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BERKSHIRE MINERALS PLAN
PADWORTH LANE TO UFTON LANE
UFTON NERVET
AGRICULTURAL LAND CLASSIFICATION
ALC MAP & REPORT
MAY 1993

BERKSHIRE MINERALS PLAN
PADWORTH LANE TO UFTON LANE, UFTON NERVET
AGRICULTURAL LAND CLASSIFICATION REPORT

## 1.0 Summary

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

1.2 Approximately 120 hectares of land between Padworth Lane and Ufton Lane near Ufton Nervet, Berkshire was surveyed in May 1993. The survey was undertaken at a detailed level of approximately one boring per hectare. A total of 112 soil auger borings and 3 soil inspection pits were assessed 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 longterm limitations on its use for agriculture.

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

1.4 At the time of the survey the landuse on the site included permanent grass and cereals.

1.5 The distribution of grades and subgrades is shown on the attached ALC map and the areas 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. This map supersedes any previous survey information for the site area.

Table 1 : Distribution of Grades and Subgrades

| Grade | Area (ha) | % of Agricultural Area |
|---|---|---|
| 3a | 9.3 | 8 |
| 3b | 106.4 | 92 |
| | | 100% (115.7 ha) |
| Non-agricultural | 1.6 | |
| Woodland | 2.8 | |
| Urban | 0.1 | |
| Total area of site | 120.2 | |

1.6 Appendix 1 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 The site has largely been graded 3b, moderate quality agricultural land, with a smaller area of good quality, subgrade 3a land. Soils on the site have mainly developed in deposits of Alluvium with smaller areas being derived from River Terrace Gravels. The alluvial soils are heavy, poorly drained clays which are limited in their agricultural use by wetness/workability to subgrade 3b. Soils resting on River Terrace Gravels are medium textured and slightly to very stony, being limited by topsoil stoniness and/or droughtiness to subgrades 3a and 3b depending upon depth to gravelly horizons.

## 2.0 Climate

2.1 The climatic criteria are considered first when classifying land as climate can be overriding in the sense that severe 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 annual average 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 No local climatic factors such as exposure or frost risk affect the site. It should be noted that the climate is relatively dry in a regional context with low rainfall and high moisture deficits. As a result climatic factors do interact with soil factors to increase the risk of soil droughtiness problems, whilst offsetting the likelihood of soil wetness restrictions.

Table 2 : Climatic Interpolations

| Grid Reference : | SU 617 683 | SU 616 676 | SU 615 671 |
|---|---|---|---|
| Altitude (m) : | 50 | 50 | 50 |
| Accumulated Temperature (days) : | 1471 | 1471 | 1471 |
| Average Annual Rainfall (mm) : | 682 | 682 | 682 |
| Field Capacity (days) : | 145 | 145 | 145 |
| Moisture Deficit, Wheat (mm) : | 112 | 112 | 112 |
| Moisture Deficit, Potatoes (mm) : | 107 | 106 | 106 |
| Overall Climatic Grade : | 1 | 1 | 1 |

## 3.0 Relief

3.1 The site is generally flat and lies at an altitude of 50-55 metres. Relief or gradient do not affect agricultural land quality.

## 4.0 Geology and Soil

4.1 The relevant geological sheet for the site, Sheet 268 (BGS, 1971) shows the underlying geology over the majority of the site to be Alluvium with deposits of Eocene London Clay to the south east. To the south of the site between Millbrook and Linley Shaw is mapped deposits of Valley Gravel.

4.2 The published soils information for the area, Sheet 6 (SSEW,1983) shows the soils next to the River Kennet to comprise the Thames association -"Stoneless, mainly calcareous clayey soils affected by groundwater". (SSEW, 1983). This gives way to soils of the Wickham 4 association towards the east -"Slowly permeable seasonally waterlogged fine loamy over clayey and fine silty over clayey soils associated with similar clayey soils, often with brown subsoils". (SSEW, 1983). A detailed inspection of soils on the site revealed the presence of calcareous and non calcareous profiles of mainly clayey soils some with sandy gravelly subsoils and some with very stony topsoils and subsoils. Locally horizons of peat and/or algal marl were also encountered.

## 5.0 Agricultural Land Classification

5.1 Table 1 provides the details of the area measurements for each grade and the distribution of each grade is shown on the attached ALC map.

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

### Subgrade 3a

5.3 Good quality subgrade 3a agricultural land is mapped to the south of the site. Soil profiles typically comprise topsoils of medium clay loam containing 5-10% total flints of which 2-5% were > 2 cm diameter. Upper subsoils consist of heavy clay loam or clay with 10-40% total flints. This passes to loamy medium sand with 70% total small flints or gravel at a depth of 40-70 cm depth. Many auger borings in this map unit were impenetrable to the auger in the lower subsoil. Pit 3 confirmed the presence of gravel in a loamy medium sand matrix at a depth of 70 cm. Profiles are well drained, typically showing no signs of wetness imperfections and are assigned to a wetness class of I. However, they do suffer from a moderate droughtiness limitation. The interaction of gravelly horizons in the lower subsoil, textures and climatic factors reduces available water in the profile for crop growth and land is classified as subgrade 3a accordingly.

### Subgrade 3b

5.4 Moderate quality land is mapped over the majority of the site. It is limited by soil wetness, droughtiness and topsoil stone contents. The majority of land in this map unit is limited by soil wetness. Soil profiles are calcareous and non calcareous comprising topsoils of heavy (silty) clay loam, sometimes medium (silty) clay loam or silty clay with 0-15% total flints of which 0-5% were > 2 cm in diameter. Underlying this is poorly structured slowly permeable clay containing 0-10% total flints. In some cases this passes to loamy medium sand or clay with 50% total flints or loamy peat/peaty loam horizons at a depth of 55-90 cm. Pit 1, dug in these soils, confirmed the presence of poorly structured slowly permeable clay in the subsoil. Due to the clay profiles are poorly drained with slowly permeable layers from 15-55 cm depth and as a result soils are placed in a wetness class of IV, sometimes III. This combined with a heavy topsoil texture and climatic factors limits the land to a classification of subgrade 3b. There are significant wetness and workability problems such that there are restrictions on trafficking, cultivations and grazing by livestock. Soil wetness will also adversely affect seed germination, crop growth and development.

5.5 A number of profiles towards the centre of the site are limited to this subgrade by soil droughtiness. Profiles are calcareous and non calcareous and consist of topsoils of heavy silty clay loam or heavy clay loam with 4-18% total flints of which 0-10% were > 2 cm in diameter. Underlying this is clay or heavy clay loam containing 5-60% total flints. Pit 2 revealed the presence of a very stony subsoil which caused many auger borings to be impenetrable beyond 30-60 cm depth. Soils are generally well drained with a wetness class of I, though some profiles do experience some wetness problems in the form of gleying above 40 cm depth and are assigned to wetness class II. The main limitation, however, is droughtiness. The interaction of textures, significant profile stone and climatic factors reduces available water reserves in the soil more severely than that of subgrade 3a land, such that a classification of subgrade 3b is appropriate.

5.6 Some profiles were limited to subgrade 3b by a topsoil stone limitation. Total topsoil stone volumes of 28-37% of which 18-22% > 2 cm diameter limit land to subgrade 3b. Stone volumes of this nature can increase production costs by causing extra wear and tear to implements and tyres and impair crop establishment. Some profiles of better quality were encountered but not mapped separately due to their limited number and distribution.

5.6 The areas marked as non-agricultural include farm tracks and part of the River Kennet.

ADAS REFERENCE : 0202/54/93
MAFF REFERENCE : PC 4607

Resource Planning Team
Guildford Statutory Group
ADAS Reading

APPENDIX I

DESCRIPTION OF THE GRADES AND SUB-GRADES

**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 on the 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.

**Grade 3 : Good To Moderate Quality Agricultural Land**

Land with moderate limitations which affect the choice of crops, 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.

**Sub-grade 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.

**Sub-grade 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 very 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 : housing, industry, commerce, education, transport, religious buildings, cemeteries. 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/airfields. Also active mineral workings and refuse tips where restoration conditions to 'soft' after-uses may apply.

