

SITE NAME Hewelsfield		PROFILE NO Pit 3 (ASP 18)	SLOPE AND ASPECT 2° S	LAND USE PGR	Av Rainfall 1021 mm	ATO 1329 day °C	PARENT MATERIAL Carboniferous Limestone	
JOB NO 47/97		DATE 25/7/97	GRID REFERENCE SP 5620 0140	DESCRIBED BY PB	FC Days 215	Climatic Grade 2	PSD SAMPLES TAKEN TS 0 25 cm ZL (MZCL) (S10 Z73 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	22	ZL	7 5YR43	0	0	0	MC FSAB	Fr		G	MF VF		Ab smooth
2	60	HZCL	7 5YR54	0	0	0	WVCSAB	Fr	M	G	CVF		Grad smooth
3	96+	HZCL	5YR54	0	0	F	WVCAB	Fm	P	G (low)	FVF		

Profile Gleyed From	Available Water	Wheat	135 mm	Final ALC Grade	2
Depth to Slowly Permeable Horizon		Potatoes	118 mm	Main Limiting Factor(s)	Wk
Wetness Class	1	Moisture Deficit	Wheat 70 mm		
Wetness Grade	2		Potatoes 52 mm		
		Moisture Balance	Wheat +65 mm	Remarks	Pit dug to 96 cm augered to 120 cm
			Potatoes +66 mm		
		Droughtiness Grade	1 (Calculated to 120 cm)		

SITE NAME		PROFILE NO	SLOPE AND ASPECT		LAND USE		Av Rainfall 1021 mm		PARENT MATERIAL			
Hewelsfield		Pit 1 ASP 71	2° E		CER		ATO 1329 day C		Carboniferous Limestone			
JOB NO		DATE	GRID REFERENCE		DESCRIBED BY		FC Days 215		PSD SAMPLES TAKEN			
47/97		24/7/97	SP 5668 0108		SH/PB		Climatic Grade 2		TS MCL/MSZL (S22 Z60 C18%)			
Exposure Grade												

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	75YR4/3	2% HR (VIS)	0	0	MDCSB	Fr		G	MF		Clear smooth
2	60	MZCL/ HZCL	75YR4/6	0	0	0	MDCSAB	Fr	M	G	FF VF		Gradual smooth
3	100	C	5YR4/3	2% HR (VIS)	75YR5/8 C Fine	Common around stones + on ped faces + within peds w th ochreous mottling	MDCSAB	Fm	M	G	FF VF fib		

Profile Gleyed From

Depth to Slowly Permeable Horizon

Wetness Class I

Wetness Grade 2

Available Water Wheat 128 mm

Potatoes 120 mm

Moisture Deficit Wheat 70 mm

Potatoes 52 mm

Moisture Balance Wheat 58 mm

Potatoes 68 mm

Droughtiness Grade 1 (Calculated to 100 cm)

Final ALC Grade 2

Main Limiting Factor(s) Wk

Remarks

SITE NAME		PROFILE NO	SLOPE AND ASPECT	LAND USE		Av Rainfall 1021 mm		PARENT MATERIAL				
Hewelsfield		Pit 2 (ASP 13)	2 S	PGR		ATO 1329 day C		Carboniferous Limestone				
JOB NO		DATE	GRID REFERENCE	DESCRIBED BY		FC Days 215		PSD SAMPLES TAKEN				
47/97		25/7/97	SO 5569 0141	PB		Climatic Grade 2		TS 0 25 cm HZCL (MZCL) (S11 Z62 C27%)				
Exposure Grade												

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	HZCL	75YR43	2% HR (VIS)	0	0	MFSAB	Fm		G	MVF		Clear smooth
2	41	C	5YR43	2% HR (VIS)	0	0	MCSAB	Fm	M	G	CVF		Abrupt wavy
3	55	C	2.5YR44	70% HR (VIS)	0	0	Too stony	(Fm)	(M)	(G)	FVF		

