

Unedited (PSD Samples showed textures  
needed revising)

6958

19/90

ALC grades also reviewed + later changed

### SOIL NOTES FOR HIGHER BROCKHOLES, SAMLESBURY

1. 0-23 cms dark grey brown sandy clay loam, 23-100 cms black humified peat with occasional bands of fibrous peat. Level. Permanent pasture. ~~3a.4~~
2. Woodland.
3. 0-15 cms dark brown organic sandy clay loam, 15-40 cms brown sandy clay loam with a few feint rusty mottles, 40-60 cms organic coarse loamy sand, 60-100 cms grey sand and gravel. Level. Permanent pasture. ~~3b.~~
4. 0-18 cms dark brown sandy loam, 18-40 cms red brown sandy clay loam with a few distinct ochreous mottles, 40-45 cms red brown medium clay loam with common distinct ochreous mottles, 40-45 cms red brown medium clay loam with common distinct ochreous mottles and manganese concretions, gleyed, 45-100 cms deep red brown with many distinct ochreous mottles. Gentle slope. Permanent pasture. 3b.
5. 0-14 cms brown sandy loam, 14-48 cms red brown sandy clay loam, slowly permeable layer at 48 cms, 48-100 cms red brown clay with common distinct ochreous mottles. Gentle slope. Permanent pasture. 3b.
6. 0-25 cms dark brown sandy loam/sandy peaty loam, 25-36 cms black peaty loam/loamy peat, 36-70 cms black humified peat, 70-100 cms dark grey sand. Micro irregularities. Permanent pasture. ~~3a.4~~
7. 0-40 cms dark brown black sandy peaty loam, 40-61 cms grey fine sandy clay loam/silty clay loam, 61-100 cms purple grey loamy sand with dark black peat lenses. Micro irregularities. Permanent pasture. ~~3a.4~~
8. On edge of wood. 0-28 cms dark brown sandy loam, 28-40 cms dark brown sandy loam with a few distinct rusty mottles, 40-80 cms grey brown loamy sandy, 80-100 cms grey sand/loamy sand. Almost level. Permanent pasture. ~~2.3a~~
9. 0-30 cms dark brown sandy loam, 30-46 cms orange grey brown sandy loam/sandy clay loam, 46-82 cms grey brown sandy clay loam, 82-100 cms grey sandy loam. Level. Permanent pasture. 2.
10. 0-18 cms dark red brown sandy peaty loam, 18-35 cms black peaty loam, 35-100 cms black humified peat. Level. Permanent pasture. ~~3a.4~~
11. 0-23 cms dark brown sandy loam, 23-61 cms red brown sandy clay loam with a few faint ochreous mottles and manganese concretions, 61-77 cms orange brown sandy loam, 77-100 cms orange loamy sand/sand. Level. Permanent pasture. 2
12. 0-15 cms brown sandy loam, 15-43 cms red brown sandy loam, 43-64 cms red brown sandy clay loam with common feint ochreous mottles and manganese concretions, 64-90 cms red brown sandy loam, 90-100 cms orange red loamy sand. Level. Permanent pasture. 2.

