**A1**
**Wokingham District Local Plan**
**Land at Hogwood Farm,**
**Finchampstead.**
**Agricultural Land Classification**
**ALC Map and Report**
**June 1995**

# AGRICULTURAL LAND CLASSIFICATION, SUMMARY REPORT

## WOKINGHAM DISTRICT LOCAL PLAN.
## LAND AT HOGWOOD FARM, FINCHAMPSTEAD.

### 1. Summary

1.1 ADAS was commissioned by MAFF's Land Use Planning Unit to provide information on land quality for a number of sites in the Wokingham district of Berkshire. The work forms part of MAFF's statutory input to the preparation of the Wokingham District Local Plan.

1.2 The site comprises approximately 78 hectares of land around Hogwood Farm, to the west of Finchampstead near Arborfield Garrison in Berkshire. An Agricultural Land Classification (ALC) survey was carried out in June 1995. The survey was undertaken at a detailed level of approximately one boring per hectare of agricultural land surveyed. A total of 63 borings and three soil inspection pits were described in accordance with MAFF's revised guidelines and criteria for grading the quality of agricultural land, (MAFF, 1988). These guidelines provide a framework for classifying land according to the extent to which its physical or chemical characteristics impose a long term limitation on its use for agriculture.

1.3 The survey work was carried out by members of the Resource Planning Team in the Guildford Statutory Group of ADAS.

1.4 At the time of the survey the agricultural land on the site comprised wheat, oats, oilseed rape and permanent grassland. Areas marked as non-agricultural land include areas not farmed and farm tracks. Several areas of woodland and tree belts have also been marked on the map. Areas of urban development comprise a small industrial estate, a metal works at Hogwood Farm, residential areas and a tarmac road. Agricultural buildings are as shown.

1.5 The distribution of grades and subgrades is shown on the attached ALC map, and the areas and extent are given in the table below. The map has been drawn at a scale of 1:10,000. It is accurate at this scale, but any enlargement would be misleading.

**Table 1 : Distribution of Grades and Subgrades**

| Grade | Area (ha) | % of Site |
|---|---|---|
| 3b | 56.9 | 73.3 |
| Urban | 11.4 | 14.7 |
| Woodland | 6.7 | 8.6 |
| Non-agricultural | 2.0 | 2.6 |
| Farm buildings | 0.6 | 0.8 |
| Total area of site | 77.6 | 100% |

1.6 Appendix I gives a general description of the grades, subgrades and land use categories identified in the survey. The main classes are described in terms of the type of limitation that can occur, the typical cropping range and the expected level and consistency of yield.

1.7 All of the agricultural land on the site has been classified as Subgrade 3b, moderate quality land, with soil wetness as the main limitation. Soil profiles typically comprise medium, or occasionally heavy, clay loam topsoils resting upon heavy clay loam upper subsoils and clay lower subsoils. Profiles are commonly gleyed or slightly gleyed from the topsoil, and the subsoils are slowly permeable and significantly impede drainage, such that a classification of Subgrade 3b is appropriate. Poorly drained wet soils restrict plant growth and development and may be more susceptible to structural damage through trafficking by agricultural machinery or poaching by grazing livestock.

## 2. Climate

2.1 The climatic criteria are considered first when classifying land as climate can be overriding in the sense that severe climatic limitations will restrict land to low grades irrespective of favourable site or soil conditions.

2.2 The main parameters used in the assessment of an overall climatic limitation are average annual rainfall, as a measure of overall wetness, and accumulated temperature as a measure of the relative warmth of a locality.

2.3 A detailed assessment of the prevailing climate was made by interpolation from a 5km gridpoint dataset (Met. Office 1989). The details are given in the table below and these show that there is no overall climatic limitation affecting the site.

2.4 However, climatic factors do interact with soil factors to influence soil wetness and droughtiness limitations. At this locality the average annual rainfall and, correspondingly the field capacity days, are relatively low in a regional context, therefore soil wetness problems may be diminished. Similarly the crop adjusted soil moisture deficits are relatively high thus increasing the likelihood of soil droughtiness.

2.5 No local climatic factors such as exposure or frost risk are believed to affect the site.

**Table 2 : Climatic Interpolation**

| Grid Reference | SU 766 645 | SU 774 643 |
|---|---|---|
| Altitude (m) | 60 | 55 |
| Accumulated Temperature (degree days, Jan-June) | 1457 | 1463 |
| Average Annual Rainfall (mm) | 675 | 666 |
| Field Capacity (days) | 138 | 138 |
| Moisture Deficit, Wheat (mm) | 112 | 112 |
| Moisture Deficit, Potatoes (mm) | 106 | 106 |
| Overall Climatic Grade | 1 | 1 |

## 3. Relief

3.1 The site is gently undulating, lying at an altitude of approximately 55-65m AOD.

## 4. Geology and Soils

4.1 The published geological map (BGS, 1971) shows the whole site to be underlain by London Clay.

4.2 The published Soil Survey map (SSEW, 1967) shows the soils on most of the site to comprise those of the Woolhampton Series with a small 'tongue' of the Wickham Series protruding up through the centre of the site. The Woolhampton soils are described as 'clayey textures, greyish brown or pale brown colouring, yellow mottling throughout and prismatic or blocky subsoil' (SSEW 1983). Wickham soils are texturally similar but are developed in drift of at least 30 cm depth over Eocene clay. Woolhampton soils are developed directly over Eocene clay beds.

4.3 Detailed field examination found the majority of the soils on the site to be loamy topsoils over poorly drained clay loam and clay.

