Yeovil West

Agricultural Land Classification

February 1998

Resource Planning Team
Bristol
FRCA Western Region

Job Number 73/97

MAFF Ref EL36/0054

YEOVIL WEST

AGRICULTURAL LAND CLASSIFICATION SURVEY

CONTENTS

YEOVIL WEST

AGRICULTURAL LAND CLASSIFICATION SURVEY

INTRODUCTION

1 This report presents the findings of a semi detailed Agricultural Land Classification (ALC) survey of 603 5 ha of land at Yeovil Somerset Field survey was based on 261 auger borings and 16 soil profile pits and was completed in March 1998 During the survey 17 samples were analysed for particle size distribution (PSD)

2 The survey was conducted by the Resource Planning Team of FRCA Western Region on behalf of MAFF in its statutory role in the preparation of South Somerset Local Plan

3 Information on climate geology and soils and from previous ALC surveys was considered and is presented in the relevant section The published regional ALC map (MAFF 1977) shows the site at a reconnaissance scale as mainly Grade 1 in the south with Grades 3 and 2 through the centre and north of the site including mainly Grade 3 on the lower land around Brympton d Evercy an area shown as Yeovil Sands parent material

4 The site was previously surveyed in 1981 at a scale of 1 25 000 (ADAS 1981) Although this 1981 survey was carried out to classification guidelines which have now been superseded it shows a pattern of grades similar to the findings of the current survey with Grade 1 in the south a mixture of Grades 2 3a and 3b through the rest of the site and the main area of Grade 3b on the lower land south of Brympton d Evercy house The current survey uses the Revised Guidelines and Criteria for grading the quality of agricultural land (MAFF 1988) and supersedes any previous ALC survey Grade descriptions are summarised in Appendix I

5 Several ALC surveys have been carried out in recent years on sites adjacent to the current survey area These include one at Nash in the south (ADAS 1995) which found almost entirely Grade 1 on Yeovil Sands deposits Sites adjacent to the north of the current survey area (ADAS 1993 and 1995) found a mixture of Grades 1 2 and Subgrades 3a and 3b all mainly limited by wetness on the more variable deposits of Pennard Sands

6 At the time of survey land cover was mainly cereals Much of it until relatively recently appeared to have been permanent grassland Smaller areas are still in grass for mixed grazing with several pony paddocks around North Coker Several fields in the south of the site had been in daffodils at some time in recent years and there is a fruit farm at Broad Leaze Other land which was not surveyed included mainly woodland Brympton d Evercy house and grounds and the usual residential land roads and several blocks of agricultural buildings

SUMMARY

7 The distribution of ALC grades is shown on the accompanying 1 20 000 scale ALC map The detail of information shown at this scale is appropriate to the intensity of field survey but could be misleading if enlarged or applied to small areas Areas are summarised in the Table 1

Table 1 Distribution of ALC grades Yeovil West

Grade	Area (ha)	% Surveyed Area (496 0 ha)
1	167 5	34
2	62 6	13
3a	166 7	34
3b	92 3	19
4	6 9	1
Agricultural land not surveyed	0 6	
Other land	106 9	
Total site area	603 5	

8 This shows that 81% of the area surveyed was found to be best and most versatile This was Grade 1 with no significant limitation Grade 2 with minor limitations mainly due to wetness and Subgrade 3a with moderate limitations due to wetness Other land was mainly Subgrade 3b limited by wetness and gradient with smaller scattered areas of Grade 4 with more severe limitations due to gradient The steeper slopes are all found on the north facing scarp running through the centre of the site

CLIMATE

9 Estimates of climatic variables for this site were derived from the published agricultural climate dataset Climatological Data for Agricultural Land Classification (Meteorological Office 1989) using standard interpolation procedures Data for key points around the site are given in Table 2 below

10 Since the ALC grade of land is determined by the most limiting factor present overall climate is considered first because it can have an overriding influence by restricting land to a lower grade despite more favourable site and soil conditions Parameters used for assessing overall climate are accumulated temperature a measure of relative warmth and average annual rainfall a measure of overall wetness The results shown in Table 2 indicate that there is no overall climatic limitations

11 Climatic variables also affect ALC grade through interactions with soil conditions The most important interactive variables are Field Capacity Days (FCD) which are used in assessing soil wetness and potential Moisture Deficits calculated for wheat and potatoes which are compared with the moisture available in each profile in assessing soil droughtiness limitations These are described in later sections A critical boundary of 175 FC Days was found approximately to follow the line of the scarp slope with around 170 FC Days to the north of this line and 178 FC Days to the south In practice this had little effect on the assessment of wetness as the parent material to the south of this line was Yeovil Sands where the great majority of soil profiles were found to be Wetness Class I