13. 0-8 cms brown sandy loam. 8-52 cms red brown sandy loam, 52-75 cms discoloured red brown sandy loam with weathered sandstone, 75-100 cms orange red brown loamy sand. Level. Permanent pasture. 2.
14. 0-22 cms dark brown dry and compacted sandy loam, 22-60 cms brown dry and compacted sandy loam with orange staining, 60-100 cms orange brown discoloured sandy loam/loamy sand (not compacted). Level. Micro irregularities. Permanent pasture. 2.
15. 0-26 cms dark brown sandy loam, 26-66 cms brown sandy loam, 60-73 cms pale brown loamy sand with manganese concretions. 73-100 cms orange brown loamy sand/sand. Level. Permanent pasture. 2.
16. 0-28 cms dark red brown medium clay loam, 28-100 cms deep red brown clay with common feint ochreous mottles and occasional sandier bands. SPL at 28. Gentle slope. Permanent pasture. 3b.
21. 0-22 cms brown sandy loam/sandy clay loam, 22-55 cms red brown sandy clay loam/clay loam. 55-100 cms deep red grey brown clay with common distinct ochreous mottles, SPL at 22. Level. Permanent pasture. 3b.
22. 0-35 cms brown sandy loam, 35-49 cms orange grey sandy clay loam with common distinct rusty mottles, 49-100 cms orange brown clay with common and ochreous mottles. Slowly permeable layer at 49. Level. Permanent pasture. 3b.
23. Site of old farm buildings. Concrete and rubble present on surface. Strong limitation grass only possible crop. Grade 4.
24. 0-22 cms dark brown dry and compacted sandy loam, 22-60 cms brown dry and compacted sandy loam with orange staining, 60-100 cms orange brown discoloured loamy sand, not compacted. Level. Micro irregularities. Permanent pasture. 2.
25. 0-23 cms dark brown sandy loam, 23-57 cms brown sandy loam, 57-80 cms orange brown sandy loam with weathered sandstone and manganese concretions, 80-100 cms pale orange brown sand. Level. Permanent pasture. 2.
26. 0-25 cms dark brown sandy loam, 25-60 cms dark red brown sandy loam, 60-100 cms red brown loamy sand. Level. Top of flood bank. Permanent pasture. 2.
27. 0-40 cms dark brown sandy loam/sandy silt loam, 40-100 cms brown sandy loam/sandy silt loam. Level, near river. Permanent pasture. 3a
28. 0-20 cms dark grey brown medium clay loam, 20-45 cms yellow orange brown heavy clay loam with many distinct ochreous mottles and rusty staining, 45-70 cms orange brown sandy clay loam with common distinct ochreous mottles. Too compacted to auger below 70 cms. Possible pipeline. Permanent pasture. 3b.

29. 0-25 cms dark brown sandy loam, 25-60 cms dark orange brown compacted sandy loam, 60 cms + impenetrable. Level. Permanent pasture. 2.
30. 0-29 cms dark brown sandy loam/sandy clay loam, 29-53 cms brown sandy loam with a few feint ochreous mottles, 53-80 cms grey brown loamy sand/sandy loam, 80-100 cms orange brown sand/loamy sand. Level. Micro irregularities. Permanent pasture. 2.
31. 0-28 cms dark brown sandy loam/sandy clay loam, 28-51 cms grey brown clay loam with sandy clay loam bands and common distinct ochreous mottles, 51-100 cms orange brown loamy sand. Almost level. Permanent pasture. 2.3b
32. 0-18 cms dark brown well bodied sandy loam, 18-50 cms grey orange brown medium clay loam with common prominent mottles, 50-62 cms orange grey brown sandy clay loam, 62-100 cms orange grey brown sandy loam with distinct orange staining. Level. Permanent pasture. 2.3b
33. 0-32 cms brown sandy clay loam, 32-70 cms grey brown heavy clay loam with a few distinct ochreous mottles and occasional sandy clay loam bands, 70-100 cms orange grey brown heavy clay loam with common ochreous mottles. Level. Permanent pasture. 3b.
34. Site of old farm buildings grass only possible land use. Grade 4.
35. 0-41 cms dark brown sandy loam, 41-73 cms red brown fine sandy clay loam with common feint ochreous mottles, gleyed, 73-100 cms red brown medium clay loam with common distinct ochreous mottles. Level. Permanent pasture. 3a.3b
36. 0-30 cms dark brown sandy loam, 30-100 cms red brown sandy loam. Level. Permanent pasture. 2.
37. 0-55 cms dark brown sandy loam, 55-66 cms brown loamy sand, 66-85 cms orange brown loamy coarse sand, 85-100 cms orange sand. Level. Permanent pasture. 2.
38. 0-30 cms dark brown sandy loam, 30-75 cms brown sandy loam, 75-100 cms red brown sandy loam/loamy sand. Level. Permanent pasture. 3a
39. 0-25 cms dark brown sandy loam, 25-60 cms orange brown loamy sand/coarse loamy sand, 60-100 cms orange loamy sand/sand. Gentle slope. Permanent pasture. 2.
40. 0-58 cms dark brown sandy loam, 58-80 cms dark grey sandy loam with clay loam bands and weathered sandstone. Impenetrable below 80 cms. Level. Permanent pasture. 3a
41. 0-28 cms dark brown sandy loam, 28-41 cms grey brown sandy clay loam with a few distinct ochreous mottles, no SPL 41-65 cms grey sandy loam, 65-85 cms orange brown loamy sand/sand, 85-100 cms sand. Level. Permanent pasture. 2.
42. 0-24 cms brown sandy clay loam, 24-44 cms grey brown sandy clay loam with a few distinct ochreous mottles, 44-80 cms grey brown sandy loam with occasional sandy clay loam bands, 60-74 cms grey brown sandy loam/loamy sand, 74-100 cms orange brown loamy  
no SPL