## 5. Agricultural Land Classification

5.1 The location of the soil observation points are shown on the attached sample point map.

### Subgrade 3b

5.2 All of the agricultural land on the site has been classified as Subgrade 3b due to a significant soil wetness limitation. Soil profiles were found to typically comprise Non-calcareous medium clay loam topsoils typically resting directly upon clay subsoils, although thin upper subsoil horizons of heavy clay loam were not known. Profiles show evidence of drainage imperfections in the form of gleying, usually from the surface. Three soil inspection pits dug on the site indicated the heavy clay loam upper subsoils and the clay lower subsoils to be poorly structured with low porosity. They are therefore classified as slowly permeable layers which significantly impede drainage. The presence of gleying and the relatively shallow depth to these slowly permeable layers means that these soils are assigned to Wetness Class IV, with a resultant classification of Subgrade 3b as the Field capacity day values are relatively low in this area. Poorly drained wet soils can inhibit plant and root development, and may be more susceptible to structural damage through trafficking by agricultural machinery or poaching by grazing livestock. This can in turn affect the frequency and timing of such operations.

## SOURCES OF REFERENCE

British Geological Survey (1971), Sheet No. 268, Reading, 1:63,360 Series (drift edition).

MAFF (1988), Agricultural Land Classification of England and Wales : Revised guidelines and criteria for grading the quality of agricultural land.

Meteorological Office (1989), Climatological Data for Agricultural Land Classification.

Soil Survey of England and Wales (1967), Sheet 268 Soils of Reading, 1:63,360 and accompanying legend.

Soil Survey of England and Wales (1983_, Sheet 6, Soils of South East England, 1:250,000, and accompanying legend.

# APPENDIX I

## DESCRIPTION OF THE GRADES AND SUBGRADES

**Grade 1 : Excellent Quality Agricultural Land**

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

**Grade 2 : Very Good Quality Agricultural Land**

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural or horticultural crops can usually be grown but on some land of this grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1 land.

**Grade 3 : Good to Moderate Quality Land**

Land with moderate limitations which affect the choice of crops, the timing and type of cultivation, harvesting or the level of yield. When more demanding crops are grown, yields are generally lower or more variable than on land in Grades 1 and 2.

**Subgrade 3a : Good Quality Agricultural Land**

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

**Subgrade 3b : Moderate Quality Agricultural Land**

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass, or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

**Grade 4 : Poor Quality Agricultural Land**

Land with severe limitations which significantly restrict the range of crops and/or the level of yields. It is mainly suited to grass with occasional arable crops (eg. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

**Grade 5 : Very Poor Quality Agricultural Land**

Land with severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

**Urban**

Built-up or 'hard' uses with relatively little potential for a return to agriculture including: housing, industry, commerce, education, transport, religous buildings, cemetries. Also, hard-surfaced sports facilities, permanent caravan sites and vacant land; all types of derelict land, including mineral workings which are only likely to be reclaimed using derelict land grants.

**Non-agricultural**

'Soft' uses where most of the land could be returned relatively easily to agriculture, including: private parkland, public open spaces, sports fields, allotments and soft-surfaced areas on airports. Also active mineral workings and refuse tips where restoration conditions to 'soft' after-uses may apply.

**Woodland**

Includes commercial and non-commercial woodland. A distinction may be made as necessary between farm and non-farm woodland.

**Agricultural Buildings**

Includes the normal range of agricultural buildings as well as other relatively permanent structures such as glasshouses. Temporary structures (eg. polythene tunnels erected for lambing) may be ignored.

**Open Water**

Includes lakes, ponds and rivers as map scale permits.

**Land Not Surveyed**

Agricultural land which has not been surveyed.

Where the land use includes more than one of the above, eg. buildings in large grounds, and where map scale permits, the cover types may be shown separately. Otherwise, the most extensive cover type will be shown.

# APPENDIX II

## FIELD ASSESSMENT OF SOIL WETNESS CLASS

### SOIL WETNESS CLASSIFICATION

Soil wetness is classified according to the depth and duration of waterlogging in the soil profile. Six soil wetness classes are identified and are defined in the table below.

**Definition of Soil Wetness Classes**

| Wetness Class | Duration of Waterlogging[1] |
|---|---|
| I | The soil profile is not wet within 70 cm depth for more than 30 days in most years.[2] |
| II | The soil profile is wet within 70 cm depth for 31-90 days in most years **or**, if there is no slowly permeable layer within 80 cm depth, it is wet within 70 cm for more than 90 days, but only wet within 40 cm depth for 30 days in most years. |
| III | The soil profile is wet within 70 cm depth for 91-180 days in most years **or**, if there is no slowly permeable layer present within 80 cm depth, it is wet within 70 cm for more than 180 days, but only wet within 40 cm depth for between 31-90 days in most years. |
| IV | The soil profile is wet within 70 cm depth for more than 180 days but not wet within 40 cm depth for more than 210 days in most years **or**, if there is no slowly permeable layer present within 80 cm depth, it is wet within 40 cm depth for 91-210 days in most years. |
| V | The soil profile is wet within 40 cm depth for 211-335 days in most years. |
| VI | The soil profile is wet within 40 cm depth for more than 335 days in most years. |

Soils can be allocated to a wetness class on the basis of quantitative data recorded over a period of many years or by the interpretation of soil profile characteristics, site and climatic factors. Adequate quantitative data will rarely be available for ALC surveys and therefore the interpretative method of field assessment is used to identify soil wetness class in the field. The method adopted here is common to ADAS and the SSLRC.

[1]The number of days specified is not necessarily a continuous period.
[2]'In most years' is defined as more than 10 out of 20 years.

# APPENDIX III

## SOIL PIT AND SOIL BORING DESCRIPTIONS

**Contents :**

# SOIL PROFILE DESCRIPTIONS : EXPLANATORY NOTE

Soil pit and auger boring information collected during ALC fieldwork is held on a computer database. This uses notations and abbreviations as set out below.

**Boring Header Information**

1. **GRID REF** : national 100 km grid square and 8 figure grid reference.