**Woodland**

Includes commercial and non-commercial 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

REFERENCES

* BRITISH GEOLOGICAL SURVEY (1971), Sheet No.268, Reading, 1:63,360 scale.

* 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 (1983), Sheet No.6, "Soils of South East England", 1:250,000 scale and accompanying legend.

APPENDIX III

## DEFINITION OF SOIL WETNESS CLASSES

**Wetness Class I**

The soil profile is not wet within 70cm depth for more than 30 days in most years.

**Wetness Class II**

The soil profile is wet within 70cm depth for 31-90 days in most years **or**, if there is no slowly permeable layer within 80cm depth, it is wet within 70cm for more than 90 days, but not wet within 40cm depth for more than 30 days in most years.

**Wetness Class III**

The soil profile is wet within 70cm depth for 91-180 days in most years **or**, if there is no slowly permeable layer within 80cm depth, it is wet within 70cm for more than 180 days, but only wet within 40cm depth for 31-90 days in most years.

**Wetness Class IV**

The soil profile is wet within 70cm depth for more than 180 days but not wet within 40cm depth for more than 210 days in most years **or**, if there is no slowly permeable layer within 80cm depth, it is wet within 40cm depth for 91-210 days in most years.

**Wetness Class V**

The soil profile is wet within 40cm depth for 211-335 days in most years.

**Wetness Class VI**

The soil profile is wet within 40cm depth for more than 335 days in most years.

(The number of days is not necessarily a continuous period. 'In most years' is defined as more than 10 out of 20 years.)

APPENDIX IV

# 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 database. This has commonly used notations and abbreviations as set out below.

## Boring Header Information

1. GRID REF : national 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 HRT : Horticultural Crops PGR : Permanent Pasture LEY : Ley Grass RGR : Rough Grazing
SCR : Scrub CFW : Coniferous Woodland DCW : Deciduous Woodland HTH : Heathland BOG : Bog or Marsh
FLW : Fallow PLO : Ploughed SAS : Set aside OTH : Other

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

4. GLEY/SPL : Depth in cm to gleying or slowly permeable layers.

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

6. MB (WHEAT/POTS) : Moisture Balance.

7. DRT : Best grade according to soil droughtiness.

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

MREL : Microrelief limitation FLOOD : Flood risk EROSN : Soil erosion risk EXP : Exposure limitation FROST : Frost
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 : Soil Erosion Risk WD : Combined 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
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 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

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

6. STONE LITH : One of the following is used.

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

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

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

- degree of development  WK : weakly developed  MD : moderately developed  ST : strongly developed

- ped size  F : fine  M : medium  C : coarse  VC : very coarse

- ped shape  S : single grain  M : massive  GR : granular  AB : angular blocky  SAB : sub-angular blocky  PR : prismatic
PL : platy

8. 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

9. SUBS STR : Subsoil structural condition recorded for the purpose of calculating profile droughtiness.

G : good  M : moderate  P : poor

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

11. IMP : If the profile is impenetrable a 'Y' will appear in this column at the appropiate horizon.

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

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

14. 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 : BERKS MIN UFTON NERVET  Pit Number : 1P

Grid Reference: SU61206720  Average Annual Rainfall : 682 mm
Accumulated Temperature : 1471 degree days
Field Capacity Level : 145 days
Land Use : Cereals
Slope and Aspect : degrees

| HORIZON | TEXTURE | COLOUR | STONES >2 | TOT.STONE | MOTTLES | STRUCTURE |
|---|---|---|---|---|---|---|
| 0- 20 | HCL | 10YR32 00 | 0 | 0 | | |
| 20- 40 | C | 10YR52 00 | 0 | 0 | C | WKCSAB |
| 40- 70 | C | 10YR72 00 | 0 | 0 | M | WKVCPR |

Wetness Grade : 3B  Wetness Class : IV
Gleying :020 cm
SPL :020 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 : BERKS MIN UFTON NERVET  Pit Number : 2P

Grid Reference: SU61036740  Average Annual Rainfall : 682 mm
Accumulated Temperature : 1471 degree days
Field Capacity Level : 145 days
Land Use :
Slope and Aspect : degrees

| HORIZON | TEXTURE | COLOUR | STONES >2 | TOT.STONE | MOTTLES | STRUCTURE |
|---|---|---|---|---|---|---|
| 0- 20 | HCL | 10YR31 32 | 0 | 0 | | |
| 20- 38 | C | 25 Y52 00 | 0 | 0 | C | STCOAB |
| 38- 60 | C | 25 Y62 00 | 0 | 0 | M | MDVCAB |

Wetness Grade : 3B  Wetness Class : IV
Gleying :020 cm
SPL :020 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 : BERKS MIN UFTON NERVET  Pit Number : 3P

Grid Reference: SU61386706  Average Annual Rainfall : 682 mm
Accumulated Temperature : 1471 degree days
Field Capacity Level : 145 days
Land Use : Bare Soil
Slope and Aspect : degrees

| HORIZON | TEXTURE | COLOUR | STONES >2 | TOT.STONE | MOTTLES | STRUCTURE |
|---|---|---|---|---|---|---|
| 0- 28 | MCL | 10YR42 00 | 4 | 7 | | |
| 28- 55 | HCL | 10YR42 43 | 0 | 20 | | |
| 55- 70 | SCL | 10YR42 43 | 0 | 45 | | |
| 70-120 | GH | 10YR54 00 | 0 | 0 | | |

Wetness Grade : 1  Wetness Class : I
Gleying : cm
SPL : No SPL

Drought Grade : 3A  APW : 93 mm  MBW : -19 mm
APP : 95 mm  MBP : -12 mm

FINAL ALC GRADE : 3A
MAIN LIMITATION : Droughtiness

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | SU61806840 | PGR | | | 035 | | 2 | 2 | 121 | 9 | 113 | 6 | 2 | | | | WE | 2 | |
| 1P | SU61206720 | CER | | | 020 | 020 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | PIT 70 |
| 2 | SU61906840 | PGR | | | 035 | 035 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 2P | SU61036740 | SAS | | | 020 | 020 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 3 | SU62006840 | PGR | | | 035 | 035 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 3P | SU61386706 | PLO | | | | | 1 | 1 | 93 | -19 | 95 | -12 | 3A | | | | DR | 3A | |
| 4 | SU62106840 | PGR | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 5 | SU62206840 | PGR | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 6 | SU61706830 | PGR | | | 020 | 020 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 7 | SU61806830 | PGR | | | 026 | 026 | 4 | 3B | 114 | 2 | 104 | -3 | 3A | | | | WE | 3B | |
| 8 | SU61906830 | PGR | | | 025 | 025 | 4 | 3B | 111 | -1 | 101 | -6 | 3A | | | | WE | 3B | IMP 65 |
| 9 | SU62006830 | PGR | | | 026 | 026 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 10 | SU62106830 | PGR | | | 036 | 036 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | IMP 65 |
| 11 | SU62206830 | PGR | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 12 | SU61706820 | PGR | | | 035 | 035 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 13 | SU61806820 | CER | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | IMP 80 |
| 14 | SU61906820 | PGR | | | 035 | 035 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 15 | SU62006820 | PGR | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | IMP 90 |
| 16 | SU62106820 | PGR | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 17 | SU62206820 | CER | | | 0 | 028 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 18 | SU62306820 | FLW | | | 0 | 026 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 19 | SU61606810 | PAS | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | PEAT 100 |
| 20 | SU61706810 | CER | | | 020 | 020 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 22 | SU61906810 | PGR | | | 032 | 032 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | IMP 80 |
| 23 | SU62006810 | PGR | | | 027 | 027 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | IMP 90 |
| 24 | SU62106810 | CER | | | 028 | 028 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | IMP 60 |
| 25 | SU62206810 | CER | | | 018 | 018 | 4 | 3B | 98 | -14 | 101 | -6 | 3A | | | | WE | 3B | IMP 82 |
| 26 | SU62306810 | PGR | | | 022 | 022 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 27 | SU61506800 | PAS | | | 035 | 035 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | ALGAL MARL |
| 28 | SU61606800 | CER | | | 026 | 026 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 29 | SU61706800 | FLW | | | | | 1 | 2 | 86 | -26 | 92 | -15 | 3B | | | | DR | 3B | IMP 60 |
| 30 | SU61806800 | FLW | | | | | 1 | 2 | 50 | -62 | 50 | -57 | 4 | | | | DR | 4 | IMP 32Q3B |
| 31 | SU61906800 | FLW | | | 028 | 055 | 3 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 32 | SU62006800 | FLW | | | 023 | | 2 | 3A | 56 | -56 | 56 | -51 | 4 | | | | DR | 4 | IMP 35Q3B |
| 33 | SU62106800 | LEY | | | 020 | 050 | 3 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 34 | SU62206800 | LEY | | | 0 | 015 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 35 | SU61406790 | PAS | | | 027 | 027 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 36 | SU61506790 | PAS | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 36A | SU61606790 | PGR | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 37 | SU61706790 | FLW | | | | | 1 | 2 | 65 | -47 | 65 | -42 | 3B | | | | DR | 3B | IMP 42 |
| 38 | SU61806790 | FLW | | | | | 1 | 2 | 60 | -52 | 60 | -47 | 4 | | | | DR | 4 | IMP 40Q3B |
| 39 | SU61906790 | FLW | | | 029 | | 2 | 3A | 64 | -48 | 64 | -43 | 3B | | | | DR | 3B | IMP 42 |

