SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Street	Pit 1 (ASP 132)	4° N	PGR	Av Rainfall 793 mm ATO 1483 day °C	Lias clay & limestone
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY	FC Days 166 Climatic Grade 1	SOIL SAMPLE REFERENCES
12 96	6 3 96	ST 47353495	HLJ/PB	Exposure Grade	HLJ 200

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	8	MCL	10YR43	5/ HR (VIS)	0	0				G	MF VF	Y	Clear smooth
2	25	C	10YR54	1% > 2cm 9/ < 2 cm 10% HR (S&D)	0	0	MMSAB	Fr	G	G	MF VF	Y	Clear smooth
3	35	C	10YR54	40% > 2 cm 21% < 2 cm 61 / HR (S&D)	0	0	Too stony		(G)	(G)	CF VF	Y	Ab wavy
4	41	ZC	10YR64	1% HR (VIS)	CDFG 10YR73	0	WMSAB	Fr	G	G	CF VF	Y	Ab smooth
5	51	ZC	10YR64	90 % HR (VIS)	0	0	Too stony			(G)	FVF	Y	Ab wavy
6	64	ZC	2 5Y63	0	CDFOG 10YR56 72	0	WCSAB	Fm	P	P	FVF	Y	Clear smooth
7	80+	C	2 5Y53	0	MDFG CDFO 25Y72, 10YR56	0	MCPR	Fm	P	P	FVF	Y	

Profile Gleyed From 51 cm

Depth to Slowly Permeable Horizon 51 cm

Wetness Class III

Wetness Grade 3b

Available Water	Wheat	108 mm
	Potatoes	97 mm
Moisture Deficit	Wheat	108 mm
	Potatoes	101 mm
Moisture Balance	Wheat	0 mm
	Potatoes	-4 mm
Droughtiness Grade	3a	(Calculated to 100 cm)

Final ALC Grade 3b

Main Limiting Factor(s) We

Remarks Augered to 100cm imp to rock

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Street	Pit 2 (ASP 99)	1° N	PGR	Av Rainfall 793 mm ATO 1483 day °C FC Days 165 Climatic Grade 1 Exposure Grade	Lias clay & limestone
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		SOIL SAMPLE REFERENCES
12 96	6 3 96	ST 47353525	HLJ/PB		HLJ 201

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	20	C	10YR54	1 / HR (VIS)	0	0				G	MF VF	Y	Clear smooth
2	46	C	10YR54/56	1 / HR (VIS)	0	0	MM CSAB	Fr	G	(G)	CF VF	Y	Clear smooth
3	85+	C	2 5Y63	40 % HR (VIS) Large > 6 cm	CDFO G 10YR58 71	0	WACSAB?	Fm	P	P	FVF	Y	

Profile Gleyed From 46 cm

Depth to Slowly Permeable Horizon 46 cm

Wetness Class III

Wetness Grade 3b

Available Water	Wheat	119 mm
	Potatoes	110 mm
Moisture Deficit	Wheat	108 mm
	Potatoes	101 mm
Moisture Balance	Wheat	+11 mm
	Potatoes	+9 mm

Droughtiness Grade 2 (Calculated to 100 cm)

Final ALC Grade 3b

Main Limiting Factor(s) We

Remarks

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Street	Pit 3 (ASP 16)	1° North	Permanent Grass	Av Rainfall 760 mm ATO 1548 day °C	Lias clay (Alluvium)
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY	FC Days 164 Climatic Grade 1 Exposure Grade 1	SOIL SAMPLE REFERENCES
12/96	7/3/96	ST 49563635	HLJ		

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	C	10YR54	<1% HR Total (VIS)	None	None				Good	CF & VF		Clear Smooth
2	35	C	10YR53	<1 % HR Total (VIS)	FAFO (10YR58)	None	MCAB	Firm	Poor	Good	CF & VF (ex ped)		Clear Smooth
3	70+	C	10YR52	None	CAFO + G (10YR58 62)	None	MCPr (breaking to MCAB)	Firm	Poor	Poor	FF & VF (ex ped)		

Profile Gleyed From 35mm

Depth to Slowly Permeable Horizon 35cm

Wetness Class IV

Wetness Grade 3b

Available Water Wheat 123 mm

Potatoes 100 mm

Moisture Deficit Wheat 108 mm

Potatoes 101 mm

Moisture Balance Wheat 15 mm

Potatoes 1 mm

Droughtiness Grade 2 (Calculated to 120 cm)