2. **USE** : Land use at the time of survey. The following abbreviations are used.

| | | |
|---|---|---|
| **ARA** : Arable | **WHT** : Wheat | **BAR** : Barley |
| **CER** : Cereals | **OAT** : Oats | **MZE** : Maize |
| **OSR** : Oilseed rape | **BEN** : Field Beans | **BRA** : Brassicae |
| **POT** : Potatoes | **SBT** : Sugar Beet | **FCD** : Fodder Crops |
| **LIN** : Linseed | **FRT** : Soft and Top Fruit | **FLW** : Fallow |
| **PGR** : Permanent Pasture | **LEY** : Ley Grass | **RGR** : Rough Grazing |
| **SCR** : Scrub | **CFW** : Coniferous Woodland | **DCW** : Deciduous Wood |
| **HTH** : Heathland | **BOG** : Bog or Marsh | **FLW** : Fallow |
| **PLO** : Ploughed | **SAS** : Set aside | **OTH** : Other |
| **HRT** : Horticultural Crops | | |

3. **GRDNT** : Gradient as estimated or measured by a hand-held optical clinometer.

4. **GLEY/SPL** : Depth in centimetres (cm) to gleying and/or slowly permeable layers.

5. **AP (WHEAT/POTS)** : Crop-adjusted available water capacity.

6. **MB (WHEAT/POTS)** : Moisture Balance. (Crop adjusted AP - crop adjusted MD)

7. **DRT** : Best grade according to soil droughtiness.

8. If any of the following factors are considered significant, 'Y' will be entered in the relevant column.

| | | |
|---|---|---|
| **MREL** : Microrelief limitation | **FLOOD** : Flood risk | **EROSN** : Soil erosion risk |
| **EXP** : Exposure limitation | **FROST** : Frost prone | **DIST** : Disturbed land |
| **CHEM** : Chemical limitation | | |

9. **LIMIT** : The main limitation to land quality. The following abbreviations are used.

| | | |
|---|---|---|
| **OC** : Overall Climate | **AE** : Aspect | **EX** : Exposure |
| **FR** : Frost Risk | **GR** : Gradient | **MR** : Microrelief |
| **FL** : Flood Risk | **TX** : Topsoil Texture | **DP** : Soil Depth |
| **CH** : Chemical | **WE** : Wetness | **WK** : Workability |
| **DR** : Drought | **ER** : Erosion Risk | **WD** : Soil Wetness/Droughtiness |
| **ST** : Topsoil Stoniness | | |

**Soil Pits and Auger Borings**

1. **TEXTURE** : soil texture classes are denoted by the following abbreviations.

| | | | | | |
|---|---|---|---|---|---|
| **S** : | Sand | **LS** : | Loamy Sand | **SL** : | Sandy Loam |
| **SZL** : | Sandy Silt Loam | **CL** : | Clay Loam | **ZCL** : | Silty Clay Loam |
| **ZL** : | Silt Loam | **SCL** : | Sandy Clay Loam | **C** : | Clay |
| **SC** : | Sandy Clay | **ZC** : | Silty Clay | **OL** : | Organic Loam |
| **P** : | Peat | **SP** : | Sandy Peat | **LP** : | Loamy Peat |
| **PL** : | Peaty Loam | **PS** : | Peaty Sand | **MZ** : | Marine Light Silts |

For the sand, loamy sand, sandy loam and sandy silt loam classes, the predominant size of sand fraction will be indicated by the use of the following prefixes:

**F** : Fine (more than 66% of the sand less than 0.2mm)
**M** : Medium (less than 66% fine sand and less than 33% coarse sand)
**C** : Coarse (more than 33% of the sand larger than 0.6mm)

The clay loam and silty clay loam classes will be sub-divided according to the clay content: **M** : Medium (<27% clay) **H** : Heavy (27-35% clay)

2. **MOTTLE COL** : Mottle colour using Munsell notation.

3. **MOTTLE ABUN** : Mottle abundance, expressed as a percentage of the matrix or surface described.

**F** : few <2% **C** : common 2-20% **M** : many 20-40% **VM** : very many 40% +

4. **MOTTLE CONT** : Mottle contrast

**F** : faint - indistinct mottles, evident only on close inspection
**D** : distinct - mottles are readily seen
**P** : prominent - mottling is conspicuous and one of the outstanding features of the horizon

5. **PED. COL** : Ped face colour using Munsell notation.

6. **GLEY** : If the soil horizon is gleyed a 'Y' will appear in this column. If slightly gleyed, an 'S' will appear.

7. **STONE LITH** : Stone Lithology - One of the following is used.

| | | | |
|---|---|---|---|
| **HR** : | all hard rocks and stones | **SLST** : | soft oolitic or dolimitic limestone |
| **CH** : | chalk | **FSST** : | soft, fine grained sandstone |
| **ZR** : | soft, argillaceous, or silty rocks | **GH** : | gravel with non-porous (hard) stones |
| **MSST** : | soft, medium grained sandstone | **GS** : | gravel with porous (soft) stones |
| **SI** : | soft weathered igneous/metamorphic rock | | |

Stone contents (>2cm, >6cm and total) are given in percentages (by volume).

8. **STRUCT** : the degree of development, size and shape of soil peds are described using the following notation:

| | | |
|---|---|---|
| degree of development | **WK** : weakly developed<br>**ST** : strongly developed | **MD** : moderately developed |
| ped size | **F** : fine<br>**C** : coarse | **M** : medium<br>**VC** : very coarse |
| ped shape | **S** : single grain<br>**GR** : granular<br>**SAB** : sub-angular blocky<br>**PL** : platy | **M** : massive<br>**AB** : angular blocky<br>**PR** : prismatic |

9. **CONSIST** : Soil consistence is described using the following notation:

**L** : loose **VF** : very friable **FR** : friable **FM** : firm **VM** : very firm
**EM** : extremely firm **EH** : extremely hard

10. **SUBS STR** : Subsoil structural condition recorded for the purpose of calculating profile droughtiness : **G** : good **M** : moderate **P** : poor

11. **POR** : Soil porosity. If a soil horizon has less than 0.5% biopores >0.5 mm, a 'Y' will appear in this column.