Profile Gleyed From

Depth to Slowly Permeable Horizon

Wetness Class I

Wetness Grade 3a

Available Water Wheat 76 mm

Potatoes 79 mm

Moisture Deficit Wheat 70 mm

Potatoes 52 mm

Moisture Balance Wheat +6 mm

Potatoes +27 mm

Droughtiness Grade 2 (Calculated to 60 cm)

Final ALC Grade 3a

Main Limiting Factor(s) Wk

Remarks

SITE NAME Hewelsfield		PROFILE NO Pit 4 (ASP 59)	SLOPE AND ASPECT 3 S	LAND USE Cer	Av Rainfall 1021 mm	PARENT MATERIAL Carboniferous Limestone rubble	
JOB NO 47/97		DATE 30/7/97	GRID REFERENCE SO 5720 0120	DESCRIBED BY PB	ATO 1329 day C	PSD SAMPLES TAKEN TS 0 25 cm MZCL (S13 Z65 C22%)	
					FC Days 215		
					Climatic Grade 2		
					Exposure Grade		

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	MZCL	7 5YR43	2% HR (VIS)	0	0	MC FSAB	Fr		G	CF VF		Ab smooth
2	40	HZCL	5YR43	2% HR (VIS)	0	0	MCSAB	Fm	M	G	FVF		Sharp wavy
3	60	HZCL	5YR44	60% HR (VIS)	0	0	Too stony	Fm	(M)	G	FVF		Clear wavy
4	80	HZCL	5YR46	25% HR (VIS)	0	0		Fr	(M)	(G)	FVF		Clear irreg
5	100+	C	2 5YR34/46 7 5YR74	20% HR MSST (VIS)	0	0		Fm	(M)	(G)	FVF		

Profile Gleyed From	Available Water	Wheat	119 mm	Final ALC Grade	2
Depth to Slowly Permeable Horizon		Potatoes	94 mm	Main Limiting Factor(s)	Wk
Wetness Class	I	Moisture Deficit	Wheat		
Wetness Grade	2		Potatoes		
		Moisture Balance	Wheat		
			Potatoes		
		Droughtiness Grade	1	Remarks	H5 distinct colour variation attributed to weathering stones
			(Calculated to 120 cm)		

SITE NAME		PROFILE NO	SLOPE AND ASPECT	LAND USE	Av Rainfall	1021 mm	PARENT MATERIAL	
Hewelsfield		Pit 5 (ASP 58)	3 S	Cer	ATO	1329 day C	Carboniferous Limestone	
JOB NO		DATE	GRID REFERENCE	DESCRIBED BY	FC Days	215	PSD SAMPLES TAKEN	
47/97		30/7/97	SO 5710 0120	PB	Climatic Grade	2	TS 0 25 cm MZCL (S14 Z66 C20%)	
					Exposure Grade			

Horizon No	Lowest Av Depth (cm)	Texture	Matrix (Ped Face) Colours	Stoniness Size Type and Field Method	Motthing 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	MZCL	7 5YR43	0	0	0	MC FSAB	Fr		G	CF VF		Clear smooth
2	40	HZCL	7 5YR43	0	0	0	MVCSAB	Fr	M	G	CVF		Ab smooth
3	70	C	5YR43	0	0	0	MCSAB	Fm	M	G	FVF		Grad smooth
4	95	C	2 5YR44 (5YR53)	0	0	C	MVCSAB	Fm	M	P	FVF		Clear wavy
5	100+	C	2 5YR44	50% HR (VIS)	0	0	Too stony	Fm	(M)	P			

Profile Gleyed From 70cm

Depth to Slowly Permeable Horizon

Wetness Class II

Wetness Grade 3a

Available Water Wheat 131 mm

Potatoes 116 mm

Moisture Deficit Wheat 70 mm

Potatoes 52 mm

Moisture Balance Wheat +61 mm

Potatoes +64 mm

Droughtiness Grade 1 (Calculated to 120 cm)

Final ALC Grade 3a/2

Main Limiting Factor(s) We

Remarks Gleying and grade borderline