

SITE NAME		PROFILE NO.		SLOPE AND ASPECT		LAND USE		Av Rainfall: 779 mm			PARENT MATERIAL		
Broadclyst Station		Pit 1		Level		Permanent Grass		ATO: 1582°			Alluvium		
JOB NO.		DATE		GRID REFERENCE		DESCRIBED BY		FC Days: 167			Soil Sample Ref:		
107/93		10/1/94		ASP 162 SX 9912 9528		Nicole Wallace		Climatic Grade: 1			None		
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	25 cm	7.5YR53/43	HCL/C	N/A	N/A	N/A	-	-	-	Many	-	-	Indistinct boundary transition graditional in nature
2	100 cm	5YR53/43	C	1-2% Hard rock	7.5YR68 common MN also present - Common	WDCSAB	<5%	Poor	Firm	Common Few with depth	-	Common	

Profile Gleyed From: 25 cm

Depth to Slowly Permeable Horizon: 25 cm

Wetness Class: IV

Wetness Grade: 3B

Available Water Wheat: 111 mm

Potatoes: 102 mm

Moisture Deficit Wheat: 112 mm

Potatoes: 107 mm

Moisture Balance Wheat: -2 mm

Potatoes: -5 mm

Droughtiness Grade: 3A (to 100 cm)

Final ALC Grade: 3B

Main Limiting Factor(s): We

Remarks:

Water table evident at 65-70 cm.  
Clay structure - weakly developed/adherent. Poor structural condition.

SITE NAME		PROFILE NO.		SLOPE AND ASPECT		LAND USE		Av Rainfall: 779 mm			PARENT MATERIAL		
Broadclyst Station		Pit 2		4° S		Winter Wheat		ATO: 1582°			Sandstone		
JOB NO.		DATE		GRID REFERENCE		DESCRIBED BY		FC Days: 168			Soil Sample Ref:		
107/93		11 January 1994		SX 90 09557 south of 102		N A Done/P Barnett		Climatic Grade: 1			PB/49 + 50		
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	45 cm	75YR44	MSL	11% Total HR sieved (2% >2cm 9% <2cm)		-	-	-	-	Common fine + medium	none	none	Gradual/wavy
2	80 cm	2.5YR46	LMS	27% SST soft sandstone 2.5YR32	-	WDMSAB	many	M	V friable	Few fine	none	none	Gradual/wavy
3	120 cm	2.5YR36	LMS	10% SST	-	WDFSAB	many	M	V friable	Few fine	none	none?	

Profile Gleyed From: -  
Depth to Slowly Permeable Horizon: -  
Wetness Class: 1  
Wetness Grade: 1

Available Water Wheat: 101 mm  
Potatoes: 81 mm  
Moisture Deficit Wheat: 113 mm  
Potatoes: 107 mm  
Moisture Balance Wheat: -12 mm  
Potatoes: -24 mm  
Droughtiness Grade: (3a) (to 120 cm)

Final ALC Grade: 3a  
Main Limiting Factor(s): Drought

Remarks:  
Stone in H2+3 are black softish coarse grained sandstone possibly manganese deposits.

SITE NAME		PROFILE NO.		SLOPE AND ASPECT		LAND USE		Av Rainfall: 781 mm			PARENT MATERIAL		
Broadclyst Station		Pit 3		2° North		Ley		ATO: 1569°			Sandstone		
JOB NO.		DATE		GRID REFERENCE		DESCRIBED BY		FC Days: 166			Topsoil Sample Ref:		
107/93		11/1/94		ASP 248 SX 9988 9487		P Barnett/N A Done		Climatic Grade: 1			PB/51 + 52 PRW/97		
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	30 cm	7.4YR43	MSL	1% >2cm 9% <2cm 10% Total HR	-	-	-	-	-	Many very fine common fine	none	none	Grad/smooth
2	50 cm	7.5YR46	MSL	25% <2cm 2% >2cm 27% HR	-	WDMAB	Many	G	V. Friable	Common fine + very fine	none	none	Diffuse/
3	100 cm	5YR46	MSL	35% <2cm 3% > 2cm 38% HR	-	Too stony to assess	Well fissured	M	Loose	Few to 60 cm	none	none	