Table 2 Climatic Interpolations Yeovil West

Grid Reference		ST 530154	ST 530149	ST 537136
Altitude (m)		45	55	65
Accumulated Temperature (day °C)		1524	1513	1502
Average Annual Rainfall (mm)		788	818	841
Overall Climatic Grade		1	1	1
Field Capacity Days		170	175	178
Moisture deficit (mm)	Wheat	107	104	101
	Potatoes	100	96	93

RELIEF

12 Altitude ranges from 45 metres opposite the council offices on Lynx Trading Estate to 105 metres on the highest ground near the village of Odcombe Slopes are mainly gentle and moderate with no limitation to ALC although extensive and fairly continuous strong and moderately steep slopes were found on the scarp north of the Odcombe Road

13 The Yeovil Sands deposits have a consistent particle size distribution within the range of fine sand and coarse silt This makes the soil susceptible to water erosion which causes considerable difficulties in other areas Although there is some evidence of slight sheet erosion within the arable fields at this site there is little evidence of erosion causing any difficulty although the lanes in the south of site are considerably sunken below field level In terms of ALC the risk of erosion is considered to be slight and not limiting Any significant erosion limitation is confined to land with an overriding primary limitation due to gradient

GEOLOGY AND SOILS

14 The underlying geology of the site is shown on the published geology map (IGS 1973) as mainly Yeovil Sands extending from the south through the centre of the site with Pennard Sands confined mainly to the area north of the old railway at Lufton This may be so but the current survey found the area characteristic of Yeovil Sands to be confined to the area south of the scarp slope with more variable textures including clay with the inevitable gleying indicative of seasonal waterlogging characteristic of Pennard Sands evident from this line northwards This has clear implications for ALC with the broad area of universal Grade 1 confined to the south of the site

15 Soils were mapped by the Soil Survey of England and Wales at a reconnaissance scale of 1 250 000 (SSEW 1983) as mainly Curtisden and South Petherton associations Curtisden association is described as comprising silty soils over siltstone with slowly permeable subsoils and slight seasonal waterlogging South Petherton association is described as deep well drained silty soils some over soft rock with a risk of water erosion Imperfectly drained Curtisden association is shown developed on Pennard Sands and on a large part of the area shown on the published geology map as Yeovil Sands This distribution was entirely borne out by the current survey although a small area of freely drained Wetness Class I soil typical of the South Petherton association was found to the north of Lufton Manor Although the

junction beds of ferruginous and argillaceous limestone do not appear to be extensive on the published geology map and not reflected at all in the published map of soil associations they do create a distinctive area of heavy clay soils with stones at the surface and generally severely limited by wetness

AGRICULTURAL LAND CLASSIFICATION

16 The distribution of ALC grades found by the current survey is shown on the accompanying 1 20 000 scale map and areas are summarised in Table 1 The detail of information shown at this scale is appropriate to the intensity of field survey but could be misleading if enlarged or applied to small areas

Grade 1

17 In the south of the site the majority of profiles were found to be Wetness Class I (See Appendix II) with no evidence of wetness and fine sandy loam topsoils These are illustrated by Pits 3 and 4 There is some variation in topsoil texture and the lightest found at ASP 254 was analysed for PSD and confirmed to be fine sandy loam

18 On the higher ground in the south west of the site soils on similar deposits were found to have fine sandy loam or fine sandy silt loam topsoils but with gleying evident at various levels within the subsoil In the absence of a slowly permeable layer these were assessed as Wetness Class I also Grade 1 These are illustrated by Pits 2 and 16

19 On the Pennard Sands soils are found with medium clay loam topsoil frequently at Wetness Class I with no evidence of wetness These are also Grade 1 and are illustrated by Pits 11 and 13

20 Some Grade 1 profiles in this area are Wetness Class II normally with gleying below 40 cm a slowly permeable layer below 60 cm land with fine sandy loam or fine sandy silt loam topsoil

Grade 2

21 The area shown as Grade 2 is typically Wetness Class II with gleying below 40 cm and a slowly permeable layer in the lower subsoil and with medium clay loam or medium silty clay loam topsoil This is illustrated by Pits 7 and 14 This area also contains a few auger borings assessed as Subgrade 3a and several auger borings which were borderline between Wetness Class II and III with a slowly permeable layer at around 60 cm