- sand/sand. Level. Permanent pasture. 3a
43. 0-30 cms brown sandy loam, 30-45 cms grey brown sandy clay loam, 45-80 cms grey brown sandy loam, 80-100 cms grey loamy sand/sandy loam. Level. Permanent pasture. 3a
  44. 0-46 cms dark brown sandy loam, 46-80 cms pale brown loamy sand/sand, 80-100 cms orange brown sand. Level. Permanent pasture. 2.
  45. 0-43 cms dark brown sandy loam, 43-55 cms brown loamy sand, 65-100 cms pale orange brown sand. Level. Permanent pasture. 2.
  46. 0-28 cms dark brown sandy loam, 28-48 cms brown fine sandy clay loam with a few feint ochreous mottles, 40-55 cms brown sandy loam 55-66 cms orange brown loamy sand, 66-100 cms pale orange loamy sand/sand. Level. Permanent pasture. 2b
  47. 0-42 cms brown slightly compacted sandy loam, 42-55 cms orange brown slightly compacted loamy sand, with occasional bands of fine sandy clay loam. 55-94 cms red brown medium clay loam, 94-100 cms deep red brown medium clay loam/sandy clay loam. Level. Permanent pasture. 2/3a.
  48. 0-27 cms brown dry and compacted sandy loam, 27-60 cms red brown dry and compacted sandy loam, 60-80 cms red dry and compacted loamy sand. Too hard to auger below 80 cms. Level. Permanent pasture. 2.
  49. 0-28 cms dark brown sandy loam with common feint rusty mottles, 28-65 cms red brown fine sandy clay loam with common feint ochreous mottles and strong discolouration, 65-100 cms red grey brown medium clay loam/heavy clay loam with common distinct ochreous mottles. Level. Possible backflooding. Hence near surface mottling. Permanent pasture. 3a.
  50. 0-40 cms dark brown sandy loam, 40-61 cms brown sandy loam, 61-83 cms pale brown loamy sand, 83-100 cms pale orange brown sand. Level. Permanent pasture. 2.
  51. 0-30 cms dark brown sandy silt loam, (peaty), 30-42 cms grey fine sandy clay loam with common distinct rusty mottles, 42-100 cms grey silty clay loam with common distinct rusty mottles. Level, in valley floor. Permanent pasture. 3a.
  52. 0-20 cms dark brown well bodied sandy silt loam, 20-29 cms grey brown sandy clay loam, 29-62 cms grey loamy sand with a few feint rusty mottles, 62-100 cms orange brown sand. Level. Valley floor. Permanent pasture. 3a
  53. 0-22 cms dark brown sandy loam, 22-36 cms pale brown sandy loam, 36-100 cms yellow brown loamy sand with common distinct staining. Very gently undulating. Permanent pasture. 2.
  54. 0-34 cms dark brown sandy loam, 34-50 cms brown sandy loam, 50-80 cms pale brown loamy sand, 80-100 cms pale orange brown sand. Almost level. Permanent pasture. 2.