Profile Gleyed From: -

Depth to Slowly Permeable Horizon: -

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 121 mm

Potatoes: 91 mm

Moisture Deficit Wheat: 113 mm

Potatoes: 107 mm

Moisture Balance Wheat: +8 mm

Potatoes: -16 mm

Droughtiness Grade: (3a) (to 120 cm)

Final ALC Grade: 3a

Main Limiting Factor(s): Drought

Remarks:

SITE NAME Broadclyst Station		PROFILE NO. Pit 4		SLOPE AND ASPECT 0°		LAND USE Ley		Av Rainfall: 1569 mm ATO: 781° FC Days: 167 Climatic Grade: 1			PARENT MATERIAL Valley Gravels		
JOB NO. 107/93		DATE 11/1/94		GRID REFERENCE ASP 225 SX 995 950		DESCRIBED BY N Done					TOPSOIL SAMPLE REF NAD/100 + 101		
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	35	75YR43	MSL	3% HR >2cm	-	-	-	-	-	Many fine + very fine	None	None	Clear/ smooth
2	60	75YR44	MSL	3% HR Total	-	WDMSAB	>0.5%	Good	Friable	Common fine + very fine	None	None	Clear/ smooth
3	90+	5YR56	MSL	8% HR	-	Too wet to assess	-	Assume moderate	Friable	Few fine	None	Common	

Profile Gleyed From: -  
Depth to Slowly Permeable Horizon: -  
Wetness Class: I  
Wetness Grade: 1

Available Water Wheat: 155 mm  
Potatoes: 112 mm  
Moisture Deficit Wheat: 113 mm  
Potatoes: 107 mm  
Moisture Balance Wheat: 42 mm  
Potatoes: +5 mm  
Droughtiness Grade: 2 (to 120 cm)

Final ALC Grade: 2  
Main Limiting Factor(s): Drought

Remarks:

SITE NAME Broadclyst Station		PROFILE NO. Pit 5	SLOPE AND ASPECT 0°		LAND USE Winter cereals		Av Rainfall: 781 mm ATO: 1569°		PARENT MATERIAL Valley Gravels			
JOB NO. 107/93		DATE 12/1/94	GRID REFERENCE Near ASP 333 SX 9930 9442		DESCRIBED BY PRW/HLJ		FC Days: 166 Climatic Grade: 1		Topsoil Sample Ref: PRW/93 + 98			

Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	32 cm	5YR4/4	MSL	3% >2cm	None	-	Many	Mod	Friable	Many fine & v. fine	none	none	Abrupt smooth
2	66 cm	2.5YR3/6	MSL	12% >2cm 16% <2cm 28% Total	None	Not easily determined due to stone content - probably moderately developed medium subangular blocky	Many	Good	V. Friable	Few fine	none	none	Abrupt smooth
3	95 cm	2.5YR4/6	MSL (but coarser)	18% >2cm 51% <2cm 69% Total	None		Many	Moderate	V. Friable	Few fine	none	none	Abrupt smooth
4	110 cm (assumed to 120)	2.5YR4/8	LMS	0%	None	Weakly developed medium angular blocky	Many	Moderate	V. Friable	None seen	None	None	-

Profile Gleyed From: Not gleyed

Depth to Slowly Permeable Horizon: No SPL

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 114 mm

Potatoes: 98 mm

Moisture Deficit Wheat: 113 mm

Potatoes: 107 mm

Moisture Balance Wheat: 1 mm

Potatoes: 9 mm

Droughtiness Grade: 3a (to 120 cm)

Final ALC Grade: 3a

Main Limiting Factor(s): Droughtiness

Remarks:

Horizon 3 almost gravel layer (70% st) which would swing grade more into 3a.