Subgrade 3a

22 This extensive mapping unit has mainly medium clay loam or medium silty clay loam topsoil textures at Wetness Class III frequently gleyed within 40 cm and with a slowly permeable layer in the middle subsoil These conditions are illustrated by Pits 1 5 8 and 9 The pits all found the porosity of the slowly permeable layer to be critical to grading as the upper 15 cm or so of what appeared to be a slowly permeable clay in the auger was found be marginally porous when an undisturbed sample was examined at the pit

Subgrade 3b

23 Within the area shown as Subgrade 3a there are several small areas shown as Subgrade 3b as at ASPs 174 112 92 and 132 The areas shown are somewhat arbitrary but are taken to represent the scattered borings within the better soils These were found to be Wetness Class IV with a clay SPL in the upper subsoil and either medium or heavy clay loam topsoils The other mapping units shown as Subgrade 3b are perhaps more robust All are illustrated by Pits 10 and 15

24 Soils developed on the Junction Beds appeared to be both heavy and stony Although the stoniness was not found to be limiting at those points where the profile was examined wetness most definitely was and this is illustrated by Pit 6

25 Subgrade 3b is also found on the main escarpment and also in smaller scattered areas elsewhere where limited by gradient

Grade 4

26 The scattered areas shown as Grade 4 are found on the shorter steeper slopes of the escarpment where limited by gradient

P BARNETT
Resource Planning Team
FRCA Bristol
27 March 1998

REFERENCES

ADAS RESOURCE PLANNING TEAM (1981) Agricultural Land Classification Survey of Yeovil Scale 1 25 000 Reference 63 ADAS Bristol

ADAS RESOURCE PLANNING TEAM (1993) Agricultural Land Classification Survey of Yeovil South S omerset Local Plan Scale 1 10 000 Reference 96 93 ADAS Bristol

ADAS RESOURCE PLANNING TEAM (1995) Agricultural Land Classification Survey of Nash Yeovil Scale 1 10 000 Reference 75 95 ADAS Bristol

ADAS RESOURCE PLANNING TEAM (1995) Agricultural Land Classification Survey of Yeovil South Somerset Local Plan Scale 1 20 000 Reference 48 95 ADAS Bristol

ADAS RESOURCE PLANNING TEAM (1995) Agricultural Land Classification Survey of Vagg Farm Yeovil Scale 1 10 000 Reference 74 95 ADAS Bristol

INSTITUTE OF GEOLOGICAL SCIENCES (1973) Sheet 312 Yeovil 1 50 000 series Solid and Drift edition IGS London

HODGSON J M (Ed) (1997) Soil Survey Field Handbook Soil Survey Technical Monograph No 5 SSRLC Cranfield University

MAFF (1977) 1 250 000 series Agricultural Land Classification South West Region MAFF Publications Alnwick

MAFF (1988) Agricultural Land Classification of England and Wales Revised Guidelines and Criteria for grading the quality of agricultural land MAFF Publications Alnwick

METEOROLOGICAL OFFICE (1989) Climatological Data for Agricultural Land Classification Meteorological Office Bracknell

SOIL SURVEY OF ENGLAND AND WALES (1983) Sheet 5 Soils of South West England 1 250 000 scale SSEW Harpenden

SOIL SURVEY OF ENGLAND AND WALES (1984) Soils and Their Use in South West England Bulletin No 14 SSEW Harpenden

APPENDIX I

DESCRIPTION OF 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 include 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 and horticultural crops can usually be grown but on some land in 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 Where 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 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 most 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

Source MAFF (1988) Agricultural Land Classification of England and Wales Revised Guidelines and Criteria for Grading the Quality of Agricultural Land MAFF Publications Alnwick

APPENDIX II

DEFINITION OF SOIL WETNESS CLASSES

Soil wetness is classified according to the depth and duration of waterlogging in the soil profile

Wetness Class I

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

Wetness Class 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 not wet within 40 cm depth for more than 30 days in most years

Wetness Class 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 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 and 90 days in most years

Wetness Class IV

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

Wetness Class V

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

Wetness Class VI

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

Notes The number of days specified is not necessarily a continuous period

In most years is defined as more than 10 out of 20 years

Source Hodgson J M (Ed) (1997) Soil Survey Field Handbook Soil Survey Technical Monograph No 5 Silsoe

APPENDIX III

ABBREVIATIONS AND TERMS USED IN SURVEY DATA

Soil pit and auger boring information collected during ALC survey is held on a computer database and is reproduced in this report Terms used and abbreviations are set out below These conform to definitions contained in the Soil Survey Field Handbook (Hodgson 1997)