55. 0-28 cms dark grey brown sandy loam/sandy silt loam, 28-40 cms grey brown fine sandy clay loam with few feint ochreous mottles, 40-63 cms grey sandy clay loam/calyl loam gleyed. SPL? 63-100 cms grey loamy sand/sand. Level. Permanent pasture. 3a.
56. 0-28 cms dark brown sandy loam, 28-60 cms brown fine sandy clay loam with a few feint ochreous mottles, 60-70 cms pale brown loamy sand/sand. Level. Permanent pasture. 3a
57. 0-34 cms dark brown sandy loam, 34-100 cms orange brown sandy clay loam with a few feint ochreous mottles, and occasional sandier bands. No SPL. Level. Permanent pasture. 2.
58. 0-25 cms dark brown sandy loam, 25-100 cms red brown sandy loam. Level. Permanent pasture. 2.
59. 0-30 cms dark brown sandy loam, 30-55 cms brown fine sandy clay loam with common feint ochreous and rusty mottles and manganese concretions, 55-100 cms red brown heavy clay loam with manganese concretions. Level. Permanent pasture. 3a.
60. 0-37 cms dark brown sandy loam, 37-46 cms brown sandy loam with common feint ochreous and rusty mottles, 46-63 cms grey brown sandy loam, 63-100 cms grey brown loamy sand. Very gently undulating. Permanent pasture. 3a
61. 0-40 cms dark brown sandy loam/sandy silt loam, 40-51 cms grey brown sandy loam, 51-64 cms grey brown sandy clay loam with a few feint rusty mottles, 64-100 cms grey loamy sand turning to sand. Very gently undulating. Permanent pasture. 3a
62. 0-20 cms dark grey brown well bodied ~~sandy silt~~<sup>clay</sup> loam, 20-40 cms grey brown sandy silt loam/medium clay loam, 40-60 cms grey brown sandy loam, 60-73 cms grey loamy sand, 73-100 cms orange grey brown sand. Level. Permanent pasture. 3a
63. 0-20 cms dark brown sandy clay loam, 20-34 cms pale grey heavy clay loam with common distinct ochreous mottles and occasional sandier bands, 35-50 cms pale grey sandy loam, 50-80 cms pale grey loamy sand, 80-100 cms pale orange grey loamy sand/sand. No SPL. Level. Permanent pasture. 3a.
64. 0-28 cms brown sandy clay loam with dark brown sandy loam and grey brown medium clay loam bands, 28-55 cms grey heavy clay loam with common distinct ochreous mottles, SPL, 55-80 cms pale grey loamy sand, 80-100 cms dark grey sand. Very gently undulating. Micro irregularities. Permanent pasture. 3b.
65. 0-28 cms dark brown sandy loam, 28-65 cms grey brown loamy sand, 65-100 cms grey sand. Level. Permanent pasture. 2.
66. 0-27 cms dark brown sandy loam, 27-40 cms brown sandy loam, 40-80 cms orange brown loamy sand, 80-100 cms orange brown loamy sand/sand. Level. Permanent pasture. 2.

67. 0-28 cms dark brown sandy loam, 28-50 cms dark orange brown sandy loam, 50-64 cms orange brown loamy sand, 64-100 cms discoloured orange pale yellow brown sand. Level. Permanent pasture. 2.
68. 0-25 cms dark brown sandy loam, 25-75 cms brown sandy loam, 75-88 cms red orange brown sandy loam with common feint ochreous mottles, 88-100 cms pale red loamy sand. Level. Permanent pasture. 3a
69. 0-35 cms dark brown sandy loam, 35-66 cms brown sandy loam, 66-73 cms dark orange brown sandy loam/loamy sand, 73-100 cms orange brown loamy sand. Flood risk. Level. Permanent pasture. 3a.
70. 0-29 cms dark red brown peaty sandy loam, 29-45 cms grey sandy clay loam, 45-55 cms grey loamy sand, 55-100 cms grey brown sand. Flood risk. Level. Valley floor. 3a.
71. 0-37 cms dark brown sandy loam, 37-68 cms orange grey brown sandy clay loam with common feint ochreous mottles, 68-100 cms orange grey sandy loam. Level. Permanent pasture. 2a  
No SPL
72. 0-35 cms brown sandy clay loam, 35-50 cms brown sandy clay loam with a few distinct ochreous mottles and manganese concretions, 50-100 cms brown sand. Level. Micro irregularities. No SPL, no gleying. 3a.
73. 0-38 cms brown sandy loam, 38-55 cms pale grey brown sandy clay loam, 55-70 cms pale brown loamy sand, 70-100 cms pale grey loamy sand/sand. Gentle slope. Micro irregularities. No SPL  
Permanent pasture. 3a
74. 0-50 cms dark brown sandy loam, 50-63 cms pale grey brown loamy sand, 63-100 cms pale orange brown sand. Almost level. Micro irregularities. Permanent pasture. 2.
75. 0-24 cms dark brown sandy loam, 24-40 cms grey brown fine sandy clay loam with common feint ochreous mottles, 40-64 cms red grey brown sandy clay loam with occasional clay and sand. 64-100 cms sand. Level. Permanent pasture. 2a No SPL
76. 0-39 cms dark brown sandy loam, 39-50 cms pale grey brown fine sandy clay loam with a few feint ochreous mottles, 50-58 cms pale brown sandy loam, 58-90 cms pale brown loamy sand, 90-100 cms orange brown coarse sand. Level. Permanent pasture.  
3b
77. 0-38 cms dark brown sandy loam, 38-70 cms orange brown compacted sandy loam/sandy clay loam. Common feint ochreous mottles, 70-85 cms orange brown sandy loam, 85-100 cms very pale brown loamy sand. Level. Permanent pasture. 2a