Final ALC Grade 3b

Main Limiting Factor(s) Wetness

Remarks Marginal porosity in H2

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE			PARENT MATERIAL
Street	Pit 4 (ASP 60)	0 North	Permanent Grass	Av Rainfall	760 mm	Lias clay
				ATO	1548 day °C	
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY	FC Days	164	SOIL SAMPLE REFERENCES
12/96	7/3/96	ST 49023567	HLJ	Climatic Grade	1	
				Exposure Grade	1	

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	17	C	10YR33	<1 / HR Total (VIS)	None	None					CF & VF		Abrupt smooth
2	70+	C	2 5Y64	None	CAFO+G (10YR58 52)	None	MCPr	Firm	Poor	Poor	FF & VF (ex ped)		

Profile Gleyed From 17 mm

Depth to Slowly Permeable Horizon 17 cm

Wetness Class IV

Wetness Grade 3b

Available Water Wheat 121 mm

Potatoes 93 mm

Moisture Deficit Wheat 108 mm

Potatoes 100 mm

Moisture Balance Wheat 13 mm

Potatoes 3 mm

Droughtiness Grade 2 (Calculated to 120 cm)

Final ALC Grade 3b

Main Limiting Factor(s) Wetness

Remarks Open face in foundation pit described as a pit

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE			PARENT MATERIAL
Street	Pit 5 (ASP 92)	2° S	Cereals	Av Rainfall	760 mm	Lias clay & limestone
				ATO	1548 day °C	
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY	FC Days	164	SOIL SAMPLE REFERENCES
12 96	12 3 96	ST 49173537	PB/GMS	Climatic Grade	1	GMS 529
				Exposure Grade	1	

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	20	C	10YR53	<1 / (visual)	None	None				Good	CF VF	Y	Abrupt smooth
2	35	C	10YR64	<1 % (visual)	None	None	WMSAB	Friable	Good	Good	CVF	Y	Gradual smooth
3	55	C	2 5Y63	None (visual)	CFFO (10YR56)	None	WM/CSAB	Friable	Good to mod	Good	CVF	Y	Gradual smooth
4	80+	C	2 5Y53	None	CFFO 10YR56	None	MCAB tending to MCPr also with MCSAB	Friable	Mod	Overall low but some large worm holes	FVF	Y	

Profile Gleyed From 35 cm

Depth to Slowly Permeable Horizon 55 cm

Wetness Class III

Wetness Grade 3b

Available Water	Wheat	127 mm
	Potatoes	134 mm
Moisture Deficit	Wheat	108 mm
	Potatoes	101 mm
Moisture Balance	Wheat	+ 19 mm
	Potatoes	+ 33 mm
Droughtiness Grade	2	(Calculated to 80 cm)

Final ALC Grade 3b

Main Limiting Factor(s) Wetness

Remarks SPL in H4 borderline on structure and porosity

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Street	Pit 6 (ASP 174)	2° E	PGR	Av Rainfall 793 mm ATO 1483 day °C FC Days 168 Climatic Grade 1 Exposure Grade 1	Lias limestone
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY		SOIL SAMPLE REFERENCES
12 96	12 3 96	ST 48463469	PB/GMS		PB 350

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	19	MCL	10YR43	2 / HR (VIS)	None	None				Good	MVF	Y	Clear wavy
2	38	C	10YR54	2% > 2cm 8 % < 2 mm 10 / HR (S&D)	None	None	WMSAB	Friable	Good	Good	CVF	Y	Abrupt smooth
3	49	Stone (flaggy)		90 / HR							CVF	Y	Abrupt smooth
4	55	C	2 5Y63	None	CDFO 10YR58	None	WFPty	Firm	Poor	None	FVF	Y	Abrupt smooth
5	72+	Stone (flaggy)										Y	

Profile Gleyed From 49 cm

Depth to Slowly Permeable Horizon 49 cm

Wetness Class III

Wetness Grade 3b

Available Water Wheat 77 mm

Potatoes 80mm

Moisture Deficit Wheat 108 mm

Potatoes 101 mm

Moisture Balance Wheat 31 mm

Potatoes 21 mm

Droughtiness Grade 3b (Calculated to 55 cm)

Final ALC Grade 3b

Main Limiting Factor(s) Dr We

Remarks Rock is hard limestone

H5 is a band of limestone within an SPL which starts at 49 cm and is assumed to continue below H5

