

SITE NAME		PROFILE NO		SLOPE AND ASPECT		LAND USE		Av Rainfall 836 mm			PARENT MATERIAL		
Countess Wear		Pit 2		2° East		Ploughed		ATO 1566 deg			Lower Sandstone		
JOB NO		DATE		GRID REFERENCE		DESCRIBED BY		FC Days 176			Topsoil Sample		
104/93		2/12/93		ASP 70 SX 962 904		PB/GMS		Climatic Grade 1			RPT/GMS 304		
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	7 5YR34	MSL	>1% HR visual	none					Common V fine	none	none	Gradual smooth
2	100	5YR43	MSL	0% visual	none	MC+MSAB	Good	Moderate	Friable	Few fine	none	none	Clear smooth
3	120+	2 5YR46	MSL	0% visual	none	WMSAB	low	Good	Friable	none	none	none	

Profile Gleyed From not gleyed

Depth to Slowly Permeable Horizon no SPL

Wetness Class I

Wetness Grade 1

Available Water Wheat 164mm

Potatoes 113mm

Moisture Deficit Wheat 109mm

Potatoes 103mm

Moisture Balance Wheat 55mm

Potatoes 10mm

Droughtiness Grade 1

Final ALC Grade 1

Main Limiting Factor(s) None

Remarks

Topsoil texture confirmed by PSD

NL336

SITE NAME		PROFILE NO		SLOPE AND ASPECT		LAND USE		Av Rainfall		PARENT MATERIAL	
Countess Wear		Pit 1		0°		Vegetables		836 mm		Valley Gravels	
JOB NO		DATE		GRID REFERENCE		DESCRIBED BY		ATO		Topsoil Sample	
104/93		1/12/93		ASP 218 SX 966 891		PB/GMS		1566 deg		RPT/GMS 299	
								FC Days			
								175			
								Climatic Grade			
								1			

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	7 5YR43	MSL	1% HR >2cm 16% HR >2mm Total 17% HR Sieved/displ	none					Common V fine	none	none	Clear smooth
2	55	5YR44	MSL	2% HR >2cm 18% HR >2mm Total 20% HR Sieved/displ	none	WC+MSAB	Good	Good	V friable	Few V fine	none	none	Gradual smooth
3	110+	5YR56	LMS	2% HR >2cm 2% HR >2mm 4% HR Total sieved/displ	none	WC+MAB	Porous but no biopores	Moderate	V friable	none	none	none	

Profile Gleyed From not gleyed

Depth to Slowly Permeable Horizon no SPL

Wetness Class I

Wetness Grade 1

Available Water Wheat 106mm

Potatoes 88mm

Moisture Deficit Wheat 109mm

Potatoes 103mm

Moisture Balance Wheat 3mm

Potatoes 15mm

Droughtiness Grade 3A (to 120 cm)

Final ALC Grade 3A

Main Limiting Factor(s) Droughtiness

Remarks

Pit dug to 110cm Topsoil texture confirmed by PSD

SITE NAME		PROFILE NO		SLOPE AND ASPECT		LAND USE		Av Rainfall		836 mm		PARENT MATERIAL	
Countess Wear		Pit 6		0°		CER		ATO		1566 deg		Lower Sandstone	
JOB NO		DATE		GRID REFERENCE		DESCRIBED BY		FC Days		175			
104/93		23/12/93		ASP 182 SX 967 894		GMS/HLJ		Climatic Grade		1			

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	7 5YR34	MSL	<1% HR >2cm 7% HR >2mm 8% total HR sieved/displ	none		good			many fine	none	none	Abrupt smooth
2	65	5YR43	MSL	<1% HR >3cm 10% HR >2mm 11% Total HR sieved/displ	none	MCSAB	good	MOD	Friable	Common fine	none	none	Abrupt smooth
3	78	5YR46	MSL	1% HR >2cm 15% HR >2mm 16% total HR sieved/displ	None	WCSAB	good	good	Friable	Few V Fine	none	none	Abrupt smooth
4	120	2 5YR46	LMS	1% HR >2cm 29% HR >2mm 30% total HR sieved/displ	None	WMSAB		MOD	V Friable				

Profile Gleyed From	not gleyed	Available Water	Wheat	118mm	Final ALC Grade	2
Depth to Slowly Permeable Horizon	no SPL		Potatoes	101mm	Main Limiting Factor(s)	Droughtiness
Wetness Class	I	Moisture Deficit	Wheat	109mm		
Wetness Grade	1		Potatoes	103mm		
		Moisture Balance	Wheat	+9mm	Remarks	
			Potatoes	2mm		
		Droughtiness Grade		2 (to 120 cm)		

SITE NAME		PROFILE NO		SLOPE AND ASPECT		LAND USE		Av Rainfall		PARENT MATERIAL			
Countess Wear		Pit 7		0°		Beans		836 mm	1566 deg	Valley Gravel			
JOB NO		DATE		GRID REFERENCE		DESCRIBED BY		FC Days		Climatic Grade			
104/93		23 12 93		ASP 233 SX 961 889		PB/GMS		175	1				
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	7 5YR43	MSL	1% >2cm HR 11% >2mm HR sieved/dspl			Good			CVF			Clear smooth
2	70	5YR44	MSL	<2% >2cm HR 4% >2mm HR sieved/dspl		MCSAB	Good	Mod	Friable	FVF			Grad smooth
3	100	5YR46	LMS	6% >2mm HR sieved/dspl		MCSAB	Good	Good	Friable				Clear smooth
4	120	2 5YR46	MSL	<1% >2cm HR 23% >2mm HR sieved/dspl			Good		Firm				