1 Terms used on computer database in order of occurrence

GRID REF National 100 km grid square and 8 figure grid reference

LAND USE At the time of survey

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

GRDNT Gradient as estimated or measured by hand held optical clinometer

GLEY SPL Depth in centimetres to gleying or slowly permeable layer

AP (WHEAT/POTS) Crop adjusted available water capacity

MB (WHEAT/POTS) Moisture Balance (Crop adjusted AP crop potential MD)

DRT Best grade according to soil droughtiness

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				

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				

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)

MOTTLE COL Mottle colour using Munsell notation

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%+

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

PED COL Ped face colour using Munsell notation

GLEY If the soil horizon is gleyed a Y will appear in this column If slightly gleyed an S will appear

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 or metamorphic rock		

Stone contents are given in % by volume for sizes >2cm >6cm and total stone >2mm

STRUCT The degree of development size and shape of soil peds are described using the following notation

Degree of development	**WA**	Weakly developed Adherent	**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		

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		

SUBS STR Subsoil structural condition recorded for the purpose of calculating profile droughtiness **G** Good **M** Moderate **P** Poor

POR Soil porosity If a soil horizon has poor porosity with less than 0 5% biopores >0 5mm a Y will appear in this column

IMP If the profile is impenetrable to rooting a Y will appear in this column at the appropriate horizon

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

CALC If the soil horizon is calcareous with naturally occurring calcium carbonate exceeding 1% a Y will appear this column

2 Additional terms and abbreviations used mainly in soil pit descriptions

STONE ASSESSMENT

VIS	Visual	**S**	Sieve	**D**	Displacement

MOTTLE SIZE

EF	Extremely fine <1mm	**M**	Medium 5 15mm
VF	Very fine 1 2mm>	**C**	Coarse >15mm
F	Fine 2 5mm		

MOTTLE COLOUR May be described by Munsell notation or as ochreous (OM) or grey (GM)

ROOT CHANNELS In topsoil the presence of rusty root channels should also be noted

MANGANESE CONCRETIONS Assessed by volume

N	None		**M**	Many	20 40%
F	Few	<2%	**VM**	Very Many	>40%
C	Common	2 20%			

POROSITY

P	Poor	less than 0 5% biopores at least 0 5mm in diameter
G	Good	more than 0 5% biopores at least 0 5mm in diameter

ROOT ABUNDANCE

The number of roots per $100cm^2$		Very Fine and Fine	Medium and Coarse
F	Few	1 10	1 or 2
C	Common	10 25	2 5
M	Many	25 200	>5
A	Abundant	>200	

ROOT SIZE

VF	Very fine	<1mm	**M**	Medium	2 5mm
F	Fine	1 2mm	**C**	Coarse	>5mm

HORIZON BOUNDARY DISTINCTNESS

Sharp	<0 5cm	**Gradual**	6 13cm
Abrupt	0 5 2 5cm	**Diffuse**	>13cm
Clear	2 5 6cm		

HORIZON BOUNDARY FORM Smooth wavy irregular or broken *

* See Soil Survey Field Handbook (Hodgson 1997) for details

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil W	Pit 1 (NrASP101)	1 W	Ley	Av Rainfall 780 mm ATO 1510 day C	Pennard Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY	FC Days 170 Climatic Grade 1 Exposure Grade 1	PSD SAMPLES TAKEN
73/97	17/2/98	ST 5155 1585	PB/AC		TS 0 25 cm MCL (S29 Z48 C23%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	23	MCL	10YR44/54	0	0	0					CF VF		Sharp Wavy
2	39	HZCL	10YR53/54	0	10YR56 FDFO 25Y62 CDFG	0	MDCPR	FR	M	G	CVF		Clear Wavy
3	60	C	25Y64/74	0	10YR66 MDFO 25Y73 MDFG	0	MDCPR	FM	P	G(Low)	FVF		Gradual Smooth
4	88	C	25Y63	0	10YR66/68 MDFO 25YR72 MDFG	0	MDCPR	FM	P	P(Low)	FVF		

Profile Gleyed From 39 cm

Slowly Permeable Horizon From 60 cm

Wetness Class III

Wetness Grade 3a

Available Water	Wheat	134 mm
	Potatoes	111 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+30 mm
	Potatoes	+15 mm

Droughtiness Grade 1 (Calculated to 120 cm)