SITE NAME Broadclyst Station		PROFILE NO. Pit 6		SLOPE AND ASPECT 0°		LAND USE Cereals			Av Rainfall: 780 mm ATO: 1586° FC Days: 166 Climatic Grade: 1			PARENT MATERIAL Valley gravels/sandstone	
JOB NO. 107/93		DATE 12/1/94		GRID REFERENCE ASP 277 SX 9900 9467		DESCRIBED BY HLJ/PRW						Topsoil Sample Ref: PRW/96	
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	26 cm	7.5YR46	MSL	HR 4% >2 mm sieve	none	-		m	-	Few fine and medium	none	none	Abrupt/ smooth
2	58 cm	2.5YR46	SCL	HR 3% >2 mm visual	none	-		m	-	Few very fine	none	none	Abrupt/ smooth
3	120 cm	2.5YR48	MSL	- Total 55% HR sieve + displacement	none	-		m	-	none	none	none	

Profile Gleyed From: none

Depth to Slowly Permeable Horizon: none

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 119 mm

Potatoes: 99 mm

Moisture Deficit Wheat: 113 mm

Potatoes: 107 mm

Moisture Balance Wheat: +6 mm

Potatoes: -8 mm

Droughtiness Grade: 2 (to 120 cm)

Final ALC Grade: 2

Main Limiting Factor(s): Droughtiness

Remarks:

Pit dug to 85 cm.

SITE NAME		PROFILE NO.		SLOPE AND ASPECT		LAND USE		Av Rainfall: 780 mm			PARENT MATERIAL		
Broadclyst Station		Pit 7		0°		Cereals		ATO: 1586°			Valley Gravels		
JOB NO.		DATE		GRID REFERENCE		DESCRIBED BY		FC Days: 166			Soil Sample Ref:		
107/93		12/1/94		ASP 360 SX 992 942		PRW/HLJ		Climatic Grade: 1			PRW/95 + 99		
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	28 cm	5YR34	MSL	3% >2cm HR visual	none	-	-	-	-	V. few fine	none	none	Clear/ smooth
2	58 cm	2.5YR36	MSL	3% >2cm HR visual	none	MCSAB	>0.5%	M	Firm	Few fine	none	none	Clear/ smooth
3	110 cm	2.5YR56	GR (MSL)	25% >2cm 45% >2 mm 70% HR sieve + displacement	none	none (determined by stones)	-	M	-	none	none	none	

Profile Gleyed From: None

Depth to Slowly Permeable Horizon: None

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 100 mm

Potatoes: 94 mm

Moisture Deficit Wheat: 113 mm

Potatoes: 107 mm

Moisture Balance Wheat: -13 mm

Potatoes: -13 mm

Droughtiness Grade: 3a (to 120 cm)

Final ALC Grade: 3a

Main Limiting Factor(s): Droughtiness

Remarks:

Gravel from 58 cm

SITE NAME		PROFILE NO.		SLOPE AND ASPECT		LAND USE		Av Rainfall: 780 mm			PARENT MATERIAL		
Broadclyst Station		Pit 8		Flat		PG		ATO: 1586°			Alluvium		
JOB NO.		DATE		GRID REFERENCE		DESCRIBED BY		FC Days: 166			Soil Sample Ref:		
107/93		12/1/94		ASP 385 SX 988 939		PRW		Climatic Grade: 1			None		
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	28 cm	10YR4/4	MZCL	-	-	-	Many	Mod	Friable	Many fine	No	No	Abrupt/ smooth
2	38 cm	10YR5/4	C	-	Few medium distinct ochreous <2%	Moderately developed coarse prismatic	Common	Mod	Friable	Common fine	No	No	Abrupt/ smooth
3	85 cm	5YR6/4	C	-	Common ochreous	Moderately developed coarse prismatic	Few	Mod	Friable	Few fine	No	Common	-

Profile Gleyed From: 38 cm

Depth to Slowly Permeable Horizon: 38 cm

Wetness Class: 4

Wetness Grade: 3b

Available Water Wheat: 116 mm

Potatoes: 120 mm

Moisture Deficit Wheat: 113 mm

Potatoes: 107 mm

Moisture Balance Wheat: 3 mm

Potatoes: 13 mm

Droughtiness Grade: 3a (to 85 cm)

Final ALC Grade: 3b

Main Limiting Factor(s): Wetness

Remarks:

SITE NAME		PROFILE NO.		SLOPE AND ASPECT		LAND USE		Av Rainfall: 780			PARENT MATERIAL		
Broadclyst Station		Pit 9		3° East		Cereals		ATO: 1586°			Sandstone		
JOB NO.		DATE		GRID REFERENCE		DESCRIBED BY		FC Days: 166			SOIL SAMPLE REF		
107/93		13 January 1994		ASP 373 SX 9845 9400		PRW		Climatic Grade: 1			None		
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	30	05YR44	MSL	0	None	-		-	Friable		None	None	
2	70	05YR46	MSL	0	None	MCSAB		Moderate	Friable		None	None	
3	96	2.5YR46	MSL	15% HR	None	MMSAB		Good	Friable		None	None	
4	120	10R46	MSL	11% HR	7.5YR56	MCSAB		Moderate	Friable		Yes	None	

Profile Gleyed From: 96

Depth to Slowly Permeable Horizon: -

Wetness Class: I

Wetness Grade: 1

Available Water Wheat: 156 mm

Potatoes: 111 mm

Moisture Deficit Wheat: 113 mm

Potatoes: 107 mm

Moisture Balance Wheat: +43 mm

Potatoes: +4 mm

Droughtiness Grade: 2 (to 120 cm)

Final ALC Grade: 2

Main Limiting Factor(s): Droughtiness

Remarks:

Form written up from datalogger printout. Original lost. No information on datalogger printout regarding horizon boundary, roots or pores.

SITE NAME		PROFILE NO.		SLOPE AND ASPECT		LAND USE		Av Rainfall: 780 mm			PARENT MATERIAL		
Broadclyst Station		Pit 10		3° North		Perm Grass		ATO: 1586°			Sandstone		
JOB NO.		DATE		GRID REFERENCE		DESCRIBED BY		FC Days: 167			Soil Sample Ref:		
107/93		13/1/94		ASP 350 SX 982 942		PRW		Climatic Grade: 1			None		
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	22 cm	5YR4/4	MSL	<1%	None	-	Many	Moderate	Friable	Many fine	No	None	Abrupt/ smooth
2	45 cm	2.5YR4/6	MSL (light)	None	None	MDMSAB	Many	Moderate	Friable	Few fine	No	None	Clear/ smooth
3	120 cm	2.5YR4/6	LMS	None	None	MDC Platy	Many	Moderate	Firm	Few fine at top	No	None	-

Profile Gleyed From: Not gleyed

Depth to Slowly Permeable Horizon: No SPL

Wetness Class: 1

Wetness Grade: 1

Available Water Wheat: 109 mm  
 Potatoes: 90 mm  
 Moisture Deficit Wheat: 113 mm  
 Potatoes: 107 mm  
 Moisture Balance Wheat: -4 mm  
 Potatoes: -17 mm  
 Droughtiness Grade: 3a (to 120 cm)

Final ALC Grade: 3a

Main Limiting Factor(s): Drought

Remarks:

SITE NAME Broadclyst Station		PROFILE NO. Pit 11		SLOPE AND ASPECT 3° West		LAND USE Winter Cereals		Av Rainfall: 801 mm ATO: 1563° FC Days: 169 Climatic Grade: 1			PARENT MATERIAL Sandstone Soil Sample Ref: PRW/103 + 104		
JOB NO. 107/93		DATE 13/1/94		GRID REFERENCE ASP 11 SX 990 961		DESCRIBED BY PRW							
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	33 cm	5YR4/4	LMS	-	-	-	Many	Moderate	Friable	Common fine	-	-	Abrupt/ smooth
2	62 cm	2.5YR4/6	LMS	-	-	WDMSAB	Many	Good	V. Friable	Few fine	-	-	Clear/ smooth
3	95 cm	2.5YR 4/6	LMS	-	-	WDMSAB	Many	Good	V. Friable	Few fine	-	-	Abrupt/ smooth
4	120 cm	5YR5/8	MS	-	-	Loose SG	Common	Moderate	Loose	Not seen	-	-	-

