SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Churston Ferrers	Pit 1	0°	Cereal	Av Rainfall 1018 mm ATO 1548°C	Middle Devonian Limestone
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY	FC Days 209 Climatic Grade 1	TOPSOIL SAMPLE
9/94	2/3/94	(ASP 66) SX 907 563	GMS/HLJ		RPT/GMS/367

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	24	05YR43	MCL	5% HR Total (visual)	None		Good			Common fine + very fine + medium	Very slightly calcareous (0 5 1%)	None	Abrupt wavy
2	47	05YR44	MCL	50% HR >2cm 9% HR <2cm 59 HR Total (sieve + displacement)	None	Determined by stones	Good between stones	M (assumed)		Common very fine	Very calcareous (>10%)	None	Clear wavy
3	70	05YR44	MCL	>70% HR Total (assumed)	None	Determined by stones	Good between stones	M (assumed)		Few very fine	Very calcareous (>10%)	None	

Profile Gleyed From N/A

Depth to Slowly Permeable Horizon N/A

Wetness Class I

Wetness Grade 2

Available Water Wheat 60 mm

Potatoes 60 mm

Moisture Deficit Wheat 97 mm

Potatoes 82 mm

Moisture Balance Wheat 32 mm

Potatoes 22 mm

Droughtiness Grade 3B (Calculated to 90 cm)

Final ALC Grade 3A

Main Limiting Factor(s) Droughtiness

Remarks

Pit dug to 65 Fissures to 70+ with reasonable amounts of soil Roots in H3 in the fissures and evidence within the rock bed

NL336d

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Churston Ferrers	Pit 2	0°	CER	Av Rainfall 1018 mm ATO 1548°C FC Days 209 Climatic Grade 1	Middle Devonian Limestone
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		TOPSOIL SAMPLE
9/94	2/3/94	SX 912 855 (ASP 32)	PB/GS		RPT/PB/107

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	7 5YR33	MCL/ MZCL	c2% HR vis	None					CF M	None	None	Ab smooth
2	80	7 5YR43	MCL	c2% <2cm vis	None	WCSAB	G	M	Fr	CF VF	SI	None	Gr smooth
3	110	7 5YR34	HCL	c5% <2cm vis	None	MCSAB	<½% but good fissures	M	FM	FF	SI	None	Cl smooth
4	130+	7 5YR33	C	None (vis)	FFFOM		<½% but mod fissures	M	Fm	None	None	F	

Profile Gleyed From

Depth to Slowly Permeable Horizon

Wetness Class 1

Wetness Grade 2

Available Water	Wheat	149 mm
	Potatoes	114 mm
Moisture Deficit	Wheat	92 mm
	Potatoes	82 mm
Moisture Balance	Wheat	+57 mm
	Potatoes	+32 mm
Droughtiness Grade		1 (Calculated to 120 cm)

Final ALC Grade 2

Main Limiting Factor(s) Workability

Remarks

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Churston Ferrers	Pit 3	0°	Perm grass	Av Rainfall 1018 mm ATO 1548°C FC Days 209 Climatic Grade 1	Middle Devonian Limestone
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		TOPSOIL SAMPLE
9/94	2/3/94	SX 904 558 (ASP 130)	PB/GMS		RPT/PB/108

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	5YR46	HZCL	1% >2cm HR 2% >2mm HR 3% HR Total Visual	none					Many fine + v fine	none	none	Clear smooth
2	40	2 5YR46	MCL	3% HR visual	none	MCSAB	Good	M	Friable	Many fine + v fine	none	none	Gradual smooth
3	65	2 5YR36	HCL	3% ZR (S+D)	none	SCSAB	Good	M	Firm	Common fine + v fine	none	none	Gradual smooth
4	100	2 5YR36	C	0% (vis)	none	MCSAB	Low porosity good fissure	M	Firm	Few	none	none	Gradual smooth
5	100+	10YR46 (10YR44 Ped face)	C	15% ZR vis	0	W			Firm	none	none	none	

Profile Gleyed From

Depth to Slowly Permeable Horizon

Wetness Class 1

Wetness Grade 2/3A

Available Water Wheat 141 mm

Potatoes 115 mm

Moisture Deficit Wheat 97 mm

Potatoes 82 mm

Moisture Balance Wheat +49mm

Potatoes +33mm

Droughtiness Grade 1 (Calculated to 120 cm)