Final ALC Grade 3a

Main Limiting Factor(s) We

Remarks H3 pores few large earthworms

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil	Pit 2 (ASP171)	4 E	Cer	Av Rainfall 803 mm ATO 1457 day C FC Days 172 Climatic Grade 1 Exposure Grade 1	Yeovil Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	17/2/98	ST 5097 1503	AC/PB		TS 0 25 cm FSZL (MCL) (S38 Z45 C17%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	27	FSZL	10YR43	0	0	0					CF		Clear Smooth
2	60	MZCL	10YR54	0	CDFO G 10YR58 5Y62	0	MDCPR	FR	M	G	FVF		Grad Smooth
3	95+	HZCL/C	2 5Y63	0	MDMO G 10YR58 5Y62	0	WKVCPR	FM	P	G(Low)	FVF		

Profile Gleyed From 60 cm

Slowly Permeable Horizon From

Wetness Class I (borderline II)

Wetness Grade 1

Available Water	Wheat	145 mm
	Potatoes	128 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+41 mm
	Potatoes	+32 mm

Droughtiness Grade 1 (Calculated to 120 cm)

Final ALC Grade 1

Main Limiting Factor(s)

Remarks H3 pores mainly few worm channels
H3 clay below 75 cm

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 3 (ASP 262/270)	3 SW	PGR	Av Rainfall 820 mm ATO 1470 day C FC Days 178 Climatic Grade 1 Exposure Grade 1	Yeovil Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	18/2/98	ST 5295 1419	AC		TS 0 25 cm FSL (S67 Z26 C7%) SS80 110 cm LFS (S74 Z25 C1%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	27	FSL	10YR54	0	0	0					MF		Clear Smooth
2	54	FSL	10YR56	0	0	0	MDMAB	VF	M	G	CF VF		Grad Smooth
3	80	FSL	10YR68	0	0	0	MDMAB (Breaking from MDCSAB)	VF	M	G	FVF		Grad Wavy
4	110+	LFS	10YR68/78	0	0	0	WKFSAB	FR	G	G	O		

Profile Gleyed From

Slowly Permeable Horizon From

Wetness Class I

Wetness Grade 1

Available Water	Wheat	191 mm
	Potatoes	138 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+87 mm
	Potatoes	+42 mm

Droughtiness Grade 1 (Calculated to 120 cm)

Final ALC Grade 1

Main Limiting Factor(s)

Remarks H3 Worm channels and worms observed
H4 Worm channels observed
H4 Some large cemented SB peds mixed in

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 4 (ASP 293/298)	2 S	PGR	Av Rainfall 841 mm ATO 1502 day C FC Days 178 Climatic Grade 1 Exposure Grade 1	Yeovil Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	19/2/98	ST 5368 1362	AC		TS 0 25 cm not sent

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	25	FSL	10YR54	0	0	0					MF		Clear Smooth
2	58	FSL	10YR46/56	0	0	0	MDMSAB	VF	G	G	CF VF		Grad Smooth
3	90	FSL	10YR56	0	0	0	WKMSAB	VF	G	G	CVF		Clear Wavy
4	110	FS	25Y64/66	0	0	0	WKMSAB	FR	G	G?			

Profile Gleyed From

Slowly Permeable Horizon From

Wetness Class I

Wetness Grade 1

Available Water	Wheat	204 mm
	Potatoes	144 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+100 mm
	Potatoes	+48 mm
Droughtiness Grade 1		(Calculated to 120 cm)

Final ALC Grade 1

Main Limiting Factor(s)

Remarks H3 earthworms/channels
H4 loose disaggregated material mixed with cemented M/CSB peds

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil W	Pit 5(ASP 27)	2 N	Cer	Av Rainfall 767 mm ATO 1507 day C FC Days 166 Climatic Grade 1 Exposure Grade 1	Pennard Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	20/2/98	ST 5148 1737	PB		TS 0 25 cm ZL/MZCL (S11 Z71 C18%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	25	ZL/MZCL	10YR53	0	0	0					CF VF		Abrupt Smooth
2	44	MZCL	2 5Y53	0	FFO G 10YR56	0	MDCSAB	FR	M	G	CVF		Clear Smooth
3	56	C	2 5Y63	0	CDFO 10YR56	0	MDCPR	FR	M	G(low)	FVF		Grad Smooth
4	85+	C	2 5Y63	0	MDMO G 10YR56 5Y71	0	WKCPR	FM	P	P(low)	FVF		

Profile Gleyed From 44 cm

Slowly Permeable Horizon From 56 cm

Wetness Class III

Wetness Grade 3a

Available Water Wheat 139 mm

Potatoes 117 mm

Moisture Deficit Wheat 104 mm

Potatoes 96 mm

Moisture Balance Wheat +35 mm

Potatoes +21 mm

Droughtiness Grade 1 (Calculated to 120 cm)