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | SU62106790 | LEY | | | | 0 | 020 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 42 | SU62206790 | LEY | | | | 0 | 023 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 44 | SU61306780 | PAS | | | | 028 | 028 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 45 | SU61406780 | PAS | | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 46 | SU61506780 | PAS | | | | 023 | 023 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 47 | SU61606780 | PGR | | | | 0 | 035 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 48 | SU61706780 | CER | | | | | | 1 | 2 | 55 | -57 | 55 | -52 | 4 | | | | DR | 4 | IMP 35Q3B |
| 49 | SU61806780 | FLW | | | | | | 1 | 2 | 40 | -72 | 40 | -67 | 4 | | | | ST | 3B | IMP 30Q3B |
| 50 | SU61906780 | FLW | | | | | | 1 | 2 | 45 | -67 | 45 | -62 | 4 | | | | DR | 4 | IMP 32Q3B |
| 51 | SU62006780 | FLW | | | | 0 | 055 | 3 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 52 | SU61206770 | PAS | | | | 029 | 029 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 53 | SU61306770 | SAS | | | | 030 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | H3 MARL |
| 54 | SU61406770 | CER | | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 55 | SU61506770 | CER | | | | 032 | 075 | 2 | 2 | | 0 | | 0 | | | | | WE | 2 | |
| 56 | SU61606770 | CER | | | | | | 1 | 2 | 59 | -53 | 59 | -48 | 4 | | | | DR | 4 | IMP 35Q3B |
| 57 | SU61706770 | CER | | | | | | 1 | 1 | 69 | -43 | 69 | -38 | 3B | | | | DR | 3B | IMP 40 |
| 58 | SU61806770 | FLW | | | | 0 | 032 | 4 | 3B | 83 | -29 | 91 | -16 | 3B | | | | WE | 3B | IMP 65 |
| 59 | SU61106760 | PAS | | | | 027 | 027 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 61 | SU61306760 | SAS | | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | H3 MARL |
| 62 | SU61406760 | CER | | | | 028 | 028 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | PEAT 90 |
| 63 | SU61506760 | PGR | | | | 035 | 035 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | SPL 35 |
| 64 | SU61606760 | PLO | | | | 035 | 035 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | IMP 80 |
| 65 | SU61706760 | CER | | | | 022 | 035 | 4 | 3B | 100 | -12 | 101 | -6 | 3A | | | | WE | 3B | IMP 85 |
| 66 | SU61806760 | CER | W | 01 | | | | 1 | 1 | 50 | -62 | 50 | -57 | 4 | | | | ST | 3B | IMP 45 |
| 67 | SU61006750 | SAS | | | | 020 | 020 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | H3 MARL |
| 68 | SU61106750 | SAS | | | | 028 | 028 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 69 | SU61206750 | SAS | | | | 026 | 026 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | PEAT 60 |
| 70 | SU61306750 | CER | | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | PEAT 80 |
| 72 | SU61606750 | PLO | | | | 025 | | 1 | 1 | 61 | -51 | 61 | -46 | 4 | | | | DR | 4 | IMP 40Q3B |
| 73 | SU61706750 | FLW | | | | | | 1 | 2 | 57 | -55 | 57 | -50 | 4 | | | | DR | 4 | IMP 40Q3B |
| 74 | SU61806750 | PLO | S | | | 026 | 026 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | IMP 100 |
| 75 | SU61906750 | CER | S | 01 | | | | 1 | 1 | 45 | -67 | 45 | -62 | 4 | | | | ST | 3B | IMP 42 |
| 76 | SU62006750 | CER | S | 01 | | | | 1 | 1 | 40 | -72 | 40 | -67 | 4 | | | | ST | 3B | IMP 35 |
| 77 | SU61006740 | SAS | | | | 030 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 78 | SU61106740 | SAS | | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 79 | SU61206740 | SAS | | | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 80 | SU61306740 | CER | | | | 036 | 060 | 3 | 3A | | 0 | | 0 | | | | | WE | 3A | |
| 81 | SU61406740 | PGR | S | | | 022 | 022 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 82 | SU61506740 | FLW | | | | 045 | 045 | 3 | 3A | | 0 | | 0 | | | | | WE | 3A | IMP 90 |
| 83 | SU61606740 | FLW | | | | 026 | 040 | 3 | 3B | 81 | -31 | 86 | -21 | 3B | | | | WE | 3B | IMP 60 |
| 84 | SU61706740 | FLW | | | | 029 | 055 | 3 | 3B | 97 | -15 | 106 | -1 | 3A | | | | WE | 3B | IMP 75 |
| 85 | SU61806740 | FLW | | | | | | 1 | 1 | 93 | -19 | 103 | -4 | 3A | | | | DR | 3A | IMP 70 |

| SAMPLE NO. | GRID REF | ASPECT USE | GRDNT | GLEY | SPL | --WETNESS-- CLASS | GRADE | -WHEAT- AP | MB | -POTS- AP | MB | M.REL DRT | FLOOD | EROSN EXP | FROST DIST | CHEM LIMIT | ALC | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 86 | SU62006740 | PGR | | 018 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 87 | SU61006730 | PAS | | 027 | 027 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | PEAT 90 |
| 88 | SU61106730 | CER | | 030 | | 2 | 2 | | 0 | | 0 | | | | | WE | 2 | |
| 89 | SU61206730 | CER | | 037 | 055 | 3 | 3A | | 0 | | 0 | | | | | WE | 3A | |
| 90 | SU61306730 | CER | | 030 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 91 | SU61406730 | PGR | | 0 | 026 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 92 | SU61506730 | PLO | | | | 1 | 1 | 88 | -24 | 95 | -12 | 3B | | | | DR | 3B | IMP 65Q3A |
| 93 | SU61606730 | CER | | 028 | 028 | 4 | 3B | 72 | -40 | 72 | -35 | 3B | | | | WE | 3B | IMP 49 |
| 94 | SU61706730 | CER | | 026 | 026 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 95 | SU61806730 | CER | | 022 | 022 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 96 | SU61906730 | PGR | | 0 | 030 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 96A | SU62006720 | PGR | | 0 | 010 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 97 | SU61106720 | PAS | | 032 | 032 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 98 | SU61206720 | CER | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 99 | SU61306720 | CER | | 025 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 100 | SU61406720 | PLO | | | | 1 | 1 | 66 | -46 | 66 | -41 | 3B | | | | DR | 3B | IMP 45 |
| 101 | SU61506720 | PLO | | | | 1 | 1 | 94 | -18 | 102 | -5 | 3A | | | | DR | 3A | IMP 65 |
| 102 | SU61606720 | CER | | 0 | 028 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | IMP 52 |
| 103 | SU61706720 | CER | | 0 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | IMP 70 |
| 104 | SU61806720 | CER | | 028 | 055 | 3 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 105 | SU61906720 | PGR | | 005 | 035 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 106 | SU61306710 | CER | | | | 1 | 1 | 75 | -37 | 72 | -35 | 3B | | | | DR | 3B | GRAVEL35 |
| 107 | SU61306710 | PLO | | | | 1 | 1 | 64 | -48 | 64 | -43 | 3B | | | | DR | 3B | IMP 40 |
| 108 | SU61406710 | PLO | | | | 1 | 1 | 88 | -24 | 95 | -12 | 3B | | | | DR | 3B | IMP 60 |
| 109 | SU61506710 | PLO | | | | 1 | 1 | 84 | -28 | 87 | -20 | 3B | | | | DR | 3B | IMP 55 |
| 110 | SU61606710 | PLO | | 030 | 030 | 4 | 3B | 82 | -30 | 86 | -21 | 3B | | | | WE | 3B | IMP 60 |
| 111 | SU61706710 | CER | | 0 | 025 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | |
| 112 | SU61306700 | PAS | | | | 1 | 2 | 52 | -60 | 52 | -55 | 4 | | | | DR | 4 | IMP 32Q3B |
| 113 | SU61406700 | PLO | | | | 1 | 1 | 79 | -33 | 79 | -28 | 3B | | | | DR | 3B | IMP 50 |
| 114 | SU61506700 | PLO | | 048 | | 1 | 1 | 96 | -16 | 97 | -10 | 3A | | | | DR | 3A | GRAVEL60 |
| 116 | SU61406690 | PAS | | 0 | 032 | 4 | 3B | | 0 | | 0 | | | | | WE | 3B | IMP 38 |