Final ALC Grade 2/3A

Main Limiting Factor(s) Workability

Remarks

Topsoil clay content 28% Borderline 3A/2

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Churston Ferrers	Pit 4	3° W	CER	Av Rainfall 1018 mm ATO 1548° C FC Days 209 Climatic Grade 1	Middle Devonian Limestone
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		TOPSOIL SAMPLE
9/94	3/3/94	SX 897 564 (ASP 38)	HLJ/PB		RPT/HLJ/21

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	18	05YR44	MSZL	20 >2cm 2% <2cm vis 22% HR Total	none					CF VF M	V Slightly	None	Ab wavy
2	30	05YR46	MCL	60% HR vis Total	none	Det by stones	G	M		CF VF	Slightly	None	Ab wavy
3	30+	05YR46	MCL in fissures	95% HR vis Total								None	

Profile Gleyed From

Depth to Slowly Permeable Horizon

Wetness Class 1

Wetness Grade 1

Available Water	Wheat	38 mm
	Potatoes	58 mm
Moisture Deficit	Wheat	92 mm
	Potatoes	82 mm
Moisture Balance	Wheat	54 mm
	Potatoes	-44 mm
Droughtiness Grade		4 (Calculated to 50 cm)

Final ALC Grade 4 (3B mapping unit)

Main Limiting Factor(s) Droughtiness

Remarks

Topsoil stoniness limitation of 3B Droughtiness borderline 3B/4

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SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Churston Ferrers	Pit 5	3° N	CER	Av Rainfall 1218 mm ATO 1548° C FC Days 209 Climatic Grade 1	Middle Devonian Slates and Shales
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		TOPSOIL SAMPLE
9/94	3/3/94	SX 911 557 (ASP 147)	PB/HLJ		RPT/PB/109

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	17	7 5YR53	HCL	18% ZR <2cm S+D	None		G			CF M	SI	None	Ab smooth
2	32	7 5YR53	HCL	20% ZR <2cm S+D	None	MMSAB	Good fissures	G	Friable	CF M	SI	None	Ab wavy
3	60+		ZR	99% ZR vis	None			M		FVF	None	None	

Profile Gleyed From

Depth to Slowly Permeable Horizon

Wetness Class 1

Wetness Grade 2/3a

Available Water Wheat 75mm

Potatoes 78mm

Moisture Deficit Wheat 97mm

Potatoes 82mm

Moisture Balance Wheat 17mm

Potatoes -4mm

Droughtiness Grade 3a (Calculation to 60 cm)

Final ALC Grade 3a

Main Limiting Factor(s) Droughtiness and Workability

Remarks

Pit dug to 65 cm

NL336d

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Churston Ferrers	Pit 6	3° S	PGR	Av Rainfall 1018 mm ATO 1548°C FC Days 209 Climatic Grade 1	Upper Devonian Slates and Mudstones
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		TOPSOIL SAMPLE
9/94	3/3/94	SX 908 568 (ASP 1)	HLJ/PB		RPT/PB/110

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	MSZL	5% HR total (visual)	None		G			Many F+M	None	None	Clear wavy
2	54	05YR43	MCL	8% >2cm 9% <2cm 17% HR S+D	None	MCSAB	G	M	Friable	Common fine	SI	None	Gradual wavy
3	72	5YR43	MCL	25% >2cm 12% <2cm 37% HR S+D	None	MCSAB	G	M	Friable	Common fine	Calcareous (5 10%)	None	Gradual wavy
4	120	2 5YR46	MCL	45% HR >2cm 15% HR <2cm 60% HR Total S+D	None	Too stony	G	M (Assumed)		None	Calcareous (5 10%)	None	

Profile Gleyed From

Depth to Slowly Permeable Horizon

Wetness Class I

Wetness Grade

Available Water	Wheat	113 mm
	Potatoes	99 mm
Moisture Deficit	Wheat	72 mm
	Potatoes	82 mm
Moisture Balance	Wheat	+21 mm
	Potatoes	+17 mm
Droughtiness Grade		2 (Calculated to 120 cm)

Final ALC Grade 2

Main Limiting Factor(s) Droughtiness

Remarks

NL336d