78. 0-35 cms dark brown sandy loam, 35-56 cms brown sandy loam, 56-86 cms orange brown loamy sand, 86-100 cms orange loamy sand/sand. Flood risk. Level. Permanent pasture. 3a.
79. 0-30 cms dark brown organic sandy loam, 30-38 cms grey brown sandy clay loam with a few distinct ochreous mottles, no SPL, 38-100 cms grey brown loamy sand. Gently undulating slope, near valley bottom. Permanent pasture. 3a
80. 0-33 cms dark brown sandy loam, 33-60 cms pale brown loamy sand, 60-100 cms pale orange brown sand/loamy sand. Level. Micro irregularities. Permanent pasture. 2.
81. 0-42 cms dark brown sandy loam, 42-73 cms brown loamy sand, 73-100 cms dark orange brown sand, level. Micro irregularities. Permanent pasture. 2.
82. 0-36 cms dark brown sandy silt loam, 36-70 cms grey brown fine sandy clay loam with common feint ochreous and rusty mottles, 70-100 cms grey fine sandy loam. Level. Micro irregularities. Permanent pasture. 3a No SPL
83. 0-40 cms dark brown sandy loam, 40-53 cms brown sandy loam, 53-68 cms pale grey brown sandy loam/loamy sand, 68-100 cms grey brown loamy sand. Level. Permanent pasture. 2a gleyed No SPL
84. 0-40 cms dark brown well bodied sandy loam, 40-60 cms pale grey brown sandy clay loam, 60-70 cms pale grey brown sandy clay loam with a few feint ochreous mottles, 70-100 cms pale grey brown sandy loam with sandy clay loam bands. Rubble. Permanent pasture. 3a. No SPL
85. 0-26 cms dark brown sandy loam, 26-65 cms brown sandy loam, 65 cms+ impenetrable. Level. Permanent pasture. 2.
86. 0-29 cms dark brown sandy loam, 29-59 cms brown sandy loam, 59-100 cms orange brown sandy loam/loamy sand. Almost level. Permanent pasture. 2.
87. 0-35 cms brown sandy loam, 35-50 cms orange brown sandy loam/sandy clay loam discoloured, with occasional pebbles, 50-70 cms multi-coloured very coarse loamy sand, 70 cms+ sand and gravel. Flood risk. Gently undulating slope. Permanent pasture. 3a.
88. 0-26 cms dark brown sandy loam, 26-43 cms brown loamy sand/sandy loam, 43-65 cms yellow brown discoloured loamy sand, 65-100 cms pale orange grey sand. Flood risk. Almost level. Permanent pasture. 3a.
89. 0-40 cms dark brown sandy loam, 40-60 cms brown sandy loam, 60-83 cms pale brown loamy sand, 83-100 cms orange brown sand. Gentle slope. Permanent pasture. 2.

90. 0-29 cms dark brown sandy loam, 29-55 cms orange brown sandy loam, 55-80 cms orange brown loamy sand, 80-100 cms orange discoloured sand. Level. Permanent pasture. 2.
91. 0-45 cms dark brown sandy loam, 45-91 cms discoloured orange brown loamy sand, 91-100 cms orange sand. Almost level. Permanent pasture. 2.
92. 0-25 cms dark brown sandy loam, 25-65 cms brown sandy loam, 65-100 cms dark orange brown sandy loam with many manganese concretions. Flood risk. Level. Permanent pasture. 3a.
93. 0-24 cms dark brown sandy silt loam, 24-43 cms orange brown strongly discoloured medium clay loam with many distinct ochreous mottles, 43-100 cms pale brown coarse sand. Flood risk. Level. Permanent pasture. 3a.
94. 0-23 cms dark brown sandy silt loam, 23-38 cms brown medium clay loam/heavy clay loam with sandier bands and many distinct ochreous mottles and manganese concretions. 60-80 cms pale orange brown loamy coarse sand, 80-100 cms pale brown coarse sand. Flood risk. Level. Permanent pasture. 3a.
95. 0-22 cms dark brown sandy loam/sandy silt loam, 22-100 cms dark orange brown sandy loam, flood risk. Level. Permanent pasture. 3a.
96. 0-27 cms dark brown sandy loam, 27-100 cms dark orange brown sandy loam. Flood risk. Level. Permanent pasture. 3a.
97. 0-23 cms dark brown sandy silt loam, 23-70 cms brown sandy loam/sandy silt loam, well bodied, 70-100 cms pale brown loamy sand. Flood risk. Level, near river. Permanent pasture. 3a.