| SAMPLE | DEPTH | TEXTURE | COLOUR | MOTTLES COL | MOTTLES ABUN | MOTTLES CONT | PED COL. | GLEY | STONES >2 | STONES >6 | STONES LITH | STONES TOT | STRUCT/ CONSIST | SUBS STR | POR | IMP | SPL | CALC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0-35 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y |
| | 35-50 | mcl | 25Y 61 00 | 75YR58 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | Y |
| | 50-60 | scl | 25Y 61 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y |
| | 60-80 | lms | 25Y 61 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y |
| | 80-120 | lms | 25Y 61 00 | | | | | | 0 | 0 | HR | 50 | | M | | | | Y |
| 1P | 0-20 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y |
| | 20-40 | c | 10YR52 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | WKCSAB FM | P | Y | | Y | Y |
| | 40-70 | c | 10YR72 00 | 75YR58 00 | M | | 10YR72 00 | Y | 0 | 0 | | 0 | WKVCPR FM | P | Y | | Y | Y |
| 2 | 0-25 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | |
| | 25-35 | c | 10YR32 00 | | | | | | 0 | 0 | | 0 | | M | | | | |
| | 35-50 | c | 10YR42 53 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| | 50-120 | c | 10YR42 53 | | | | | | 0 | 0 | HR | 50 | | M | | | | |
| 2P | 0-20 | hcl | 10YR31 32 | | | | | | 0 | 0 | | 0 | | | | | | Y |
| | 20-38 | c | 25 Y52 00 | 75YR56 58 | C | | | Y | 0 | 0 | | 0 | STCOAB FM | P | Y | | Y | Y |
| | 38-60 | c | 25 Y62 00 | 75YR58 00 | M | | | Y | 0 | 0 | | 0 | MDVCAB FM | P | Y | | Y | Y |
| 3 | 0-35 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y |
| | 35-60 | c | 25Y 63 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | Y |
| | 60-75 | c | 25Y 63 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | Y |
| | 75-85 | c | 25Y 30 00 | 75YR56 00 | F | | | | 0 | 0 | | 0 | | P | | | Y | |
| | 85-120 | lms | 10YR72 00 | | | | | | 0 | 0 | HR | 10 | | M | | | | Y |
| 3P | 0-28 | mcl | 10YR42 00 | | | | | | 4 | 0 | HR | 7 | | | | | | |
| | 28-55 | hcl | 10YR42 43 | | | | | | 0 | 0 | HR | 20 | | M | | | | |
| | 55-70 | scl | 10YR42 43 | | | | | | 0 | 0 | HR | 45 | | M | | | | |
| | 70-120 | gh | 10YR54 00 | | | | | | 0 | 0 | | 0 | | P | | | | |
| 4 | 0-25 | zc | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y |
| | 25-65 | c | 25Y 53 00 | 75YR56 58 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | Y |
| | 65-85 | c | 25Y 30 00 | | | | | | 0 | 0 | | 0 | | M | | | | |
| | 85-120 | lms | 10YR72 00 | | | | | | 0 | 0 | HR | 10 | | M | | | | Y |
| 5 | 0-25 | zc | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y |
| | 25-70 | c | 25Y 52 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | Y |
| | 70-90 | fszl | 25Y 72 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y |
| | 90-120 | lms | 10YR72 00 | | | | | | 0 | 0 | HR | 10 | | M | | | | Y |
| 6 | 0-20 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y |
| | 20-85 | c | 25Y 62 00 | 75YR56 58 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | Y |
| | 85-120 | hp | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | |
| 7 | 0-26 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y |
| | 26-50 | c | 25Y 62 00 | 75YR56 58 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | Y |
| | 50-65 | c | 25Y 42 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | |
| | 65-120 | c | 25Y 62 32 | 75YR56 00 | C | | | Y | 0 | 0 | HR | 50 | | M | | | | |