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE			PARENT MATERIAL
Street	Pit 7 (ASP 152)	4 N	PGR	Av Rainfall	793 mm	Lias limestone
				ATO	1483 day °C	
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY	FC Days	168	SOIL SAMPLE REFERENCES
12 96	12 3 96	ST 47613483	PB/GMS	Climatic Grade	1	PB 351
				Exposure Grade	1	

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	16	MCL	10YR42	5 % HR (VIS)	None	None				Good	MF VF	Y	Clear wavy
2	29	C	10YR54	30 % > 2cm HR (Sieved)	None	None	WMSAB	Friable	Good	Good	CVF	Y	Abrupt smooth
3	33	C	2 5Y62	5 / HR Visual	CDFOG 10YR56 51	None	Too thin	Firm	Poor	Poor	CVF	Y	Abrupt smooth
4	41	Rock (fissured)									None	Y	Abrupt smooth
5	53	C	2 5Y62	None									
6	53+	Rock										Y	

Profile Gleyed From 29 cm

Depth to Slowly Permeable Horizon 29 cm

Wetness Class IV

Wetness Grade 3b

Available Water	Wheat	67 mm
	Potatoes	68 mm
Moisture Deficit	Wheat	108 mm
	Potatoes	101 mm
Moisture Balance	Wheat	-41 mm
	Potatoes	33 mm

Droughtiness Grade 3b (Calculated to 53 cm)

Final ALC Grade 3b

Main Limiting Factor(s) We Dr

Remarks Horizons 3 and 5 essentially one horizon with fissured rock within it

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE		PARENT MATERIAL
Street	Pit 8 (ASP 175)	0°	PGR	Av Rainfall 793 mm ATO 1483 day °C	Lias clay
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY	FC Days 168 Climatic Grade 1	SOIL SAMPLE REFERENCES
12 96	22 3 96	ST 48603466	GMS	Exposure Grade 1	GMS 526

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	21	C	10YR42	neg	None	None					MVF		Clear smooth
2	60	C	10YR53	neg	FFFO 10YR56	None	MCSAB	Friable	Mod	Good	CVF		Clear wavy
3	80+	C	2 5Y64 62	neg	CDFO 10YR56	None	MCAB	Friable	Mod	Poor	CVF		

Profile Gleyed From 60 cm

Depth to Slowly Permeable Horizon 60 cm

Wetness Class III/II

Wetness Grade 3b

Available Water Wheat 138 mm

Potatoes 114 mm

Moisture Deficit Wheat 108 mm

Potatoes 101 mm

Moisture Balance Wheat +30 mm

Potatoes +13 mm

Droughtiness Grade 1 (Calculated to 120 cm)

Final ALC Grade 3b

Main Limiting Factor(s) Wetness

Remarks Water running out of horizons 2 and 3 Surface wet

SITE NAME	PROFILE NO	SLOPE AND ASPECT	LAND USE			PARENT MATERIAL
Street	Pit 9 (ASP 148)	0°	PGR	Av Rainfall	793 mm	Lias clay
				ATO	1483 day °C	
JOB NO	DATE	GRID REFERENCE	DESCRIBED BY	FC Days	168	SOIL SAMPLE REFERENCES
12 96	22 3 96	ST49853495	GMS	Climatic Grade	1	GMS 527
				Exposure Grade	1	

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	15	HZCL	10YR41	neg	None	None					CVF		Gradual smooth
2	40	C	10YR53	5 / HR (Visual)	FFFO 35-40 cm	None	WCSAB	Friable	Mod	Good	CVF		Gradual smooth
3	65	C	2 5Y62	neg	CDFOG 10YR56 51	None	WC and VC Platy with WCSAB	Firm	Poor	Borderline	FVF		Clear smooth
4	80+	C	2 5Y50	neg	CDFO 10YR58	None	MC Platy	Firm	Poor	Poor	FVF		

Profile Gleyed From	40 cm plus
Depth to Slowly Permeable Horizon	40 cm
Wetness Class	III
Wetness Grade	3b

Available Water	Wheat	129 mm
	Potatoes	106 mm
Moisture Deficit	Wheat	108 mm
	Potatoes	101 mm
Moisture Balance	Wheat	+21 mm
	Potatoes	+5 mm
Droughtiness Grade	2	(Calculated to 120 cm)

Final ALC Grade	3b
Main Limiting Factor(s)	Wetness

Remarks Horizons 3 and 4 largely weathered platy stone which in places slightly less weathered Some large worm holes in Horizon 3 but overall platy structure gives poor drainage