12. **IMP** : If the profile is impenetrable to rooting a 'Y' will appear in this column at the appropiate horizon.

13. **SPL** : Slowly permeable layer. If the soil horizon is slowly permeable a 'Y' will appear in this column.

14. **CALC** : If the soil horizon is calcareous, a 'Y' will appear in this column.

15. Other notations
**APW** : available water capacity (in mm) adjusted for wheat
**APP** : available water capacity (in mm) adjusted for potatoes
**MBW** : moisture balance, wheat
**MBP** : moisture balance, potatoes

SOIL PIT DESCRIPTION

Site Name : HOGWOOD FM FINCHAMPSTEAD  Pit Number :  1P

Grid Reference: SU77606450  Average Annual Rainfall :  666 mm
Accumulated Temperature : 1463 degree days
Field Capacity Level : 138 days
Land Use : Oilseed Rape
Slope and Aspect : degrees

| HORIZON | TEXTURE | COLOUR | STONES >2 | TOT.STONE | LITH | MOTTLES | STRUCTURE | CONSIST | SUBSTRUCTURE | CALC |
|---|---|---|---|---|---|---|---|---|---|---|
| 0- 25 | MCL | 10YR42 43 | 0 | 2 | HR | C | | | | |
| 25- 38 | HCL | 10YR53 42 | 0 | 1 | HR | M | WKCOPR | FM | P | |
| 38- 80 | C | 10YR52 00 | 0 | 0 | | M | MDCOPR | FM | P | |

Wetness Grade : 3B  Wetness Class : IV
Gleying : 0 cm
SPL :025 cm

Drought Grade :  APW :  mm  MBW :  0 mm
APP :  mm  MBP :  0 mm

FINAL ALC GRADE : 3B
MAIN LIMITATION : Wetness

SOIL PIT DESCRIPTION

Site Name : HOGWOOD FM FINCHAMPSTEAD  Pit Number :  2P

Grid Reference: SU76706460  Average Annual Rainfall :  666 mm
Accumulated Temperature : 1463 degree days
Field Capacity Level : 138 days
Land Use : Wheat
Slope and Aspect :  degrees

| HORIZON | TEXTURE | COLOUR | STONES >2 | TOT.STONE | LITH | MOTTLES | STRUCTURE | CONSIST | SUBSTRUCTURE | CALC |
|---|---|---|---|---|---|---|---|---|---|---|
| 0- 27 | MCL | 10YR43 00 | 0 | 5 | HR | C | | | | |
| 27- 40 | HCL | 10YR53 00 | 0 | 5 | HR | C | WKCSAB | FM | P | |
| 40- 70 | C | 25Y 62 00 | 0 | 5 | HR | M | WKCOPR | FM | P | |

Wetness Grade : 3B  Wetness Class : IV
Gleying :S00 cm
SPL :027 cm

Drought Grade :  APW :  mm  MBW :  0 mm
APP :  mm  MBP :  0 mm

FINAL ALC GRADE : 3B
MAIN LIMITATION : Wetness

SOIL PIT DESCRIPTION

Site Name : HOGWOOD FM FINCHAMPSTEAD  Pit Number :  3P

Grid Reference: SU77006460  Average Annual Rainfall : 666 mm
Accumulated Temperature : 1463 degree days
Field Capacity Level : 138 days
Land Use : Permanent Grass
Slope and Aspect : degrees

| HORIZON | TEXTURE | COLOUR | STONES >2 | TOT.STONE | LITH | MOTTLES | STRUCTURE | CONSIST | SUBSTRUCTURE | CALC |
|---|---|---|---|---|---|---|---|---|---|---|
| 0- 20 | MCL | 10YR53 00 | 0 | 5 | HR | C | | | | |
| 20- 36 | HCL | 10YR53 00 | 0 | 5 | HR | C | WKCSAB | FM | P | |
| 36- 60 | C | 10YR61 00 | 0 | 1 | HR | M | MDCOPR | VM | P | |

Wetness Grade : 3B  Wetness Class : IV
Gleying : 0 cm
SPL :020 cm

Drought Grade :  APW : mm  MBW : 0 mm
APP : mm  MBP : 0 mm

FINAL ALC GRADE : 3B
MAIN LIMITATION : Wetness

| AMPLE NO. | GRID REF | USE | ASPECT | GRDNT | GLEY | SPL | --WETNESS-- CLASS | GRADE | -WHEAT- AP | MB | -POTS- AP | MB | M.REL DRT | FLOOD | EROSN EXP | FROST DIST | CHEM LIMIT | | ALC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SU76606480 | WHT | N | 1 | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 1P | SU77606450 | OSR | | | 0 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 2 | SU76706480 | WHT | N | 1 | 028 | 028 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 2P | SU76706460 | WHT | | | S00 | 027 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 3 | SU76806480 | PGR | N | 1 | S00 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 3P | SU77006460 | PGR | | | 0 | 020 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 4 | SU76906480 | PGR | N | 1 | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 8 | SU76606470 | WHT | S | 1 | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 9 | SU76706470 | WHT | S | 1 | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 10 | SU76806470 | WHT | S | 1 | S00 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 11 | SU76906470 | PGR | S | 1 | 0 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 16 | SU76506460 | WHT | S | 1 | S00 | 020 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 17 | SU76606460 | WHT | S | 1 | 020 | 020 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 18 | SU76706460 | WHT | S | 1 | 030 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 19 | SU76806460 | PGR | N | 1 | 0 | 022 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 21 | SU77006460 | PGR | S | 1 | S00 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 25 | SU77406460 | OAT | E | 1 | 030 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 26 | SU77506460 | OAT | E | 1 | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 27 | SU77606460 | OSR | | | 035 | 035 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 28 | SU76506450 | WHT | | | 030 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 29 | SU76606450 | WHT | | | S00 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 30 | SU76706450 | WHT | | | S00 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 31 | SU76806450 | WHT | | | 030 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 32 | SU76906450 | WHT | | | S00 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 33 | SU77006450 | PGR | S | 1 | S00 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 36 | SU77306450 | OSR | | | S25 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 37 | SU77406450 | OSR | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 38 | SU77506450 | OSR | | | 020 | 020 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 39 | SU77606450 | OSR | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 40 | SU77706450 | OSR | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 41 | SU76506440 | OAT | | | S00 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 42 | SU76606440 | OAT | | | S00 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 43 | SU76706440 | WHT | | | 030 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 44 | SU76806440 | WHT | | | S00 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 45 | SU76906440 | WHT | | | S00 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 46 | SU77006440 | WHT | W | 1 | 032 | 032 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 47 | SU77106440 | WHT | W | 1 | 035 | 035 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 48 | SU77206440 | OAT | SW | 1 | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 49 | SU77306440 | OAT | SW | 1 | 030 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 50 | SU77406440 | WHT | | | 030 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 51 | SU77506440 | WHT | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |
| 52 | SU77606440 | OSR | | | 030 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | | |

| SAMPLE NO. | GRID REF | USE | ASPECT | GRDNT | GLEY | SPL | --WETNESS-- CLASS | GRADE | -WHEAT- AP | MB | -POTS- AP | MB | M.REL DRT | FLOOD | EROSN EXP | FROST DIST | CHEM LIMIT | ALC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 53 | SU77706440 | OSR | | | 030 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 54 | SU76506430 | OAT | | | S00 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 55 | SU76606430 | OAT | | | 025 | 025 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 56 | SU76706430 | OAT | | | 030 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 57 | SU76806430 | OAT | | | S00 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 58 | SU76906430 | OAT | | | S00 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 59 | SU77006430 | OSR | | | 030 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 60 | SU77106430 | OSR | | | 030 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 61 | SU77206430 | WHT | SW | 1 | 032 | 042 | 3 | 3A | 0 | | 0 | | | | | | WE | 3A | |
| 62 | SU77306430 | WHT | SW | 1 | 035 | 035 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 63 | SU77406430 | WHT | SW | 1 | 025 | 025 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 64 | SU76506420 | WHT | S | 1 | 030 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 65 | SU76606420 | WHT | | | 030 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 66 | SU76706420 | OAT | | | 025 | 025 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 67 | SU76806420 | OAT | | | 025 | 025 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 69 | SU77006420 | OSR | | | 030 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 70 | SU77106420 | WHT | | | 035 | 035 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 71 | SU77206420 | WHT | | | 030 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 72 | SU77306420 | WHT | | | 025 | 025 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 73 | SU76506410 | WHT | S | 2 | 030 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 74 | SU76606410 | WHT | S | 1 | 025 | 025 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 75 | SU76706410 | OAT | | | 025 | 025 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 77 | SU77206410 | WHT | | | 035 | 035 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |
| 78 | SU76506400 | PGR | | | 030 | 030 | 4 | 3B | 0 | | 0 | | | | | | WE | 3B | |

| MPLE | DEPTH | TEXTURE | COLOUR | MOTTLES COL | MOTTLES ABUN | MOTTLES CONT | PED COL. | GLEY | STONES >2 | STONES >6 | STONES LITH | STONES TOT | STRUCT/ CONSIST | SUBS STR | SUBS POR | SUBS IMP | SUBS SPL | SUBS CALC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0-25 | hcl | 10YR43 00 | | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 25-80 | c | 10YR62 00 | 10YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 1P | 0-25 | mcl | 10YR42 43 | 10YR58 00 | C | | | Y | 0 | 0 | HR | 2 | | | | | | |
| | 25-38 | hcl | 10YR53 42 | 75YR58 00 | M | | | Y | 0 | 0 | HR | 1 | WKCOPR FM | P | Y | | Y | |
| | 38-80 | c | 10YR52 00 | 10YR68 72 | M | | | Y | 0 | 0 | | 0 | MDCOPR FM | P | Y | | Y | |
| 2 | 0-28 | hcl | 10YR43 00 | 10YR63 00 | F | | | | 0 | 0 | HR | 2 | | | | | | |
| | 28-80 | c | 25Y 62 00 | 10YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 2P | 0-27 | mcl | 10YR43 00 | 10YR62 00 | C | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 27-40 | hcl | 10YR53 00 | 10YR58 73 | C | | 00MN00 00 | Y | 0 | 0 | HR | 5 | WKCSAB FM | P | Y | | Y | |
| | 40-70 | c | 25Y 62 00 | 10YR68 00 | M | | 00MN00 00 | Y | 0 | 0 | HR | 5 | WKCOPR FM | P | Y | | Y | |
| 3 | 0-25 | mcl | 10YR43 00 | 10YR63 00 | C | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 25-45 | hcl | 10YR53 00 | 75YR58 00 | C | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 45-80 | c | 25Y 62 00 | 10YR58 00 | M | | | Y | 0 | 0 | HR | 2 | | P | | | Y | |
| 3P | 0-20 | mcl | 10YR53 00 | 10YR66 73 | C | | | Y | 0 | 0 | HR | 5 | | | | | | |
| | 20-36 | hcl | 10YR53 00 | 10YR66 72 | C | | 00MN00 00 | Y | 0 | 0 | HR | 5 | WKCSAB FM | P | Y | | Y | |
| | 36-60 | c | 10YR61 00 | 10YR68 00 | M | | | Y | 0 | 0 | HR | 1 | MDCOPR VM | P | Y | | Y | |
| 4 | 0-25 | mcl | 10YR43 00 | 75YR58 00 | F | | | | 0 | 0 | | 0 | | | | | | |
| | 25-55 | hcl | 10YR53 00 | 75YR58 00 | C | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 55-80 | c | 25Y 62 00 | 75YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 8 | 0-25 | mcl | 10YR43 00 | | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 25-80 | c | 25Y 62 00 | 75YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 9 | 0-25 | hcl | 10YR43 00 | | | | | | 0 | 0 | HR | 2 | | | | | | |
| | 25-80 | c | 10YR63 00 | 10YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 10 | 0-25 | mcl | 10YR43 00 | 10YR62 00 | C | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 25-45 | hcl | 10YR53 00 | 75YR58 00 | C | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 45-70 | c | 10YR53 00 | 75YR58 00 | M | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| 11 | 0-30 | hcl | 10YR53 00 | 75YR58 00 | C | | | Y | 0 | 0 | HR | 2 | | | | | | |
| | 30-40 | hcl | 25Y 53 00 | 75YR58 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| | 40-80 | c | 25Y 62 00 | 10YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 16 | 0-20 | mcl | 10YR43 00 | 10YR62 00 | C | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 20-30 | hcl | 25Y 63 00 | 10YR58 00 | C | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 30-80 | c | 25Y 62 00 | 75YR56 00 | M | | | Y | 0 | 0 | HR | 2 | | P | | | Y | |
| 17 | 0-20 | mcl | 10YR52 00 | 10YR62 00 | F | | | | 0 | 0 | HR | 2 | | | | | | |
| | 20-50 | hcl | 10YR53 00 | 75YR58 00 | C | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 50-80 | c | 25Y 62 00 | 10YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |

| SAMPLE | DEPTH | TEXTURE | COLOUR | ----MOTTLES----- COL | ABUN | CONT | PED COL. | GLEY | ----STONES---- >2 | >6 | LITH | TOT | STRUCT/ CONSIST | SUBS STR | POR | IMP | SPL | CALC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | 0-30 | mcl | 10YR43 00 | 10YR62 00 | F | | | | 0 | 0 | HR | 2 | | | | | | |
| | 30-50 | hcl | 10YR63 00 | 10YR56 00 | C | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 50-80 | c | 25Y 62 00 | 10YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 19 | 0-22 | mcl | 10YR53 00 | 10YR62 00 | C | | | Y | 0 | 0 | HR | 5 | | | | | | |
| | 22-40 | hcl | 10YR53 00 | 75YR58 00 | C | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 40-80 | c | 25Y 62 00 | 10YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 21 | 0-25 | mcl | 10YR43 00 | 10YR58 00 | C | | | S | 0 | 0 | HR | 2 | | | | | | |
| | 25-40 | hcl | 10YR53 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| | 40-80 | c | 25Y 62 00 | 10YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 25 | 0-30 | mcl | 10YR44 00 | 75YR56 00 | F | | 00MN00 00 | | 0 | 0 | HR | 5 | | | | | | |
| | 30-45 | hcl | 10YR53 00 | 10YR56 00 | C | | 00MN00 00 | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 45-90 | c | 10YR64 00 | 10YR56 72 | C | | 00MN00 00 | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| | 90-120 | c | 10YR51 00 | 75YR56 00 | C | | 00MN00 00 | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 26 | 0-25 | mcl | 10YR54 00 | 75YR56 00 | F | | | | 0 | 0 | HR | 5 | | | | | | |
| | 25-45 | hcl | 10YR53 00 | 10YR56 63 | C | | 00MN00 00 | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 45-120 | c | 10YR52 00 | 10YR56 73 | C | | 00MN00 00 | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 27 | 0-20 | mcl | 10YR54 00 | | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 20-35 | mcl | 10YR54 00 | 75YR56 00 | F | | | | 0 | 0 | HR | 5 | | M | | | | |
| | 35-55 | hcl | 10YR53 00 | 10YR56 00 | C | | 00MN00 00 | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| | 55-120 | c | 10YR52 00 | 10YR68 73 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 28 | 0-30 | mcl | 10YR54 00 | 10YR66 00 | F | | | | 0 | 0 | HR | 5 | | | | | | |
| | 30-60 | c | 10YR53 00 | 10YR68 72 | C | | 00MN00 00 | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 29 | 0-30 | mcl | 10YR54 00 | 10YR66 00 | C | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 30-60 | c | 10YR53 00 | 10YR68 72 | M | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 30 | 0-30 | mcl | 10YR54 00 | 10YR66 00 | C | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 30-60 | c | 10YR53 00 | 10YR68 73 | C | | 00MN00 00 | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 31 | 0-30 | mcl | 10YR54 00 | 10YR56 00 | F | | | | 0 | 0 | HR | 5 | | | | | | |
| | 30-40 | hcl | 10YR53 00 | 10YR68 72 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| | 40-60 | c | 10YR53 00 | 10YR68 00 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 32 | 0-25 | mcl | 10YR54 00 | 10YR66 00 | C | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 25-60 | c | 10YR53 00 | 10YR52 68 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 33 | 0-25 | mcl | 10YR43 00 | 10YR56 00 | C | | | S | 0 | 0 | HR | 2 | | | | | | |
| | 25-60 | hcl | 10YR63 00 | 10YR72 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| | 60-80 | c | 25Y 62 00 | 10YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 36 | 0-25 | mcl | 10YR54 00 | 75YR56 00 | F | | | | 0 | 0 | HR | 5 | | | | | | |
| | 25-50 | hcl | 10YR54 00 | 10YR66 00 | C | | 00MN00 00 | S | 0 | 0 | HR | 5 | | P | | | Y | |
| | 50-70 | c | 10YR63 00 | 10YR66 62 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |

| MPLE | DEPTH | TEXTURE | COLOUR | ----MOTTLES----- COL ABUN | CONT | PED COL. | GLEY | ----STONES---- >2 | >6 | LITH | TOT | STRUCT/ CONSIST | SUBS STR | POR | IMP | SPL | CALC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | 0-30 | mcl | 10YR54 00 75YR56 00 F | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 30-40 | hcl | 10YR53 00 10YR66 73 C | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| | 40-70 | c | 10YR63 00 10YR66 00 C | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 51 | 0-25 | mcl | 10YR54 00 75YR56 00 F | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 25-40 | hcl | 10YR53 00 10YR66 00 C | | | 00MN00 00 | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 40-120 | c | 10YR73 00 10YR66 00 C | | | 00MN00 00 | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 52 | 0-30 | mcl | 10YR54 00 75YR56 00 F | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 30-50 | hcl | 10YR53 00 10YR66 00 C | | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 50-120 | c | 10YR52 00 10YR66 74 C | | | 00MN00 00 | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 53 | 0-30 | mcl | 10YR54 00 75YR56 00 F | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 30-60 | hcl | 10YR53 00 10YR66 00 C | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| | 60-120 | c | 10YR52 00 10YR66 73 C | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 54 | 0-30 | mcl | 10YR54 00 75YR56 73 C | | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 30-45 | hcl | 10YR53 00 10YR68 00 C | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| | 45-60 | c | 10YR53 00 10YR68 73 C | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 55 | 0-25 | mcl | 10YR54 00 10YR66 00 C | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 25-60 | c | 10YR52 00 10YR68 73 C | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 56 | 0-30 | mcl | 10YR54 00 75YR56 00 F | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 30-50 | hcl | 10YR53 00 10YR66 00 C | | | 00MN00 00 | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 50-70 | c | 10YR53 00 10YR68 73 C | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 57 | 0-30 | mcl | 10YR54 00 10YR66 00 C | | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 30-60 | c | 10YR53 00 10YR68 73 C | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 58 | 0-30 | mcl | 10YR54 00 75YR66 00 C | | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 30-60 | c | 10YR53 00 10YR68 72 C | | | 00MN00 00 | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 59 | 0-30 | mcl | 10YR42 00 10YR58 00 F | | | | | 0 | 0 | HR | 2 | | | | | | |
| | 30-60 | c | 10YR53 63 75YR68 00 M | | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 60 | 0-30 | mcl | 10YR42 00 | | | | | 0 | 0 | HR | 2 | | | | | | |
| | 30-45 | hcl | 10YR42 00 10YR68 00 C | | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 45-65 | c | 10YR53 63 75YR68 00 M | | | | Y | 0 | 0 | HR | 8 | | P | | | Y | |
| 61 | 0-32 | mcl | 10YR42 00 | | | | | 0 | 0 | HR | 2 | | | | | | |
| | 32-42 | mcl | 10YR42 00 10YR58 00 C | | | | Y | 0 | 0 | HR | 2 | | M | | | | |
| | 42-52 | hcl | 25Y 63 00 10YR68 00 M | | | | Y | 0 | 0 | HR | 2 | | P | | | Y | |
| | 52-80 | c | 10YR53 63 75YR68 00 M | | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 62 | 0-35 | mcl | 10YR42 00 10YR58 00 F | | | | | 0 | 0 | HR | 2 | | | | | | |
| | 35-45 | hcl | 10YR53 00 10YR68 00 C | | | | Y | 0 | 0 | HR | 2 | | P | | | Y | |
| | 45-65 | c | 10YR53 00 75YR68 00 M | | | | Y | 0 | 0 | | 0 | | P | | | Y | |

| SAMPLE | DEPTH | TEXTURE | COLOUR | MOTTLES COL | MOTTLES ABUN | MOTTLES CONT | PED COL. | PED GLEY | STONES >2 | STONES >6 | STONES LITH | STONES TOT | STRUCT/ CONSIST | SUBS STR | SUBS POR | SUBS IMP | SUBS SPL | SUBS CALC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 | 0-25 | mcl | 10YR54 00 75YR56 00 F | | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 25-50 | hcl | 10YR53 00 10YR56 00 C | | | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 50-120 | c | 10YR63 00 10YR66 00 C | | | | 00MN00 00 | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 38 | 0-20 | mcl | 10YR54 00 75YR56 00 F | | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 20-40 | hcl | 10YR53 00 10YR66 73 C | | | | 00MN00 00 | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 40-60 | c | 10YR63 00 10YR66 73 C | | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 39 | 0-25 | mcl | 10YR54 00 75YR56 00 F | | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 25-45 | hcl | 10YR53 00 10YR66 00 C | | | | 00MN00 00 | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 45-120 | c | 10YR62 00 10YR66 73 C | | | | 00MN00 00 | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 40 | 0-25 | mcl | 10YR54 00 75YR56 00 F | | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 25-45 | hcl | 10YR53 00 10YR66 00 C | | | | 00MN00 00 | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 45-120 | c | 10YR52 00 10YR56 73 C | | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 41 | 0-30 | mcl | 10YR54 00 10YR66 73 C | | | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 30-40 | hcl | 10YR53 00 10YR68 00 C | | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| | 40-60 | c | 10YR53 00 10YR68 73 C | | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 42 | 0-30 | mcl | 10YR54 00 10YR66 00 C | | | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 30-60 | c | 10YR53 00 10YR68 73 C | | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 43 | 0-30 | mcl | 10YR54 00 10YR66 00 F | | | | | | 0 | 0 | HR | 5 | | | | | | |
| | 30-60 | c | 10YR53 00 10YR68 73 C | | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 44 | 0-30 | mcl | 10YR54 00 10YR66 00 C | | | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 30-60 | c | 10YR53 00 10YR68 73 C | | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 45 | 0-30 | mcl | 10YR54 00 10YR66 00 C | | | | | S | 0 | 0 | HR | 5 | | | | | | |
| | 30-50 | hcl | 10YR53 00 10YR66 00 C | | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| | 50-70 | c | 10YR53 00 10YR68 73 C | | | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 46 | 0-32 | mcl | 10YR42 00 | | | | | | 0 | 0 | HR | 2 | | | | | | |
| | 32-70 | hcl | 25Y 52 00 75YR68 00 M | | | | 00MN00 00 | Y | 0 | 0 | HR | 2 | | P | | | Y | |
| 47 | 0-35 | mcl | 10YR42 00 | | | | | | 0 | 0 | HR | 2 | | | | | | |
| | 35-55 | hcl | 10YR53 00 10YR58 00 C | | | | | Y | 0 | 0 | HR | 8 | | P | | | Y | |
| | 55-70 | hcl | 10YR53 00 | | | | | | 0 | 0 | HR | 15 | | P | | | Y | |
| 48 | 0-25 | mcl | 10YR42 00 | | | | | | 0 | 0 | HR | 2 | | | | | | |
| | 25-45 | hcl | 10YR53 00 10YR68 00 C | | | | | Y | 0 | 0 | HR | 3 | | P | | | Y | |
| | 45-70 | c | 10YR53 63 75YR68 00 M | | | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 49 | 0-30 | mcl | 10YR42 00 | | | | | | 0 | 0 | HR | 2 | | | | | | |
| | 30-50 | hcl | 10YR53 00 10YR58 00 C | | | | | Y | 0 | 0 | HR | 3 | | P | | | Y | |
| | 50-70 | c | 10YR53 63 75YR68 00 M | | | | | Y | 0 | 0 | | 0 | | P | | | Y | |