Final ALC Grade 3a

Main Limiting Factor(s) We

Remarks H3 H4 pores few worm channels

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 6(ASP 21)	3 N	Cer	Av Rainfall 770 mm ATO 1500 day C FC Days 170 Climatic Grade 1 Exposure Grade 1	Pennard Sands/Junction Beds
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	20/2/98	ST 5193 1743	PB		TS 0 25 cm HZCL (MZCL) (S7 Z65 C28%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	30	HZCL	2.5Y53/ 5Y52*	1% HR (is)	0	0					FF VF		Abrupt Smooth
2	45	C	2 5Y63	0	MDMO G	O	MDCPR	FM	P	P/G* (low)	FVF		Grad Smooth
3	68+	C	2 5Y63	0	MDMO G	0	WKCPR	FM	P	P	FVF		

Profile Gleyed From 30 cm

Slowly Permeable Horizon From 45 cm

Wetness Class IV

Wetness Grade 3b

Available Water	Wheat	131 mm
	Potatoes	108 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+27 mm
	Potatoes	+12 mm
Droughtiness Grade	2	(Calculated to 120 cm)

Final ALC Grade 3b

Main Limiting Factor(s) We

Remarks H2 pores patchy worm channels therefore not consistently SPL
H1 variable zone of discolouration 5Y52 due to anerobic conditions where trash incorporated

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 7(ASP 133)	2 S	PLO	Av Rainfall 790 mm ATO 1520 day C FC Days 170 Climatic Grade 1 Exposure Grade 1	Pennard Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	25/2/98	ST 5255 1550	PB		TS 0 25 cm MCL (FSZL) (S31 Z50 C19%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	30	MCL	10YR53 43	0	0	0					CF VF		Clear Smooth
2	50	MCL	10YR54	0	0	0	MDCAB	FR	M	G	CVF		Clear Irregular
3	65	MCL	2 5Y63 64	0	CDFO G 7 5YR58 2Y62	0	MDCSAB	FR	M	G(low)	CVF		Grad Smooth
4	100+	C	2 5Y63	0	MDFO G 7 5YR58 5Y62	0	WKCSAB	FM	P	P*	FVF		

Profile Gleyed From 50 cm

Slowly Permeable Horizon From 65 cm

Wetness Class II

Wetness Grade 2

Available Water Wheat 154 mm

Potatoes 132 mm

Moisture Deficit Wheat 104 mm

Potatoes 96 mm

Moisture Balance Wheat +50 mm

Potatoes +36 mm

Droughtiness Grade 1 (Calculated to 120 cm)

Final ALC Grade 2 borderline 1

Main Limiting Factor(s) We

Remarks H4 pores few worm channels persist

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 8(ASP 133/120)	1 E	PLO	Av Rainfall 790 mm ATO 1520 day C FC Days 170 Climatic Grade 1 Exposure Grade 1	Pennard Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 94	25/2/98	ST 5252 1558	PB		TS 0 25 cm MCL (S35 Z46 C19%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	30	MCL	10YR53 43	0	0	0					CF VF		Sharp Wavy
2	40	HCL	2 5Y54,53	0	FDFO 10YR56	0	WKCSAB	FR	M	G	CVF		Clear Wavy
3	60	C	2 5Y53	0	MDFO G 10YR58 5Y72	0	MDCSAB	FM	M	G	FVF		Grad Smooth
4	90+	C	2 5Y53	0	MDMOG 10YR58 5Y72	0	WKCSAB	FM	P	P(low)	FVF		

Profile Gleyed From 40 cm

Slowly Permeable Horizon From 60 cm

Wetness Class III

Wetness Grade 3a

Available Water	Wheat	140 mm
	Potatoes	119 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+36 mm
	Potatoes	+23 mm

Droughtiness Grade 1 (Calculated to 120 cm)

Final ALC Grade 3a

Main Limiting Factor(s) We

Remarks H3 porous to 60 cm
H4 pores few worm channels

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 9(ASP 203)	1 N	FRT	Av Rainfall 790 mm ATO 1520 day C FC Days 170 Climatic Grade 1 Exposure Grade 1	Pennard Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	26/2/98	ST 5308 1500	PB		TS 0 25 cm MCL (FSZL) (S35 Z46 C19%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	28	MCL	10YR43	0	0	0					CF VF		Sharp Wavy
2	38	MZCL	10YR54	0	FDFO G 10YR58 5Y71	0	WKCAB	FM	P	G(low)	FVF		Clear Smooth
3	70	MZCL	2 5Y63	0	MDFO G 10YR58 5Y71	0	WKCSAB	FR	M	G(low)	FVF		Grad Smooth
4	90+	C	2 5Y63	0	MDMO G 10YR58 10Y71	0	WKCPR	FM	P	P(low)	FVF		