| SAMPLE | DEPTH | TEXTURE | COLOUR | ----MOTTLES----- COL | ABUN | CONT | PED COL. | GLEY | ----STONES---- >2 | >6 | LITH | TOT | STRUCT/ CONSIST | SUBS STR | POR | IMP | SPL | CALC | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0-18 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | Y | | |
| | 18-25 | zc | 10YR32 00 | | | | | | 0 | 0 | | 0 | | M | | | Y | | |
| | 25-55 | c | 25Y 62 63 | 75YR56 58 | M | | | Y | 0 | 0 | | 0 | | P | | Y | Y | | |
| | 55-65 | c | 25Y 30 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | | | IMP 65 |
| 9 | 0-26 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 26-75 | c | 25Y 62 52 | 75YR56 58 | M | | | Y | 0 | 0 | | 0 | | P | | Y | Y | | |
| | 75-85 | c | 25Y 30 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 85-120 | fp | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 10 | 0-36 | zc | 10YR32 00 | 10YR56 00 | C | | | | 0 | 0 | | 0 | | | | | | | |
| | 36-55 | c | 25Y 52 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 55-65 | c | 25Y 30 00 | | | | | | 0 | 0 | | 0 | | M | | | | | IMP 65 |
| 11 | 0-25 | zc | 10YR32 00 | 10YR56 00 | C | | | | 0 | 0 | | 0 | | | | | | | |
| | 25-70 | c | 25Y 62 00 | 75YR56 58 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 70-100 | hcl | 25Y 62 72 | 75YR58 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | Y | | |
| | 100-120 | hcl | 25Y 62 00 | | | | | | 0 | 0 | HR | 50 | | M | | | Y | | |
| 12 | 0-18 | hzcl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | Y | | |
| | 18-35 | c | 10YR53 00 | | | | | | 0 | 0 | | 0 | | M | | | Y | | |
| | 35-50 | c | 25Y 52 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | Y | | |
| | 50-95 | fszl | 25Y 61 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | M | | | Y | | |
| | 95-120 | mzcl | 25Y 52 00 | | | | | | 0 | 0 | | 0 | | M | | | Y | | |
| 13 | 0-25 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 25-65 | c | 10YR53 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 65-80 | c | 25Y 52 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | | | IMP 80 |
| 14 | 0-35 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 35-70 | c | 25Y 52 00 | 75YR56 58 | C | | | Y | 0 | 0 | | 0 | | P | | Y | Y | | |
| | 70-120 | c | 25Y 30 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| 15 | 0-25 | c | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 25-55 | c | 25Y 62 00 | 75YR56 58 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 55-70 | c | 25Y 30 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 70-90 | hcl | 25Y 62 00 | 75YR58 00 | C | | | Y | 0 | 0 | HR | 3 | | M | | | Y | | IMP 90 |
| 16 | 0-25 | hzcl | 10YR32 00 | 10YR56 00 | C | | | | 0 | 0 | | 0 | | | | | | | |
| | 25-85 | c | 05Y 41 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 85-120 | hcl | 25Y 72 00 | 75YR58 00 | C | | | Y | 0 | 0 | | 0 | | M | | | Y | | |
| 17 | 0-28 | hcl | 25Y 42 00 | 10YR46 00 | C | | | Y | 0 | 0 | | 0 | | | | | | | |
| | 28-45 | c | 10YR51 52 | 10YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 45-120 | c | 10YR51 52 | 10YR58 00 | M | | 00MN00 00 | Y | 0 | 0 | | 0 | | P | | Y | | | |
| 18 | 0-26 | mcl | 25Y 41 00 | 10YR46 00 | C | | | Y | 0 | 0 | | 0 | | | | | | | |
| | 26-120 | c | 25Y 51 00 | 75YR46 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | 0-25 | hzcl | 10YR31 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 25-75 | c | 25 Y62 00 | 10YR58 00 | C | | 10YR71 00 | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 75-90 | c | 10YR32 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y | |
| | 90-100 | pl | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 100-120 | fp | 05YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 20 | 0-20 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 20-50 | c | 25Y 52 00 | 75YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 50-90 | fszl | 25Y 72 00 | 75YR58 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| | 90-120 | lms | 25Y 72 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y | |
| 22 | 0-27 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 27-32 | zc | 10YR32 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 32-75 | c | 25Y 52 00 | 75YR56 58 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 75-80 | hcl | 25Y 52 62 | 75YR58 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | | IMP 80 |
| 23 | 0-27 | zc | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 27-45 | c | 25Y 52 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 45-55 | c | 25Y 30 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 55-65 | c | 25Y 52 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 65-90 | hcl | 25Y 52 00 | 75YR56 00 | F | | | | 0 | 0 | | 0 | | M | | | | | IMP 90 |
| 24 | 0-28 | hzcl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 28-55 | c | 10YR42 52 | 10YR58 00 | M | | 25Y 51 00 | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 55-60 | c | 10YR42 52 | 10YR58 00 | M | | 25Y 51 00 | Y | 0 | 0 | HR | 30 | | M | | | | | IMP 60 |
| 25 | 0-18 | hzcl | 10YR42 00 | | | | | | 0 | 0 | HR | 2 | | | | | | | |
| | 18-40 | c | 10YR52 00 | 75YR46 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 40-65 | c | 25Y 41 00 | 10YR46 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 65-82 | c | 25Y 62 00 | 75YR46 00 | M | | 00MN00 00 | Y | 0 | 0 | | 0 | | P | | Y | | | IMP 82 |
| 26 | 0-22 | hcl | 10YR42 00 | | | | | | 0 | 0 | HR | 2 | | | | | | | |
| | 22-48 | c | 05Y 51 00 | 10YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 48-110 | c | 25Y 31 41 | 10YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 110-120 | fp | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 27 | 0-22 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 22-35 | c | 25 Y52 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y | |
| | 35-50 | c | 25 Y62 00 | 10YR68 00 | C | | 10YR61 00 | Y | 0 | 0 | | 0 | | M | | Y | | Y | |
| | 50-55 | scl | 25 Y72 00 | 10YR68 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| | 55-80 | lcs | 10YR81 00 | 10YR68 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| | 80-95 | scl | 10YR71 00 | 10YR68 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| | 95-120 | lp | 75YR30 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 28 | 0-26 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 26-70 | c | 25Y 52 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | Y | |
| | 70-85 | fszl | 10YR62 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y | |
| | 85-120 | csl | 10YR81 82 | | | | | | 0 | 0 | | 0 | | M | | | | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 | 0-28 | hcl | 10YR42 43 | | | | | | 2 | 0 | HR | 10 | | | | | | | |
| | 28-55 | c | 10YR53 00 | 10YR66 00 | F | | | | 0 | 0 | HR | 5 | | M | | | | | |
| | 55-60 | c | 10YR53 00 | | | | | | 0 | 0 | HR | 40 | | M | | | | | IMP 60 |
| 30 | 0-23 | hcl | 10YR42 43 | | | | | | 3 | 0 | HR | 10 | | | | | | | |
| | 23-30 | c | 10YR43 00 | | | | | | 0 | 0 | HR | 10 | | M | | | | | |
| | 30-32 | c | 10YR43 00 | | | | | | 0 | 0 | HR | 40 | | M | | | | | IMP 32 |
| 31 | 0-28 | hcl | 10YR43 00 | | | | | | 5 | 0 | HR | 15 | | | | | | | |
| | 28-55 | c | 10YR53 00 | 10YR56 00 | C | | | Y | 0 | 0 | HR | 10 | | M | | | | | |
| | 55-120 | c | 25Y 51 00 | 75YR46 00 | M | | 00MN00 00 | Y | 0 | 0 | HR | 5 | | P | | Y | | | |
| 32 | 0-23 | hzcl | 10YR43 00 | | | | | | 0 | 0 | HR | 5 | | | | | | | |
| | 23-30 | c | 10YR53 00 | 10YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | | | | |
| | 30-35 | c | 10YR53 00 | 10YR56 00 | C | | | Y | 0 | 0 | HR | 40 | | M | | | | | IMP 35 |
| 33 | 0-20 | hzcl | 10YR42 00 | | | | | | 0 | 0 | HR | 2 | | | | | | | |
| | 20-50 | c | 10YR53 00 | 10YR46 56 | M | | | Y | 0 | 0 | | 0 | | M | | | | | |
| | 50-55 | c | 10YR21 00 | 10YR56 00 | F | | 00MN00 00 | | 0 | 0 | | 0 | | P | | Y | | | |
| | 55-120 | c | 05Y 51 41 | 10YR46 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| 34 | 0-15 | hzcl | 10YR42 00 | 10YR46 00 | C | | | Y | 0 | 0 | HR | 2 | | | | | | | |
| | 15-62 | c | 25Y 51 00 | 75YR46 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 62-120 | c | 25Y 31 00 | 10YR46 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| 35 | 0-27 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 27-95 | c | 25 Y52 00 | 10YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | Y | |
| | 95-120 | c | 25 Y40 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 36 | 0-25 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 25-50 | c | 25 Y62 00 | 10YR58 00 | C | | 10YR71 00 | Y | 0 | 0 | | 0 | | P | | Y | | Y | |
| | 50-65 | c | 10YR71 00 | 75YR68 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | Y | |
| | 65-80 | c | 25 Y40 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 80-120 | pl | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 36A | 0-18 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 18-25 | zc | 10YR32 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y | |
| | 25-65 | c | 10YR53 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 65-120 | msl | 10YR62 00 | | | | | Y | 0 | 0 | | 0 | | M | | Y | | Y | |
| 37 | 0-28 | hcl | 10YR42 00 | | | | | | 3 | 0 | HR | 10 | | | | | | | |
| | 28-38 | hcl | 10YR43 00 | | | | | | 0 | 0 | HR | 10 | | M | | | | | |
| | 38-42 | c | 10YR43 00 | | | | | | 0 | 0 | HR | 25 | | M | | | | | IMP 42 |
| 38 | 0-32 | hcl | 10YR42 00 | | | | | | 10 | 0 | HR | 15 | | | | | | | |
| | 32-40 | c | 10YR44 54 | | | | | | 0 | 0 | HR | 25 | | M | | | | | IMP 40 |
| 39 | 0-29 | hcl | 10YR42 00 | | | | | | 5 | 0 | HR | 12 | | | | | | | |
| | 29-39 | c | 10YR53 52 | 10YR56 00 | C | | | Y | 0 | 0 | HR | 15 | | M | | | | | |
| | 39-42 | c | 10YR53 00 | 10YR56 00 | F | | | | 0 | 0 | HR | 25 | | M | | | | | IMP 42 |