Profile Gleyed From: Not gleyed

Depth to Slowly Permeable Horizon: No SPL

Wetness Class: 1

Wetness Grade: 1

Available Water Wheat: 102 mm

Potatoes: 78 mm

Moisture Deficit Wheat: 113 mm

Potatoes: 107 mm

Moisture Balance Wheat: -11 mm

Potatoes: -29 mm

Droughtiness Grade: 3a (to 120 cm)

Final ALC Grade: 3a

Main Limiting Factor(s): Droughtiness

Remarks:

SITE NAME Broadclyst Station		PROFILE NO. Pit 12		SLOPE AND ASPECT 0°		LAND USE PGR		Av Rainfall: 779 mm ATO: 1582 FC Days: 166 Climatic Grade: 1			PARENT MATERIAL Alluvium		
JOB NO. 107/93		DATE 14/1/94		GRID REFERENCE ASP 179/178 SX 9880 9522		DESCRIBED BY H Lloyd-Jones and P R Woode					SOIL SAMPLE REF PRW/105		
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	15	7.5YR54	MZCL	<1% HR visual	None	-	>0.5%	-	-	Many fine + very fine	None	None	Clear smooth
2	50	7.5YR62	HCL	<1% HR visual	7.5YR68 common	WDMP	<0.5%	M	Friable	Few very fine	None	Many	Clear wavy
3	100	05YR64	C	0% visual	7.5YR68 many	MDCP	<0.5%	M	Friable	Few very fine	None	Few	

Profile Gleyed From: 15 cm  
Depth to Slowly Permeable Horizon: 15 (35) cm  
Wetness Class: IV  
Wetness Grade: 3B

Available Water Wheat: 140 mm  
Potatoes: 716 mm  
Moisture Deficit Wheat: 113 mm  
Potatoes: 107 mm  
Moisture Balance Wheat: 27 mm  
Potatoes: 9 mm  
Droughtiness Grade: 2 (to 120 cm)

Final ALC Grade: 3B  
Main Limiting Factor(s): Wetness

Remarks:

SITE NAME		PROFILE NO.		SLOPE AND ASPECT		LAND USE		Av Rainfall: 779 mm			PARENT MATERIAL		
Broadclyst Station		13P		4° South		Ley		ATO: 1582°			Sandstone		
JOB NO.		DATE		GRID REFERENCE		DESCRIBED BY		FC Days: 167			SOIL SAMPLE REF		
107/93		14/1/94		ASP 119 SX 987 955		PRW/NW		Climatic Grade: 1			PRW/100		
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	30	05YR43	MSL	-	-	-	Many	Moderate	Friable	Common fine	-	-	Abrupt smooth
2	58	5YR33	MSL	-	-	Moderately coarse angular blocky	Common >5%	Moderate	Very friable	Few fine	-	-	Abrupt, irregular
3	100	7.5YR30	MS	Soft weathering sandstone. Visual estimate 10%	-	Single-grain	Common	Moderate	Loose	Few fine	-	-	Sharp, wavy
4	120 (assumed)	7.5YR30	Weathered sandstone	100%	-	-	>5%	Assume moderate	-	-	-	-	-

Profile Gleyed From: None

Depth to Slowly Permeable Horizon: None

Wetness Class: I

Wetness Grade: 1

VP336-3

Available Water Wheat: 109 mm

Potatoes: 99 mm

Moisture Deficit Wheat: 113 mm

Potatoes: 107 mm

Moisture Balance Wheat: -4 mm

Potatoes: -8 mm

Droughtiness Grade: 3a

Final ALC Grade: 3A

Main Limiting Factor(s): Drought

Remarks:

Patchy weathering sandstone within lower subsoil.