Profile Gleyed From 38 cm

Slowly Permeable Horizon From 70 cm

Wetness Class III

Wetness Grade 3a

Available Water	Wheat	138 mm
	Potatoes	117 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+34 mm
	Potatoes	+21 mm
Droughtiness Grade	1	(Calculated to 120 cm)

Final ALC Grade 3a

Main Limiting Factor(s) We

Remarks H2 Compact plough pan
H3 Porous deeper than inferred from auger boring nearby

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 10 (ASP 201/184)	1 N	Cer	Av Rainfall 810 mm ATO 1510 day C	Pennard Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	26/2/98	ST 5276 1507	PB	FC Days 174 Climatic Grade 1 Exposure Grade 1	TS 0 25 cm HCL (S33 Z37 C30%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	22	HCL	10YR43	0	0	0					CF VF		Abrupt Wavy
2	40	C	2.5Y61 62	0	CDFO 10YR56	0	WACSAB	FM	P	P	FVF		Clear Wavy
3	55+	C	2 5Y62	0	MDFO G 10YR58 10Y61	0	M	FR	P	P(low)	FVF		

Profile Gleyed From 22 cm

Slowly Permeable Horizon From 22 cm

Wetness Class IV

Wetness Grade 3b

Available Water	Wheat	125 mm
	Potatoes	102 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+21 mm
	Potatoes	+6 mm

Droughtiness Grade 2 (Calculated to 120 cm)

Final ALC Grade 3b

Main Limiting Factor(s) We

Remarks

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 11 (Nr 228)	7 N	PLO	Av Rainfall 820 mm ATO 1490 day C FC Days 174 Climatic Grade 1 Exposure Grade 1	Yeovil Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	27/2/98	ST 5225 1465	PB		TS 0 25 cm MCL(FSZL) (S41 Z40 C19%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	25	MCL	10YR43	0	0	0					CF VF		Sharp Smooth
2	50	MZCL	10YR53	0	0	0	WKCSAB	FR	M	G	CVF		Clear Smooth
3	80	HCL	10Y54	0	0	0	WKCPR Br to WKCSAB	FR	M	G	CVF		Grad Smooth
4	104+	HCL	10YR64	0	0	0	WKCPR Br to WKCSAB	FR	M	G	FVF		

Profile Gleyed From

Slowly Permeable Horizon From

Wetness Class I

Wetness Grade 1

Available Water	Wheat	158 mm
	Potatoes	120 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+54 mm
	Potatoes	+24 mm

Droughtiness Grade 1 (Calculated to 120 cm)

Final ALC Grade 1

Main Limiting Factor(s)

Remarks

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 12 (ASP 164)	1 N	PLO	Av Rainfall 790 mm ATO 1520 day C FC Days 170 Climatic Grade 1 Exposure Grade 1	PennarD Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	27/2/98	ST 5236 1524	PB		TS 0 25 cm FSZL (S38 Z47 C15%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	27	FSZL	10YR43	0	0	0					CF VF		Sharp Smooth
2	50	C	10YR63 2.5Y53	0	CDFO G 7 5YR58 5Y62	0	MDCPR	FR	M	G	FVF		Clear Smooth
3	80+	C	2 5Y63	0	MDMO G 10YR58 5Y71	0	MDCPR	FM	P	P(Low)	FVF		

Profile Gleyed From 27 cm

Slowly Permeable Horizon From 50 cm

Wetness Class III

Wetness Grade 2

Available Water	Wheat	134 mm
	Potatoes	111 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+30mm
	Potatoes	+15 mm
Droughtiness Grade	1	(Calculated to 120 cm)

Final ALC Grade 2

Main Limiting Factor(s) We

Remarks H3 pores few worm channels remain

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 13(ASP93)	2 SE	PLO	Av Rainfall 790 mm ATO 1520 day C FC Days 170 Climatic Grade 1 Exposure Grade 1	Pennard Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	3/3/98	ST 5223 1591	PB		TS 0 25 cm MCL (S26 Z51 C23%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	30	MCL	10YR43	0	0	0					CF VF		Clear Wavy
2	55	HZCL	2.5Y64	0	0	0	MDCSAB	FR	M	G	CVF		Grad Smooth
3	78	C	2 5Y64	0	0	0	MDCPR Br to MDC MSAB	FR	M	G mainly exped	FVF		Clear Smooth
4	90+	C	2 5Y63	0	CDFO G 10YR58 5Y72	0	WKCSAB	FM	P	G (worms)	FVF		