| SAMPLE | DEPTH | TEXTURE | COLOUR | ----MOTTLES----- COL | ABUN | CONT | PED COL. | GLEY | ----STONES---- >2 | >6 | LITH | TOT | STRUCT/ CONSIST | SUBS STR | POR | IMP | SPL | CALC | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | 0-20 | hzcl | 10YR42 00 | 10YR46 56 | C | | | Y | 0 | 0 | | 0 | | | | | | | |
| | 20-100 | c | 05Y 51 00 | 10YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 100-120 | c | 10YR21 00 | 75YR46 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| 42 | 0-23 | hzcl | 10YR42 00 | 10YR46 00 | C | | | Y | 0 | 0 | HR | 2 | | | | | | | |
| | 23-60 | c | 25Y 51 00 | 10YR46 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 60-120 | c | 05Y 41 00 | 75YR46 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| 44 | 0-28 | hcl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | Y | | |
| | 28-70 | c | 10YR61 00 | 10YR68 00 | C | | 10YR71 00 | Y | 0 | 0 | | 0 | | P | | Y | Y | | |
| | 70-120 | c | 10YR71 00 | 75YR68 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | Y | | |
| 45 | 0-25 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | Y | | |
| | 25-120 | c | 25 Y52 00 | 75YR58 00 | M | | 10YR71 00 | Y | 0 | 0 | | 0 | | P | | Y | Y | | |
| 46 | 0-23 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 23-50 | c | 25 Y52 00 | 10YR58 00 | C | | 10YR61 00 | Y | 0 | 0 | | 0 | | P | | Y | Y | | |
| | 50-70 | c | 25 Y71 00 | 75YR58 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | Y | | |
| | 70-100 | c | 25 Y40 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 100-120 | lp | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 47 | 0-25 | hcl | 10YR42 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | | | | | | |
| | 25-35 | c | 10YR53 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 35-65 | c | 10YR53 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 65-120 | fszl | 10YR81 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | M | | | Y | | |
| 48 | 0-25 | hcl | 10YR43 00 | | | | | | 0 | 0 | HR | 10 | | | | | | | |
| | 25-35 | hcl | 10YR43 00 | | | | | | 0 | 0 | HR | 15 | | M | | | | | IMP 35 |
| 49 | 0-28 | hzcl | 10YR42 00 | | | | | | 18 | 0 | HR | 28 | | | | | | | |
| | 28-30 | hcl | 10YR54 00 | | | | | | 0 | 0 | HR | 60 | | M | | | | | IMP 30 |
| 50 | 0-29 | hcl | 10YR42 00 | | | | | | 10 | 0 | HR | 18 | | | | | | | |
| | 29-32 | c | 10YR54 00 | | | | | | 0 | 0 | HR | 60 | | M | | | | | IMP 29 |
| 51 | 0-28 | hcl | 10YR41 42 | 10YR46 00 | C | | | Y | 0 | 0 | HR | 5 | | | | | | | |
| | 28-55 | c | 10YR53 52 | 10YR46 00 | C | | 00MN00 00 | Y | 0 | 0 | | 0 | | M | | | | | |
| | 55-65 | c | 25Y 51 00 | 10YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 65-120 | c | 25Y 52 00 | 75YR56 00 | M | | | Y | 0 | 0 | HR | 10 | | P | | Y | | | |
| 52 | 0-29 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | Y | | |
| | 29-65 | c | 10YR51 52 | 75YR78 68 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 65-90 | c | 25Y 40 00 | | | | | Y | 0 | 0 | | 0 | | M | | Y | | | |
| | 90-120 | hp | 10YR21 00 | | | | | Y | 0 | 0 | | 0 | | M | | Y | | | |
| 53 | 0-30 | hcl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | Y | | |
| | 30-50 | c | 25 Y72 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | P | | Y | Y | | |
| | 50-70 | csl | 10YR81 00 | 10YR68 00 | C | | | Y | 0 | 0 | | 0 | | M | | | Y | | |
| | 70-80 | c | 25 Y40 00 | | | | | | 0 | 0 | | 0 | | M | | | Y | | |
| | 80-120 | sc | 25 Y50 00 | | | | | | 0 | 0 | HR | 20 | | M | | | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 54 | 0-25 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 25-50 | c | 25 Y62 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 50-100 | c | 10YR61 00 | 75YR68 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 100-120 | c | 25 Y40 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 55 | 0-32 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 32-40 | c | 25 Y52 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| | 40-75 | hcl | 25 Y52 00 | 75YR58 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| | 75-120 | c | 25 Y40 00 | 75YR58 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| 56 | 0-35 | hcl | 10YR42 00 | | | | | | 3 | 0 | HR | 7 | | | | | | Y | IMP 35 |
| 57 | 0-25 | mzcl | 10YR42 00 | | | | | | 0 | 0 | HR | 4 | | | | | | | |
| | 25-40 | hcl | 10YR43 00 | 75YR56 00 | C | | | | 0 | 0 | HR | 3 | | M | | | | | IMP 40 |
| 58 | 0-32 | hcl | 10YR41 00 | 10YR46 00 | C | | | Y | 2 | 0 | HR | 10 | | | | | | | |
| | 32-65 | c | 25Y 52 53 | 10YR56 00 | M | | 00MN00 00 | Y | 0 | 0 | HR | 10 | | P | | | Y | | IMP 65 |
| 59 | 0-27 | hcl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 27-55 | c | 10YR61 00 | 75YR56 58 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 55-90 | scl | 10YR71 81 | | | | | | 0 | 0 | HR | 30 | | M | | | | Y | |
| | 90-120 | gh | | | | | | | 0 | 0 | | 0 | | P | | | | Y | |
| 61 | 0-25 | hcl | 10YR42 43 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 25-60 | c | 10YR61 00 | 75YR56 46 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 60-75 | hcl | 10YR81 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y | |
| | 75-120 | hp | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 62 | 0-28 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 28-55 | c | 25 Y62 00 | 75YR58 00 | C | | 10YR71 00 | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 55-75 | c | 10YR61 00 | 75YR68 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 75-90 | c | 25 Y40 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 90-120 | hp | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 63 | 0-25 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 25-35 | c | 10YR53 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y | |
| | 35-50 | c | 10YR53 00 | 75YR56 58 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 50-60 | scl | 25Y 72 00 | 75YR58 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| | 60-120 | c | 25Y 52 00 | 75YR56 00 | F | | | | 0 | 0 | | 0 | | P | | | Y | Y | |
| 64 | 0-25 | hcl | 10YR43 00 | | | | | | 0 | 0 | HR | 4 | | | | | | | |
| | 25-35 | c | 10YR53 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 35-80 | c | 10YR53 52 | 75YR56 58 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | | IMP 80 |
| 65 | 0-22 | hcl | 10YR42 00 | | | | | | 0 | 0 | HR | 5 | | | | | | | |
| | 22-35 | hcl | 10YR52 53 | 10YR46 56 | C | | | Y | 0 | 0 | HR | 5 | | M | | | | | |
| | 35-85 | c | 25Y 51 52 | 75YR46 00 | M | | 00MN00 00 | Y | 0 | 0 | HR | 5 | | P | | | Y | | IMP 85 |

| SAMPLE | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 66 | 0-30 | mcl | 10YR42 00 | | | | | | 18 | 0 | HR | 33 | | | | | | | |
| | 30-45 | mcl | 10YR44 00 | | | | | | 0 | 0 | HR | 50 | | M | | | | | IMP 45 |
| 67 | 0-20 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 20-75 | c | 10YR61 00 | 75YR58 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 75-120 | csl | 10YR72 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| 68 | 0-28 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 28-80 | c | 10YR61 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 80-120 | fscl | 10YR61 71 | 10YR58 00 | F | | | | 0 | 0 | | 0 | | M | | | | Y | |
| 69 | 0-26 | hcl | 10YR43 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 26-40 | c | 10YR51 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | | |
| | 40-60 | c | 25 Y40 00 | 10YR68 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | | |
| | 60-120 | hp | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 70 | 0-25 | hcl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 25-50 | c | 25 Y62 00 | 10YR58 00 | M | | 25 Y70 00 | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 50-70 | c | 10YR61 00 | 75YR68 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 70-80 | c | 25 Y40 00 | | | | | | 0 | 0 | | 0 | | P | | | Y | | |
| | 80-120 | hp | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 72 | 0-25 | mcl | 10YR42 00 | | | | | | 0 | 0 | HR | 10 | | | | | | | |
| | 25-40 | hcl | 10YR43 00 | 75YR56 00 | C | | | | 0 | 0 | HR | 15 | | M | | | | | IMP 40 |
| 73 | 0-35 | hcl | 10YR42 43 | | | | | | 10 | 0 | HR | 18 | | | | | | | |
| | 35-40 | hcl | 10YR54 44 | | | | | | 0 | 0 | HR | 40 | | M | | | | | IMP 40 |
| 74 | 0-26 | hcl | 10YR42 00 | | | | | | 0 | 0 | HR | 10 | | | | | | | |
| | 26-100 | c | 25Y 52 00 | 75YR46 56 | M | | | Y | 0 | 0 | HR | 5 | | P | | | Y | | IMP 100 |
| 75 | 0-20 | mcl | 10YR42 00 | | | | | | 22 | 0 | HR | 37 | | | | | | | |
| | 20-42 | hcl | 10YR44 00 | | | | | | 0 | 0 | HR | 40 | | M | | | | | IMP 42 |
| 76 | 0-32 | mcl | 10YR42 43 | | | | | | 22 | 0 | HR | 37 | | | | | | | |
| | 32-35 | mcl | 10YR53 54 | | | | | | 0 | 0 | HR | 40 | | M | | | | | IMP 35 |
| 77 | 0-30 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 30-75 | c | 25 Y62 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 75-90 | c | 10YR61 00 | 75YR68 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | | |
| | 90-110 | c | 25 Y40 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| | 110-120 | hp | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 78 | 0-25 | c | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 25-50 | c | 25 Y52 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 50-80 | hcl | 10YR71 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| | 80-120 | fszl | 10YR61 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y | |