| | | | | ----MOTTLES----- | | | PED | | ----STONES---- | | | | STRUCT/ | SUBS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MPLE | DEPTH | TEXTURE | COLOUR | COL | ABUN | CONT | COL. | GLEY | >2 | >6 | LITH | TOT | CONSIST | STR | POR | IMP | SPL | CALC |
| 63 | 0-25 | mcl | 10YR42 00 | 10YR58 00 | F | | | | 0 | 0 | HR | 2 | | | | | | |
| | 25-60 | c | 10YR62 52 | 75YR68 61 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 64 | 0-30 | mcl | 10YR54 00 | 75YR56 00 | F | | | | 0 | 0 | HR | 5 | | | | | | |
| | 30-45 | hcl | 10YR53 00 | 10YR66 73 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| | 45-60 | c | 10YR63 00 | 10YR68 73 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 65 | 0-30 | mcl | 10YR54 00 | 75YR56 00 | F | | | | 0 | 0 | HR | 5 | | | | | | |
| | 30-45 | hcl | 10YR53 00 | 10YR66 73 | C | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 45-120 | c | 10YR53 00 | 10YR68 73 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 66 | 0-25 | mcl | 10YR54 00 | 75YR56 00 | F | | | | 0 | 0 | HR | 5 | | | | | | |
| | 25-40 | hcl | 10YR53 00 | 10YR66 00 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| | 40-60 | c | 10YR53 00 | 10YR68 72 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 67 | 0-25 | mcl | 10YR54 00 | 75YR56 00 | F | | | | 0 | 0 | HR | 1 | | | | | | |
| | 25-60 | c | 10YR53 00 | 10YR68 72 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 69 | 0-30 | mcl | 10YR43 00 | 10YR58 00 | F | | | | 0 | 0 | HR | 2 | | | | | | |
| | 30-45 | hcl | 10YR53 00 | 10YR58 00 | C | | | Y | 0 | 0 | HR | 2 | | P | | | Y | |
| | 45-78 | c | 10YR53 00 | 75YR68 00 | C | | | Y | 0 | 0 | HR | 2 | | P | | | Y | |
| | 78-120 | c | 10YR52 00 | 75YR68 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 70 | 0-35 | mcl | 10YR41 42 | 10YR58 00 | F | | | | 0 | 0 | HR | 1 | | | | | | |
| | 35-70 | c | 25Y 63 00 | 75YR68 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 71 | 0-30 | mcl | 10YR42 00 | 10YR58 00 | F | | | | 0 | 0 | HR | 2 | | | | | | |
| | 30-48 | hcl | 10YR43 53 | 10YR68 00 | C | | | Y | 0 | 0 | HR | 2 | | P | | | Y | |
| | 48-70 | c | 25Y 62 00 | 75YR68 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 72 | 0-25 | mzcl | 10YR42 00 | 10YR58 00 | F | | | | 0 | 0 | HR | 2 | | | | | | |
| | 25-35 | hzcl | 10YR53 00 | 10YR68 00 | C | | | Y | 0 | 0 | HR | 2 | | P | | | Y | |
| | 35-60 | c | 10YR53 63 | 75YR68 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 73 | 0-30 | mcl | 10YR54 00 | 75YR56 00 | F | | | | 0 | 0 | HR | 5 | | | | | | |
| | 30-60 | c | 10YR53 00 | 10YR68 73 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 74 | 0-25 | mcl | 10YR54 00 | 75YR56 00 | F | | | | 0 | 0 | HR | 5 | | | | | | |
| | 25-35 | hcl | 10YR53 00 | 10YR66 00 | C | | | Y | 0 | 0 | HR | 5 | | P | | | Y | |
| | 35-60 | c | 10YR53 00 | 10YR68 73 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 75 | 0-25 | mcl | 10YR54 00 | 10YR56 00 | C | | | | 0 | 0 | HR | 5 | | | | | | |
| | 25-60 | c | 10YR63 00 | 10YR68 00 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |
| 77 | 0-35 | mcl | 10YR42 00 | 10YR58 00 | F | | | | 0 | 0 | HR | 2 | | | | | | |
| | 35-70 | c | 10YR53 00 | 75YR68 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| 78 | 0-30 | mcl | 10YR54 00 | 75YR56 00 | F | | | | 0 | 0 | HR | 5 | | | | | | |
| | 30-60 | c | 10YR53 00 | 10YR68 73 | C | | | Y | 0 | 0 | HR | 1 | | P | | | Y | |