
(ie Good Structure)

Subsoil 2 : 47-57 cm  
Sandy Clay Loam; Good structure assumed (difficult to assess  
with high stone content)  
7.5YR44  
approx. 50% stones (sieve); hard flaggy sandstone

Subsoil 3 : + 57 cm  
Rock (ie, greater than 70% stone) hard sandstone.

AP Wheat = 94 mm (using hard rock values)  
AP Pots = 99 mm  
MB Wheat = -1 mm  
MB Pots = +14 mm  
Grade according to Droughtiness = 3A

Pit No 4

Slope =  $3\frac{1}{2}$ -4°; slightly variable microrelief. Poached and Waterlogged surface

Topsoil : 0-21 cm  
Medium Clay Loam  
10YR42; dark grey brown

Subsoil 1: 21-49 cm  
Clay  
5YR53; just pale; ped faces are definitely pale (5YR53)  
Less than 2% manganese; not well developed  
Medium prismatic at the base of this horizon  
Less than 0.5% biopores greater than 0.5 mm  
Stony layer, 21-26 cm (10-20%, larger than 2 cm)

Subsoil 2 : 49-80+ cm  
Clay  
Gleying present : Matrix colour = 5YR53/2.5YR54; ped faces are  
pale (5YR53); greater than 2% Manganese  
no evidence of mottling  
Very Coarse Prismatic  
Less than 0.5% biopores greater than 0.5 mm

In the assessment of Soil Wetness Class, Figure 8 is used : there is an SPL at less than 80 cm and the soil, although Red, is gleyed between 40-70 cm. Wetness Class = III

For MCL at FCD = 191 and WC = III, Grade according to Wetness = 3A.