| SAMPLE | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 79 | 0-25 | c | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 25-55 | c | 25Y 52 00 | 10YR58 | 00 | C | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 55-80 | hcl | 10YR71 00 | 75YR56 | 00 | C | | Y | 0 | 0 | | 0 | | M | | | Y | Y | |
| | 80-120 | fszl | 10YR61 00 | | | | | Y | 0 | 0 | | 0 | | M | | | Y | Y | |
| 80 | 0-24 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 24-36 | c | 10YR53 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y | |
| | 36-45 | c | 10YR53 00 | 75YR56 | 00 | C | | Y | 0 | 0 | | 0 | | P | | | | Y | |
| | 45-60 | mzcl | 10YR72 00 | 75YR56 | 00 | C | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| | 60-90 | c | 25Y 30 00 | | | | OOMNOO | | 0 | 0 | | 0 | | P | | | Y | | |
| | 90-120 | fp | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 81 | 0-22 | hcl | 10YR32 41 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 22-35 | c | 10YR53 00 | 10YR56 | 00 | M | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 35-65 | c | 25Y 72 00 | 10YR66 | 00 | M | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 65-120 | c | 05Y 41 00 | 10YR58 | 00 | M | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| 82 | 0-26 | mcl | 10YR42 00 | | | | | | 4 | 0 | HR | 12 | | | | | | | |
| | 26-45 | hcl | 10YR43 53 | 10YR46 | 00 | F | | | 0 | 0 | HR | 20 | | M | | | | | |
| | 45-65 | c | 25Y 52 00 | 75YR56 | 00 | M | OOMNOO | 00 Y | 0 | 0 | HR | 10 | | P | | | Y | | |
| | 65-90 | c | 10YR52 00 | 75YR56 | 00 | M | | Y | 0 | 0 | HR | 5 | | P | | | Y | | IMP 90 |
| 83 | 0-26 | hcl | 10YR42 00 | | | | | | 5 | 0 | HR | 11 | | | | | | | |
| | 26-40 | hcl | 10YR62 00 | 10YR66 | 00 | M | | Y | 0 | 0 | HR | 2 | | M | | | | | |
| | 40-60 | c | 25Y 62 00 | 10YR56 | 66 | M | | Y | 0 | 0 | HR | 2 | | P | | | Y | | IMP 60 |
| 84 | 0-29 | hcl | 10YR42 00 | | | | | | 5 | 0 | HR | 10 | | | | | | | |
| | 29-55 | hcl | 10YR52 62 | 10YR56 | 00 | M | OOMNOO | 00 Y | 0 | 0 | HR | 5 | | M | | | | | |
| | 55-70 | c | 25Y 62 00 | 75YR56 | 00 | M | OOMNOO | 00 Y | 0 | 0 | HR | 5 | | P | | | Y | | |
| | 70-75 | c | 10YR53 00 | 75YR56 | 00 | M | | Y | 0 | 0 | HR | 40 | | M | | | | | IMP 75 |
| 85 | 0-35 | mcl | 10YR42 00 | | | | | | 5 | 0 | HR | 13 | | | | | | | |
| | 35-60 | hcl | 10YR44 00 | | | | | | 0 | 0 | HR | 10 | | M | | | | | |
| | 60-70 | hcl | 10YR44 00 | | | | | | 0 | 0 | HR | 30 | | M | | | | | IMP 70 |
| 86 | 0-18 | mcl | 10YR31 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 18-25 | hzcl | 25Y 41 00 | 75YR56 | 00 | C | | Y | 0 | 0 | | 0 | | M | | | | | |
| | 25-85 | c | 25Y 61 00 | 10YR56 | 00 | M | | Y | 0 | 0 | | 0 | | P | | | Y | | |
| | 85-120 | c | 25Y 61 00 | 10YR56 | 00 | M | OOMNOO | 00 Y | 0 | 0 | | 0 | | P | | | Y | | |
| 87 | 0-27 | hcl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 27-90 | c | 25 Y62 00 | 75YR56 | 00 | C | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 90-120 | hp | 10YR21 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 88 | 0-30 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 30-45 | scl | 10YR71 00 | 10YR58 | 00 | C | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| | 45-120 | hcl | 10YR71 72 | 10YR58 | 00 | C | | Y | 0 | 0 | | 0 | | M | | | | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 89 | 0-25 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 25-37 | hcl | 25 Y62 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y | |
| | 37-55 | hcl | 25 Y62 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| | 55-110 | c | 10YR71 81 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 110-120 | c | 25 Y40 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 90 | 0-25 | hzcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 25-30 | c | 10YR53 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y | |
| | 30-60 | c | 10YR53 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 60-120 | c | 25Y 30 00 | | | | | | 0 | 0 | | 0 | | M | | | | | |
| 91 | 0-26 | hcl | 10YR41 00 | 75YR46 00 | C | | | Y | 0 | 0 | | 0 | | | | | | | |
| | 26-50 | c | 25Y 41 51 | 75YR46 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | | |
| | 50-70 | c | 05Y 41 00 | 75YR46 00 | M | | | Y | 0 | 0 | HR | 5 | | P | | | Y | | |
| | 70-120 | c | 05Y 41 00 | 75YR46 00 | M | | 00MN00 00 | Y | 0 | 0 | | 0 | | P | | | Y | | |
| 92 | 0-28 | mcl | 10YR41 42 | | | | | | 4 | 0 | HR | 10 | | | | | | | |
| | 28-60 | hcl | 10YR43 00 | | | | | | 0 | 0 | HR | 15 | | M | | | | | |
| | 60-65 | hcl | 10YR43 44 | | | | | | 0 | 0 | HR | 40 | | M | | | | | IMP 65 |
| 93 | 0-28 | mcl | 10YR42 00 | | | | | | 3 | 0 | HR | 9 | | | | | | | |
| | 28-45 | c | 25Y 52 53 | 75YR56 00 | M | | 00MN00 00 | Y | 0 | 0 | HR | 2 | | P | | | Y | | |
| | 45-49 | c | 25Y 52 53 | 75YR56 00 | M | | 00MN00 00 | Y | 0 | 0 | HR | 20 | | P | | | Y | | IMP 49 |
| 94 | 0-26 | c | 10YR43 00 | | | | | | 0 | 0 | HR | 2 | | | | | | | |
| | 26-40 | c | 10YR51 61 | 75YR46 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | | |
| | 40-55 | c | 25Y 62 72 | 75YR46 56 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | | |
| | 55-90 | c | 25Y 62 72 | 75YR56 00 | M | | 00MN00 00 | Y | 0 | 0 | | 0 | | P | | | Y | | |
| | 90-97 | c | 25Y 62 72 | 75YR56 00 | M | | | Y | 0 | 0 | HR | 5 | | P | | | Y | | IMP 97 |
| 95 | 0-22 | c | 10YR53 00 | | | | | | 0 | 0 | HR | 2 | | | | | | | |
| | 22-90 | c | 25Y 61 00 | 10YR56 00 | M | | | Y | 0 | 0 | HR | 2 | | P | | | Y | | |
| | 90-105 | c | 25Y 61 00 | 10YR56 00 | M | | | Y | 0 | 0 | HR | 5 | | P | | | Y | | IMP 105 |
| 96 | 0-25 | mcl | 10YR41 00 | 75YR46 00 | C | | | Y | 0 | 0 | | 0 | | | | | | | |
| | 25-30 | hzcl | 25Y 41 00 | 75YR46 56 | M | | | Y | 0 | 0 | | 0 | | M | | | | | |
| | 30-80 | c | 25Y 61 00 | 10YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | | |
| | 80-120 | c | 25Y 61 00 | 10YR56 00 | M | | 00MN00 00 | Y | 0 | 0 | | 0 | | P | | | Y | | |
| 96A | 0-10 | mzcl | 10YR52 00 | 10YR56 00 | C | | | Y | 0 | 0 | HR | 0 | | | | | | | |
| | 10-80 | c | 25Y 62 00 | 75YR56 58 | M | | | Y | 0 | 0 | | 0 | | P | | | Y | | |
| 97 | 0-32 | hcl | 10YR32 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 32-65 | c | 25 Y52 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 65-120 | hcl | 25 Y62 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | Y | |
| 98 | 0-25 | hcl | 10YR52 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 25-90 | c | 25 Y62 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | P | | | Y | Y | |
| | 90-120 | scl | 10YR81 00 | 10YR58 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 99 | 0-25 | hzcl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | | Y | |
| | 25-58 | c | 25Y 52 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 58-120 | lcs | 10YR81 00 | | | | | | 0 | 0 | | 0 | | M | | | | Y | |
| 100 | 0-28 | mcl | 10YR42 00 | | | | | | 5 | 0 | HR | 10 | | | | | | | |
| | 28-45 | hcl | 10YR43 00 | | | | | | 0 | 0 | HR | 25 | | M | | | | | IMP 45 |
| 101 | 0-28 | mcl | 10YR43 00 | | | | | | 2 | 0 | HR | 6 | | | | | | | |
| | 28-60 | hcl | 10YR44 00 | | | | | | 0 | 0 | HR | 5 | | M | | | | | |
| | 60-65 | hcl | 10YR44 00 | | | | | | 0 | 0 | HR | 25 | | M | | | | | IMP 65 |
| 102 | 0-28 | hcl | 10YR42 00 | 75YR56 00 | C | | | Y | 0 | 0 | HR | 3 | | | | | | | |
| | 28-52 | c | 10YR62 00 | 75YR56 58 | M | | 00MN00 00 | Y | 0 | 0 | HR | 2 | | P | | Y | | | IMP 52 |
| 103 | 0-25 | hcl | 10YR42 00 | 75YR56 00 | C | | | Y | 0 | 0 | HR | 1 | | | | | | | |
| | 25-70 | c | 10YR62 00 | 75YR56 58 | M | | 00MN00 00 | Y | 0 | 0 | | 0 | | P | | Y | | | IMP 70 |
| 104 | 0-28 | hcl | 10YR42 00 | | | | | | 0 | 0 | HR | 1 | | | | | | | |
| | 28-40 | fsl | 25Y 63 00 | 75YR56 00 | C | | | Y | 0 | 0 | | 0 | | M | | | | | |
| | 40-55 | scl | 25Y 63 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | M | | | | | |
| | 55-120 | c | 10YR62 00 | 05YR68 00 | M | | 00MN00 00 | Y | 0 | 0 | | 0 | | P | | Y | | | |
| 105 | 0-5 | mcl | 10YR42 00 | | | | | | 0 | 0 | | 0 | | | | | | | |
| | 5-35 | hcl | 10YR62 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | M | | | | | |
| | 35-70 | c | 10YR62 00 | 75YR56 00 | M | | | Y | 0 | 0 | | 0 | | P | | Y | | | |
| | 70-120 | c | 25Y 62 00 | 75YR56 00 | C | | 00MN00 00 | Y | 0 | 0 | | 0 | | P | | Y | | | |
| 106 | 0-35 | zl | 10YR31 00 | | | | | | 3 | 0 | HR | 20 | | | | | | Y | |
| | 35-120 | gh | | | | | | | 0 | 0 | | 0 | | P | | | | Y | |
| 107 | 0-32 | mcl | 10YR43 00 | | | | | | 3 | 0 | HR | 8 | | | | | | Y | |
| | 32-40 | hcl | 10YR44 00 | | | | | | 0 | 0 | HR | 20 | | M | | | | | IMP 40 |
| 108 | 0-28 | mcl | 10YR43 00 | | | | | | 2 | 0 | HR | 5 | | | | | | | |
| | 28-45 | hcl | 10YR44 00 | | | | | | 0 | 0 | HR | 5 | | M | | | | | |
| | 45-60 | c | 10YR44 00 | 75YR58 00 | F | | | | 0 | 0 | HR | 15 | | M | | | | | IMP 60 |
| 109 | 0-30 | mcl | 10YR43 00 | | | | | | 2 | 0 | HR | 5 | | | | | | | |
| | 30-45 | c | 10YR44 00 | | | | | | 0 | 0 | HR | 10 | | M | | | | | |
| | 45-55 | c | 10YR44 00 | 75YR58 00 | F | | | | 0 | 0 | HR | 15 | | M | | | | | IMP 55 |
| 110 | 0-30 | mcl | 10YR42 00 | | | | | | 3 | 0 | HR | 8 | | | | | | | |
| | 30-50 | c | 10YR53 62 | 75YR58 00 | C | | 10YR71 00 | Y | 0 | 0 | HR | 10 | | P | | Y | | | |
| | 50-60 | scl | 10YR71 62 | 75YR58 00 | C | | | Y | 0 | 0 | HR | 15 | | M | | | | | IMP 60 |
| 111 | 0-25 | hcl | 10YR42 00 | 10YR56 00 | C | | | Y | 0 | 0 | | 0 | | | | | | | |
| | 25-120 | c | 25Y 52 53 | 75YR56 58 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 112 | 0-32 | hcl | 10YR42 00 | | | | | | 0 | 0 | HR | 10 | | | | | | IMP 32 |
| 113 | 0-29 | mcl | 10YR33 00 | | | | | | 3 | 0 | HR | 7 | | | | | | |
| | 29-50 | hcl | 10YR44 00 | | | | | | 0 | 0 | HR | 10 | | M | | | | IMP 50 |
| 114 | 0-33 | mcl | 10YR42 00 | | | | | | 3 | 0 | HR | 6 | | | | | | |
| | 33-48 | hcl | 10YR43 00 | | | | | | 0 | 0 | HR | 10 | | M | | | | |
| | 48-60 | hcl | 10YR52 00 | 75YR56 00 | C | | | Y | 0 | 0 | HR | 10 | | M | | | | |
| | 60-120 | gh | | | | | | Y | 0 | 0 | | 0 | | P | | | | |
| 116 | 0-32 | hcl | 10YR51 00 | 75YR46 00 | C | | | Y | 0 | 0 | HR | 10 | | | | | | |
| | 32-38 | sc | 10YR42 00 | 75YR56 58 | C | | | Y | 0 | 0 | HR | 10 | | P | | Y | | IMP 38 |