Profile Gleyed From not gleyed

Depth to Slowly Permeable Horizon no SPL

Wetness Class I

Wetness Grade 1

Available Water Wheat 133mm

Potatoes 103mm

Moisture Deficit Wheat 109mm

Potatoes 103mm

Moisture Balance Wheat +24mm

Potatoes +0mm

Droughtiness Grade 2 (to 120 cm)

Final ALC Grade 2

Main Limiting Factor(s) Droughtiness

Remarks

SITE NAME		PROFILE NO		SLOPE AND ASPECT		LAND USE		Av Rainfall			PARENT MATERIAL		
Countess Wear		Pit 5		0°		Potatoes		836 mm			Valley Gravels		
JOB NO		DATE		GRID REFERENCE		DESCRIBED BY		ATO			Topsoil Sample		
104/93		3/12/93		ASP 179 SX 964 894		PB/GMS		1566 deg			RPT/PB11		
FC Days								175					
Climatic Grade								1					
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	7 5YR33	MSL	1% >2cm HR 11% >2mm HR Total 12% HR Sieved/displ	none					Common V fine + fine	none	none	Gradual smooth
2	47	7 5YR34	MSL	12% HR as Horizon 1	none	MMSAB	good	good	Friable	Few V fine + fine	none	none	Clear smooth
3	70	7 5YR46	MSL	12% >2cm HR 52% >2mm HR 64% HR Total sieved/displ	none	WMG	good	good	Friable	Few V fine	none	none	Diffuse smooth
4	100+	5YR46	LMS	As horizon 3	none	WMG	good	good	Friable	none	none	none	

Profile Gleyed From not gleyed

Depth to Slowly Permeable Horizon no SPL

Wetness Class I

Wetness Grade 1

Available Water Wheat 97mm

Potatoes 86mm

Moisture Deficit Wheat 109mm

Potatoes 103mm

Moisture Balance Wheat 12mm

Potatoes 17mm

Droughtiness Grade 3A (to 120 cm)

Final ALC Grade 3A

Main Limiting Factor(s) Droughtiness

Remarks

Pit dug to 100 cm  
Topsoil texture confirmed by PSD H3+4 like H2 in Pit 3

SITE NAME		PROFILE NO		SLOPE AND ASPECT		LAND USE		Av Rainfall		PARENT MATERIAL							
Countess Wear		Pit 4		4° W		Cereal		836 mm		Lower Sandstone							
JOB NO		DATE		GRID REFERENCE		DESCRIBED BY		ATO		Topsoil Sample							
104/93		3 12 93		ASP150 SX 954 896		GS/PB		1566 deg		RPT/PB8							
FC Days								177									
Climatic Grade								1									
Horizon Number	Lowest Av Depth (cm)	Matrix and Ped Face Colours	Texture	Stoniness Size Shape Type and Field Method	Motting 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	7 5YR34	MSL	2% >2cm HR 13% >2mm HR Total 15% HR Sieved/displ	none					Common V fine	none	none	Clear smooth				
2	65	7 5YR44	FSL	0% >2cm 5% >2mm Sieved/displ	none mixing of topsoil	MMSAB	Very porous	Good	Friable	Few V fine	none	none	Diffuse smooth				
3	105	5YR46	FSL	0% visual (felt)	none	MCAB	Porous	Moderate	Friable	Few V fine in worm holes	none	none	Clear smooth				
4	120+	2 5YR46	LMS	20%	none	MCAB	Porous	Good	Friable	none	none	few					
Profile Gleyed From				not gleyed		Available Water				Wheat		169mm		Final ALC Grade		1	
Depth to Slowly Permeable Horizon				no SPL						Potatoes		125mm		Main Limiting Factor(s)		none	
Wetness Class				I		Moisture Deficit				Wheat		109mm					
Wetness Grade				1						Potatoes		103mm					
						Moisture Balance				Wheat		60mm					
										Potatoes		22mm					
						Droughtiness Grade						1 (to 120 cm)		Remarks			
														Horizon 4 layers of stoneless LMS and stony LMS so 20% taken as average stone content Topsoil texture confirmed by PSD			

SITE NAME Countess Wear		PROFILE NO Pit 3	SLOPE AND ASPECT 0°		LAND USE Potatoes		Av Rainfall 836 mm ATO 1566 deg		PARENT MATERIAL Valley Gravels			
JOB NO 104/93		DATE 3 12 93	GRID REFERENCE ASP 187 SX 957 893		DESCRIBED BY GS/PB		FC Days 177 Climatic Grade 1		Topsoil Sample RPT/PB12			

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	7 5YR33	MSL	<1% <2cm HR 14% <2mm HR Total 15% HR sieve/displ	none					Common V fine	none	none	Clear smooth
2	60	7 5YR44	MSL	15% <2cm HR 50% <2mm HR Total 65% HR Sieve/displ	none	WMG	Porous	Good	Friable	Common V fine	none	none	Gradual smooth
3	110+	7 5YR46	LMS	As horizon 2	none	WMG	Porous	Good	Friable	none	none	none	

Profile Gleyed From not gleyed

Depth to Slowly Permeable Horizon no SPL

Wetness Class I

Wetness Grade 1

Available Water Wheat 79mm

Potatoes 67mm

Moisture Deficit Wheat 109mm

Potatoes 103mm

Moisture Balance Wheat 30mm

Potatoes 36mm

Droughtiness Grade 3B (to 120 cm)

Final ALC Grade 3B

Main Limiting Factor(s) Droughtiness

Remarks

Placed in 3A map unit

Topsoil textured confirmed by PSD