Profile Gleyed From 78 cm

Slowly Permeable Horizon From

Wetness Class I

Wetness Grade 1

Available Water	Wheat	141 mm
	Potatoes	121 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+ 37 mm
	Potatoes	25 mm
Droughtiness Grade 1		(Calculated to 120 cm)

Final ALC Grade 1

Main Limiting Factor(s)

Remarks

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 14 (ASP 107)	1 S	PLO	Av Rainfall 788 mm ATO 1524 day C FC Days 171 Climatic Grade 1 Exposure Grade 1	Pennard Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	3/3/98	ST 5237 1579	PB		TS 0 25 cm MCL (S29 Z49 C22%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	25	MCL	10YR43	0	FRRCh	0					CF VF		Abrupt Smooth
2	60	HZCL	2.5Y64,53	0	0	0	WKCPR Br to WKCSAB	FR	M	G	CVF		Clear Smooth
3	70	C	2 5Y63	0	CDFO 10YR56	0	MDCSAB	FM	P	G mainly ex ped	FF VF		Grad Smooth
4	95+	C	2 5Y63	0	MDFO G 10YR56 5Y72	0	MDCPR	FM	P	P	FF VF		

Profile Gleyed From 60 cm

Slowly Permeable Horizon From 70 cm

Wetness Class II

Wetness Grade 2

Available Water	Wheat	142 mm
	Potatoes	120 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+ 38 mm
	Potatoes	+24 mm
Droughtiness Grade 1		(Calculated to 120 cm)

Final ALC Grade 2

Main Limiting Factor(s) We

Remarks

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 15 (ASP 112)	1 SE	Cer	Av Rainfall 800 mm ATO 1460 day C	Pennard Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY	FC Days 170 Climatic Grade 1 Exposure Grade 1	PSD SAMPLES TAKEN
73 97	4/3/98	ST 5140 1565	PB		TS 0 25 cm MCL (S29 Z51 C20%)

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	23	MCL	10YR42	0	CRRCL	0					CF VF		Sharp Smooth
2	42	C	2.5Y63	0	CDFO G 10YR56 5Y62	0	WACSAB	FR	M	G(low)	FVF		Clear Smooth
3	80+	C	2 5Y63	0	CDMO G 10YR56 5Y62	0	MDCPR	FM	P	P	FVF		

Profile Gleyed From 23 cm

Slowly Permeable Horizon From 42 cm

Wetness Class IV

Wetness Grade 3B

Available Water	Wheat	131 mm
	Potatoes	108 mm
Moisture Deficit	Wheat	104 mm
	Potatoes	96 mm
Moisture Balance	Wheat	+ 27 mm
	Potatoes	+12 mm
Droughtiness Grade 2		(Calculated to 120 cm)

Final ALC Grade 3b

Main Limiting Factor(s) We

Remarks Water entering pit above H3

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Yeovil West	Pit 16 (ASP 226)	2 N	Cereals	Av Rainfall 820 mm ATO 1490 day C FC Days 174 Climatic Grade 1 Exposure Grade 1	Yeovil Sands
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		PSD SAMPLES TAKEN
73 97	4/3/98	ST 5194 1468	PRW		None taken

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Mottling Abundance Contrast Size and Colour	Mangan Concs	Structure Ped Development Size and Shape	Consistence	Structural Condition	Pores (Fissures)	Roots Abundance and Size	Calcium Carbonate Content	Horizon Boundary Distinctness and form
1	27	FSL	10YR54	None	None	None				Many	MF+VF		Clear Smooth
2	52	FSL	10Yr53	None	CDO 10YR56	None	MDMSAB	Friable	G	Many	CF+VF		Gradual Smooth
3	100+	SCL	10YR53	None	CDO 10YR56	None	MDMSAB	Friable	G	Many	FF+VF		

Profile Gleyed From 27 cm

Slowly Permeable Horizon From

Wetness Class I

Wetness Grade 1

Available Water Wheat 198 mm

Potatoes 138 mm

Moisture Deficit Wheat 106 mm

Potatoes 98 mm

Moisture Balance Wheat 92 mm

Potatoes 40 mm

Droughtiness Grade 1 (Calculated to 120 cm)

Final ALC Grade 1

Main Limiting Factor(s)

Remarks