SITE NAME		PROFILE NO.		SLOPE AND ASPECT		LAND USE		Av Rainfall: 779 mm			PARENT MATERIAL		
Broadclyst Station		Pit 14		0		PGR		ATO: 1582°			Alluvium		
JOB NO.		DATE		GRID REFERENCE		DESCRIBED BY		FC Days: 166			SOIL SAMPLE REFS		
107/93		14/1/94		ASP 252 SX 984 948		H Lloyd-Jones and P R Woode		Climatic Grade: 1			PRW/101		
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	26	05YR44	MZCL	<1% HR visual	None	-	>0.5%	-	-	Common fine	None	None	Abrupt smooth
2	50	7.5YR56 05YR64 (ped face)	C	0% visual	None	MDMP	<0.5%	P	Firm	Few fine	None	Common	Abrupt smooth
3	120	7.5YR62	C	0% visual	Ochreous common	MDVCP	<0.5%	P	Firm	None	None	Common	

Profile Gleyed From: 26 cm

Depth to Slowly Permeable Horizon: 26 cm

Wetness Class: IV

Wetness Grade: 3b

Available Water Wheat: 119 mm

Potatoes: 119 mm

Moisture Deficit Wheat: 113 mm

Potatoes: 107 mm

Moisture Balance Wheat: 6 mm

Potatoes: 12 mm

Droughtiness Grade: 2 (to 90 cm)

Final ALC Grade: 3b

Main Limiting Factor(s): Wetness

Remarks:

Pit dug to 90 cm.

SITE NAME Broadclyst		PROFILE NO. Pit 15		SLOPE AND ASPECT 0°		LAND USE Cereals		Av Rainfall: 801 mm ATO: 1563° FC Days: 169 Climatic Grade: 1		PARENT MATERIAL Lower Sandstone			
JOB NO. 107/93		DATE 14/1/94		GRID REFERENCE ASP 19 SX 9850 9598		DESCRIBED BY P Barnett and P R Woode				SOIL SAMPLE REF PB/53 + 54 + 55			
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	28	5YR43	LMS	1% >2 cm (visual estimate)	-	-	-	-	-	CVF	-	-	Clear smooth
2	75	5YR58	LMS	-	-	WMAB	Many	M	V friable	-	-	-	Grad smooth
3	120	2.5YR46	MS	-	-	WCSAB	Many	M	V friable	-	-	-	

Profile Gleyed From: -  
Depth to Slowly Permeable Horizon: -  
Wetness Class: I  
Wetness Grade: 1

Available Water Wheat: 82 mm  
Potatoes: 66 mm  
Moisture Deficit Wheat: 113 mm  
Potatoes: 107 mm  
Moisture Balance Wheat: -31 mm  
Potatoes: -41 mm  
Droughtiness Grade: 3b

Final ALC Grade: 3b  
Main Limiting Factor(s): Drought

Remarks:

SITE NAME		PROFILE NO.		SLOPE AND ASPECT		LAND USE		Av Rainfall: 801 mm			PARENT MATERIAL		
Broadclyst Station		Pit 16		1° NW		PGR		ATO: 1563°			Sandstone		
JOB NO.		DATE		GRID REFERENCE		DESCRIBED BY		FC Days: 169			SOIL SAMPLE REF:		
107/93		14/1/94		ASP 94 SX 982 956		PB HLJ/PRW		Climatic Grade: 1			PRW/102		
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast, Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots: Abundance, Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and form
1	25	05YR46	MSL	<1% HR visual	None	-	>0.5%	-	-	Common fine and very fine	None	None	Abrupt smooth
2	52	2.5YR46	MCL	<1% HR visual	None	WDMP	>0.5%	M	Friable	Few fine	None	None	Abrupt smooth
3	84	2.5YR54	C	0% HR visual	Ochreous + pale few	MACP	<0.5%	P	Firm	Few fine (ex-ped)	None	>2%	Abrupt smooth
4	120 (assumed)	2.5YR46	LMS	0% HR visual	None	M	>0.5%	M	V friable	None	None	None	

Profile Gleyed From: 52 cm

Depth to Slowly Permeable Horizon: 52 cm

Wetness Class: III

Wetness Grade: 2

Available Water Wheat: 123 mm

Potatoes: 108 mm

Moisture Deficit Wheat: 112 mm

Potatoes: 107 mm

Moisture Balance Wheat: 10 mm

Potatoes: 1 mm

Droughtiness Grade: 2 (to 120 cm)

Final ALC Grade: 2

Main Limiting Factor(s): Wetness

Remarks: