Botley West Solar Farm

Environmental Statement

Volume 3

Appendix 17.1: Agricultural Land Classification and Soil Survey Report

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READING AGRICULTURAL CONSULTANTS

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Photovolt Development Partners GmbH

Botley West Solar Farm

Agricultural Land Classification and Soil Resources

Volume I of II

Beechwood Court
Long Toll
Woodcote
RG8 0RR

01491 684 233
reading-ag.com

VOLUME I

VOLUME II

Appendices and maps

1 Introduction

1.1 Reading Agricultural Consultants Ltd (RAC) is instructed by Photovolt Development Partners GmbH to investigate the Agricultural Land Classification (ALC) and soil resources of land subject to the proposals for Botley West Solar Farm, Oxfordshire, by means of a survey of soil and site characteristics.

1.2 Guidance for assessing the quality of agricultural land in England and Wales is set out in the Ministry of Agriculture, Fisheries and Food (MAFF) revised guidelines and criteria for grading the quality of agricultural land[1], and summarised in Natural England's Technical Information Note (TIN) 049[2].

1.3 Agricultural land in England and Wales is graded between 1 and 5, depending on the extent to which physical or chemical characteristics impose long-term limitations on agricultural use. The principal physical factors influencing grading are climate, site conditions and soil which, together with interactions between them, form the basis for classifying land into one of the five grades.

1.4 Grade 1 land is excellent quality agricultural land with very minor or no limitations to agricultural use. Grade 2 is very good quality agricultural land, with minor limitations which affect crop yield, cultivations or harvesting. Grade 3 land has moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield, and is subdivided into Subgrade 3a (good quality land) and Subgrade 3b (moderate quality land). Grade 4 land is poor quality agricultural land with severe limitations which significantly restrict the range of crops and/or level of yields. Grade 5 is very poor quality land, with very severe limitations which restrict use to permanent pasture or rough grazing.

1.5 Land which is classified as Grades 1, 2 and 3a in the ALC system is defined as best and most versatile (BMV) agricultural land.

[1] **MAFF (1988).** *Agricultural Land Classification of England and Wales. Revised guidelines and criteria for grading the quality of agricultural land*. Agricultural Land Classification of England and Wales: Revised criteria for grading the quality of agricultural land - ALC011 (naturalengland.org.uk)

[2] **Natural England (2012).** *Technical Information Note 049 - Agricultural Land Classification: protecting the best and most versatile agricultural land*, Second Edition. Agricultural Land Classification: protecting the best and most versatile agricultural land - TIN049 (naturalengland.org.uk)

1.6 As explained in Natural England's TIN049, the whole of England and Wales was mapped from reconnaissance field surveys in the late 1960s and early 1970s, to provide general strategic guidance on agricultural land quality for planners. This Provisional Series of maps was published on an Ordnance Survey base at a scale of One Inch to One Mile (1:63,360). The Provisional ALC map shows the site as predominantly Grade 3, with Grade 4 in the valleys of the River Dorn and River Evenlode, and to the east of Farmoor Reservoir, and Grade 2 to the west of Cassington. However, TIN049 explains that:

> *"These maps are not sufficiently accurate for use in assessment of individual fields or development sites, and should not be used other than as general guidance. They show only five grades: their preparation preceded the subdivision of Grade 3 and the refinement of criteria, which occurred after 1976. They have not been updated and are out of print. A 1:250 000 scale map series based on the same information is available. These are more appropriate for the strategic use originally intended …"*

1.7 TIN049 goes on to explain that a definitive ALC grading should be obtained by undertaking a survey according to the published guidelines. This survey follows the detailed methodology set out in the ALC guidelines. An observation density of one soil profile per 2ha was initially employed due to the extent of the site boundaries as well as the long-term but temporary nature of solar farm development. This initial survey was supplemented by additional observations following consultations with Natural England.

2 Site and climatic conditions

General features, land form and drainage

2.1 The site extends to approximately 1,317ha of agricultural land within three broad locations:

- land between Wootton and Tackley;
- land west of Yarnton and north of Cassington; and
- land west of Botley at Oxford.

2.2 The land is primarily in arable cultivation. The main areas of grassland are adjacent to the River Dorn and around Burleigh Wood.

2.3 Across the entire site area, the topography is overall gently undulating at altitudes of between around 65m and 120m above Ordnance Datum (AOD). The altitude generally falls with distance south, other than into the river valleys. The slopes are shallow and are typically not limiting to agricultural land quality.

2.4 Drainage of the site is by a combination of the slopes and field ditches which direct water into the valleys of the Rivers Dorn, Evenlode and Thames.

Agro-climatic conditions

2.5 Agro-climatic data for the site have been interpolated from the Meteorological Office's standard 5km grid point dataset at numerous representative points and altitudes, and are given in Table 1. The site is moderately warm with moderate rainfall. Moisture deficits are moderate to moderately large. The number of Field Capacity Days is about average for lowland England (150) and is favourable for providing opportunities for agricultural field work. There is no overriding climatic limitation to agricultural land quality.

Table 1: Local agro-climatic conditions

Parameter	Value						
Easting	445679	445533	446186	444715	443878	443121	445925
Northing	220800	219000	217800	213720	213011	212275	205378
Altitude (mAOD)	110	95	98	85	68	75	75
Average Annual Rainfall (mm)	701	691	685	682	668	673	646
Accumulated Temperatures >0°C (day°)	1,383	1,400	1,397	1,414	1,434	1,427	1,427
Field Capacity Days	153	151	149	148	146	146	136
Average Moisture Deficit, wheat (mm)	99	102	102	104	106	105	110
Average Moisture Deficit, potatoes (mm)	89	92	92	95	99	97	103

Soil parent material and soil type

2.6 The bedrock geology mapped by the British Geological Survey[3] across most of the site area, from Burleigh Wood and south, comprises the Oxford Clay Formation and the West Walton Formation mapped together as one unit. The Oxford Clay Formation includes grey silicate mudstone with sporadic limestone nodules. The West Walton Formation includes calcareous mudstone, silty mudstone and siltstone, with some fine-grained sandstones and limestone or siltstone nodules.

2.7 Narrow bands of mudstone and sandstone of the Kellaways Formation mark the boundary to separate units of the Forest Marble Formation and the Cornbrash Limestone Formation which occur north, west and south of Burleigh Wood and generally west of the River Evenlode where the topography is flatter. The Forest Marble Formation has variably calcareous silicate-mudstone with cross-bedded limestone units, with some parts dominated by the limestone. The Cornbrash Formation is characterised by fine- to medium-grained limestone.

2.8 In the northern site area between Wootton and Tackley, the bedrock is predominantly a mix of the Forest Marble Formation and the Cornbrash Formation, with the addition of the White Limestone Formation in the west, comprising pale grey to off-white or yellowish limestone with localised variations in composition. A small area of the Hampen Formation limestone is mapped at Sansom's Platt.

2.9 Superficial deposits mainly comprise pockets of sand and gravel formations mapped between Cassington and Burleigh Road. Superficial deposits of alluvium are mapped in conjunction with the River Evenlode. A small pocket of head deposits is mapped on the north side of the B4027, east of Stratford Lane.

2.10 The Soil Survey of England and Wales soil association mapping[4] (1:250,000 scale) shows the:

- Elmton 1 association (343a) across much of the north of the site, characterised by shallow, well drained, brashy, calcareous fine loamy soils over limestone;
- Elmton 3 association (343c) also in the north of the site, also characterised by shallow, well drained, brashy, calcareous fine loamy soils over limestone but including some deeper, slowly permeable, seasonally waterlogged and mainly calcareous clayey soils;

[3] **British Geological Survey (2023).** *BGS Geology Viewer*, https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/
[4] **Soil Survey of England and Wales (1984).** *Soils of South East England* (1:250,000), Sheet 6

- Aberford association (511a) across the remainder of the north which includes soils similar to the Elmton 1 and 3 associations but is only locally brashy;
- Denchworth association (712b) across most of the central area between Yarnton and Cassington, and in the south at Farmoor, characterised by seasonally waterlogged, clayey soils;
- Essendon association (714d) around Bladon Heath, comprising seasonally waterlogged, coarse loamy over clayey soils;
- Sutton 1 association (571u) in patches on river terraces west of Carsington and Kidlington and comprising well drained, fine and coarse loamy soils that are locally calcareous and in places shallow over gravel;
- Badsey 1 association (511h) west of Cassington and west of Lower Road, characterised by well drained, calcareous and non-calcareous, fine loamy soils over limestone gravel;
- Kelmscot association (832) north-east of Eynsham, characterised by calcareous, fine loamy soils over gravel that are variably affected by groundwater, and associated with non-calcareous, clayey soils over gravel om flat land; and
- Fladbury 1 association (813b) in the valley of the River Evenlode, comprising stoneless, clayey soils variably affected by groundwater[5].

[5] **Jarvis et al (1984).** *Soils and Their Use in South East England*. Soil Survey of England and Wales Bulletin 15, Harpenden.

3 Agricultural land quality

Soil survey methods

3.1 The initial survey in 2023 examined 622 soil profiles using an Edelman (Dutch) auger, together with 36 soil pits excavated by spade to examine subsoil structures and stone content at an overall observation density of approximately one per two hectares and otherwise in accordance with the established recommendations for ALC surveys[2]. Observations numbered 334-359 were removed from the scope of the survey and have not been included within this report.

3.2 A further 40 observations were examined during a second round of surveying in 2024 following consultation with Natural England to further investigate the boundaries of isolated areas of BMV land identified.

3.3 The locations of observations are indicated on Figure RAC/9962/1. At each observation point the following characteristics were assessed for each soil horizon up to a maximum of 120cm or any impenetrable layer:

- soil texture;
- stone content;
- colour (including localised mottling);
- consistency;
- structural condition;
- free carbonate; and
- depth.

3.4 In total, 25 topsoil samples were submitted to a laboratory for determination of particle size distribution, pH, organic matter content and/or nutrient contents (P, K, Mg). Results are presented in Appendix 1.

3.5 Soil Wetness Class (WC) was determined from the matrix colour, presence or absence of, and depth to, greyish and ochreous gley mottling, and slowly permeable subsoil layers at least 15cm thick, in relation to the number of Field Capacity Days at the location.

3.6 Soil droughtiness was investigated by the calculation of moisture balance equations (given in Appendix 2). Crop-adjusted Available Profile Water (AP) is estimated from texture, stoniness and depth, and then compared to a calculated moisture deficit (MD) for the standard crops wheat

and potatoes. The MD is a function of potential evapotranspiration and rainfall. Grading of the land can be affected if the AP is insufficient to balance the MD and droughtiness occurs.

Agricultural land classification and site limitations

3.7 Assessment of agricultural land quality has been carried out according to the revised ALC guidelines[1]. Soil profiles have been described according to Hodgson[6] which is the recognised source for describing soil profiles and characteristics according to the revised ALC guidelines.

3.8 The site area is divided into 20 Parcel Plots, each described in turn below. Four main soil types have been identified and categorised according to their main limitations in the ALC, and are shown on Figure RAC/9962/2.

Denman's Farm (Observations 1-37 and 630-636 on Figure RAC/9962/1A)

3.9 The area surveyed has some permanent pasture (north and south of the farmstead) but is mainly in grass leys, arable crops and maize. The land north of Denman's Farm and the overhead power line is level or on a 1° northerly slope. The southern part of the land has moderate slopes (2-6°) facing north-west, north or north-east with some north-south valley features. The land west of the Farmoor to Cumnor road has gentler (1-4°) slopes, again mainly in a northerly direction.

3.10 The north-western part of the large field north of Denman's Farm is in Flood Zone 3; the rest of the land has no designated flood risk. The land has functioning ditches and underdrains, although wetter patches were evident in parts of the flatter land and footslope areas at the time of survey.

3.11 The majority of soils have 23cm-28cm depth of dark greyish to olive brown (2.5Y4/2 to 2.5Y5/3 in the Munsell soil colour charts[7]), non-calcareous clay or silty clay topsoil. The structure is granular at the surface, transitioning to medium subangular blocks. The upper subsoil is olive-coloured (5Y5/2 to 5Y5/4) clay with fine mottles which is very firm with a weak prismatic structure, passing to pale olive (5Y6/4) calcareous clay with a medium subangular blocky structure at around 38cm depth. From 55cm depth, the subsoil is grey (N6/1) mottled calcareous clay with a weakly developed coarse structure extending to depth. The main soil is assessed as WC III as the upper subsoil compaction could be easily ameliorated, and the soil limited to Subgrade 3b by wetness.

[6] **Hodgson, J. M. (Ed.) (1997).** *Soil survey field handbook.* Soil Survey Technical Monograph No. 5, Silsoe.
[7] **Munsell Color (2009).** *Munsell Soil Color Book*. Grand Rapids, MI, USA

3.12 Where the clay is calcareous to the surface (Observations 11, 12, 13, 22, 30, 632 and 633), the structure is better developed in the topsoil and upper subsoil which is usually unmottled in the top 40cm. The WC is II or III, resulting in a wetness limitation to Subgrade 3a.

3.13 In Observation 25 the topsoil is heavy clay loam overlying moderately structured clay at about 35cm. This profile is in WC II and is also limited to Subgrade 3a.

3.14 At Observations 2, 3, 6, 7, 8 , 10, 630, 631 and 635, the topsoil is dark greyish or olive brown (2.5Y5/3) clay or silty clay which commonly includes a low volume of limestones and is (slightly) calcareous and of granular structure. The clay subsoil becomes slowly permeable at depths of between 30cm and 65cm (WC II to IV). A composite sample taken from Observations 30 to 32 comprised 7% $CaCO_3$ and 52% clay. Clay content of more than 50% can be used to downgrade calcareous soils and furthermore in Observation 30 the soil has previously been disturbed and reinstated over an installed pipeline. Accordingly most of this area is assessed as Subgrade 3b although this is marginal to 3a as the land is distinctly easier working than decalcified clays.

3.15 In Observations 4, 5 and 35, the topsoil is typically dark brown (2.5Y4/2) calcareous heavy clay loam with distinct granular structure. The upper soil is formed of loamier 'drift' containing 6%-15% limestone and siliceous stones, becoming stonier with depth. Clay does not occur within 80cm. The profiles are in WC I or II and are limited equally by wetness and droughtiness to Grade 2.

Parcel 1 (Observations 38-76 and 637-639 on Figure RAC/9962/1B)

3.16 The sloping land on the west comprises 23cm-28cm depth of (olive) brown (2.5Y4/3 or 2.5Y5/3) clay or heavy clay loam topsoil which is variably pebbly and usually non-calcareous. The topsoil forms adherent blocks which pull apart easily and are porous with roots. Subsoil within 45cm is stoneless olive-yellow or yellow (2.5Y6/6 or 2.5Y7/8) non-calcareous clay with massive structure which is slowly permeable, locally interbedded with reddish-yellow mottled clay loam. Where the clay starts immediately beneath the topsoil, the WC is IV. Where stony material extends deeper the WC is III but in both cases the profiles are limited to Subgrade 3b due to wetness.

3.17 In the south and along the eastern edge of Parcel 1, the topsoil is brown (10YR4/3 or 10YR4/4) calcareous silty clay or heavy clay loam. The stone content varies between around 8% and 30% and includes high proportions of limestone. The topsoil and subsoil are well structured and pass to very calcareous, very stony material (gravel or limestone) at depths of between 40 and 60cm. In the north-west plateau, thin gravel overlies clay. All of these soils are well drained in WC I and are limited to Subgrade 3a due to droughtiness.

3.18 Across the central portion of Parcel 1 the topsoil is brown or yellowish brown (7.5YR4/4 or 7.5YR5/4) medium clay loam, which is non-calcareous and includes around 4%-15% pebbles. Acidic patches are common. Upper subsoil is yellowish-brown or strong brown clay loam with moderately developed, coarse angular blocky structures, overlying redder (5YR4/6) silty clay or heavy silty clay loam subsoil starting at variable depth, with some mottling evident. The subsoil is friable with a moderate, fine subangular blocky structure, transitioning to weakly developed angular blocks. Limestone usually occurs deeper than 80cm and locally the lower subsoil is deep slowly permeable clay. Compaction was observed in the upper layers but the profiles are moderately well drained (WC II or I) resulting in Grade 2. In the north of Parcel 1, the topsoil is sandy silt loam which passes to a gravelly layer below a depth of 60cm (WC I). Most of these profiles have good moisture reserves and are also classified as Grade 2.

3.19 In Observations 637 and 639, the topsoil is dark brown (10YR4/2) sandy clay loam over a sandy clay loam upper subsoil and either a sandy clay or sandy loam lower subsoil. Both profiles contain ochreous mottling within a depth of 40cm and are of WC II or III, depending on whether the lower subsoil is slowly permeable. Profiles are classified as Grade 2 or Subgrade 3a depending on the severity of the overriding wetness limitation.

Parcel 2 (Observations 77-92 on Figure RAC/9962/1B)

3.20 Land in the east and south of Parcel 2 is most limited by wetness and flood risk whilst land in the centre and north is limited most by droughtiness.

3.21 Across the land in the east and south, the topsoil is primarily dark greyish brown (10YR4/2) clay of 23cm average depth. In the south, the topsoil is non-calcareous and in the east is slightly to moderately calcareous. The stone content is very low at around 1-3%.

3.22 The upper subsoil comprises grey (10YR6/1 or N5/) clay. The upper subsoil is stoneless or very slightly stony, is mottled, gleyed and slowly permeable. Similar to the topsoil, in the east the upper subsoil is non-calcareous and in the south is slightly to moderately calcareous.

3.23 In the south-east there is a lower subsoil of black (10YR2/1) organic clay which was saturated at the time of survey. The soils are all within Flood Zone 3. All are in WC IV and limited by wetness and flood risk to Subgrade 3b.

3.24 In two locations in the south (Observations 79 and 80), there is an upper subsoil of mottled, brown (10YR5/3) heavy clay loam which passes to mottled, brown clay subsoil, or yellowish brown calcareous sandy loam. The clay and heavy clay loam subsoil horizons are gleyed but are permeable and the profiles are in WC II. The area is on the edge of Flood Zone 3 and the profiles

are limited by wetness and flood risk to Subgrade 3a. Observation 91a is mapped in accordance with this soil type and comprises unmottled heavy clay loam to a depth of 79cm at which depth the profile stops over bedrock. This observation is WC I and has a slight deficit in available water, restricting the profile to Grade 2 by both wetness and droughtiness.

3.25 In the centre of Parcel 2, the topsoil is typically dark brown or dark greyish brown (10YR3/3 or 10YR4/2) clay or heavy clay loam, or in Observation 85 is sandy clay loam. The average depth is 26cm. The stone content is variable: on the west side there is 30%-35% total stone, mostly comprising limestones. Elsewhere the topsoil is only slightly stony.

3.26 The upper subsoil is dark yellowish brown, brown or yellowish brown (10YR4/4, 10YR5/3 or 10YR5/4) clay, with one sandy clay loam. The upper subsoil is slightly stony and slightly or moderately calcareous in most cases.

3.27 The upper subsoil passes to a lower subsoil of very calcareous, dark yellowish brown (10YR4/6) loamy medium sand and limestone gravel at an average depth of just 38cm. The profiles are well drained, in WC I, and are limited by droughtiness to Subgrade 3a or Subgrade 3b, depending on the upper subsoil stone content and the depth to sand and gravel.

3.28 In the north of the parcel, the limestone gravel within the subsoil becomes shallower over the limestone bedrock. Where the limestone gravel is thin or lacking within the subsoil, observations are mapped within the 'shallow soils over limestone' unit on Figure RAC/9962/2. These soils are restricted to Subgrade 3a or 3b by droughtiness depending on the depth over limestone.

3.29 Land in the south of Parcel 2 was surveyed by ADAS on behalf of MAFF[8] in 1992. As the ALC is concerned with the long-term, inherent physical properties of land and soil, the results of this survey remain valid and this land has been classified mostly as Subgrade 3b, with smaller areas of Grade 2 and Subgrade 3a in the south-west.

Parcel 3 (Observations 93-217 and 640-648 on Figure RAC/9962/1B)

3.30 Parcel 3 has a range of topographic characteristics including a hill summit, some steeper valley slopes over 7 degrees which are limiting to Subgrade 3b, mainly in the west of the Parcel but

[8] **ADAS (1992).** *Land North-East of Eynsham, Oxfordshire. Reconnaissance survey, ALC Map and Report. MAFF reference 3305/017/91.* Agricultural Land Classification detailed Post 1988 ALC survey, Eynsham, North East - ALCR01791 (naturalengland.org.uk)

also in the north, and low-lying land in a floodplain. These features give rise to differing soil types.

3.31 Across the flatter land north and west of Cassington and around Purwell Farm, the topsoil is mainly sandy clay loam or heavy clay loam, although there are instances of medium clay loam and clay. The topsoil is dark brown or dark greyish brown (10YR3/3 or 10YR4/2), moderately or very calcareous and is slightly or moderately stony, with up to 30% limestone.

3.32 The subsoil either comprises loamy medium sand to depth, occasionally with a thin transitional layer of medium sandy loam, or otherwise there is an intermediary upper subsoil horizon with textures similar to the respective topsoil texture. In both types the upper subsoil is brown, dark yellowish brown or yellowish brown (10YR4/3, 10YR4/4, 10YR4/6, 10YR5/4 or 10YR5/6) and is mainly very calcareous. Where the texture is fine loamy as the topsoil, the stone content is between 10% and 20%, including a larger proportion of limestone. These intermediary horizons typically have a fine to medium subangular structure and are friable. The loamy medium sand subsoil is substantially stonier, with a volume content typically of 40% to 50%. Where this subsoil type is recorded, it has a fine to medium coarse granular structure which is very friable.

3.33 Most of the soil profiles are limited by droughtiness to Subgrade 3a. Where the profiles pass to loamy medium sand subsoil within around 26cm depth, there is a more severe droughtiness limitation to Subgrade 3b. In two isolated locations (Observations 131 and 139), the sandy material starts at depths of 62cm and 90cm, giving a less severe droughtiness limitation to Grade 2.

3.34 The soil characteristics along the western edge of Parcel 3 reflect the Flood Zone. The topsoil is dark brown or dark greyish brown (10YR3/3 or 10YR4/2) clay or heavy clay loam of 22cm average depth. The stone content is low, typically around 2%-3%. The southern and northern topsoils are non-calcareous but the central topsoils are moderately calcareous.

3.35 The subsoil horizons consistently comprise stoneless, slightly or moderately calcareous gleyed clay which in most locations is slowly permeable immediately beneath the topsoil. The clay is grey or greyish brown (including 10YR5/1, 10YR5/2, 10YR6/1, 2.5Y5/2 and N5/) typically passing to grey (10YR6/1) at depth. Subsoils typically have a very coarse prismatic or angular blocky structure. Commonly clay along within the river flood plain has a more plastic consistency, although generally the consistency is very firm. The soil profiles are in WC IV or occasionally WC III and are limited by wetness and flood risk to Subgrade 3b.

3.36 A subtype similar to those described above is present throughout Parcel 3 and includes predominantly dark greyish brown (10YR4/2), slightly stony clay topsoil which is non-calcareous. There are instances of heavy clay loam.

3.37 The upper subsoils are often brown or light olive brown (10YR5/3 or 2.5Y5/3) mottled clay. In most locations the upper subsoil is gleyed but permeable. In these instances the structure is observed as medium subangular blocky. This passes to grey lower subsoil clay as found in the floodplain soils, which is stoneless and slowly permeable and has a firm coarse prismatic structure with some more angular peds observed. Most of the profiles are in WC IV with the remainder in WC III. With clay topsoil there is a wetness limitation to Subgrade 3b across all profiles. Profiles of WC III with a heavy clay loam topsoil are limited to the extent.

3.38 All clayey profiles of WC III or IV within and outside the floodplain are mapped on Figure RAC/9962/2 in the 'imperfectly to poorly draining clayey soils WC III-IV' category.

3.39 A variation of this type occurs mainly in the north and south-east of Parcel 3 in which the subsoils are only gleyed below a depth of 40cm and become slowly permeable at depths greater than around 50cm. These profiles are in WC II but with clay topsoils continue to be limited by wetness to Subgrade 3b. Those of WC II with a heavy clay loam topsoil are restricted to Subgrade 3a.

3.40 Identified in the south-west and roughly in a band across the parcel to the north of Purwell Farm, this soil type includes slightly to moderately stony heavy clay loam topsoil which is dark brown or dark greyish brown (10YR3/3 or 10YR4/2). There are a few instances of clay topsoil and one of sandy clay loam (Observation 178). In the south-west the topsoil is calcareous whilst in the northern band the topsoil is primarily non-calcareous.

3.41 The upper subsoil is clay or heavy clay loam which is brown (10YR4/3 or 10YR5/3), dark yellowish brown (10YR4/4 or 10YR4/6) or yellowish brown (10YR5/4 or 10YR5/6) and is variably calcareous. In most profiles the upper subsoil is only slightly stony but there are instances of moderate stoniness (Observations 111, 180 and 192). There is typically no mottling. The upper subsoil is permeable and has a medium subangular blocky structure, readily breaking down.

3.42 The profiles pass to clay or heavy clay loam lower subsoils which are also typically slightly stony. Most are yellowish brown (10YR5/4, 10YR5/6 or 10YR5/8). Ochreous mottles and manganese concretions are more common but no gleying is evident. These lower subsoils, similar to the upper subsoils, have a medium subangular blocky structure. In two isolated locations

(Observations 117 and 180) the clay passes to a lower subsoil of slowly permeable grey or greenish grey (10YR5/1 or N5/1) clay.

3.43 The soil profiles are adequately drained throughout and with no significant gleying, they are in WC I. The profiles are limited equally by droughtiness and/or wetness to Grade 2, other than where the topsoil is non-calcareous clay where they are limited by wetness to Subgrade 3a.

3.44 Profiles assessed as WC I-II are mapped on Figure RAC/9962/2 as 'well drained to moderately drained clayey or loamy soils WC I-II'.

Parcel 4 (Observations 218-224 on Figure RAC/9962/1B)

3.45 Parcel 4 is situated within a flood zone. The topsoil resource comprises variably calcareous dark brown (10YR3/3) clay of 29cm average depth. Most of the topsoil is free of stones.

3.46 In the north of Parcel 4 there is an upper subsoil of permeable greyish brown or brown (10YR5/2 or 10YR5/3) clay which is moderately calcareous but in all other locations the topsoil directly lies over gleyed and slowly permeable clay which in most instances is grey (10YR5/1). The subsoil typically becomes more heavily mottled with depth, and in all cases is slowly permeable.

3.47 One profile (Observation 224) is in WC III; all others are in WC IV. The land is limited by wetness and flood risk to Subgrade 3b.

Parcel 5 (Observations 225-264 and 649-650 on Figure RAC/9962/1B)

3.48 At the time of survey the land was cropped with beans in the northern fields, wheat in the centre and a new grass ley in the south. The east was stubble and long leys.

3.49 The land is intersected by deep functioning ditches and the groundwater level was controlled at the time of sampling.

3.50 At the southern and western edges and in the north, there is a silty clay or heavy clay loam topsoil which is brown or yellowish brown (10YR4/3 or 10YR5/4). The depth is between 22cm and 29cm. The topsoil is moderately or very calcareous and slightly to moderately stony. In some places there is a reddish yellow or very pale brown (7.5YR6/6 or 10YR6/4) heavy clay loam or silty clay subsoil of up to 13cm thickness and with a brashy limestone content of up to 25%. All profiles pass to Cornbrash limestone bedrock at an average depth of 32cm. The profiles are limited by droughtiness and sometimes also by depth to Subgrade 3b.

3.51 A similar but deeper soil type is present mainly in the south of Parcel 5 but, with the limestone present from an average depth of 46cm, there is a less severe droughtiness limitation to Subgrade 3a. The topsoil is also locally medium clay loam.

3.52 The other calcareous soil type is found in the north of Parcel 5. The topsoil is dark yellowish brown or olive brown (10YR4/4 or 2.5Y4/4) heavy clay loam or silty clay. Subsoil horizons are of similar textures but become mottled and greenish grey (10Y7/1 or N6/1) with depth. The subsoils are free of stones, gleyed and slowly permeable. The profiles are in WC II or III and are limited by wetness to Subgrade 3a.

3.53 The main non-calcareous soil type is found across much of Parcel 5. The topsoil is slightly compact but friable heavy silty clay loam which is dark yellowish brown or yellowish brown (10YR4/4, 10YR4/6 or 10YR5/4). This passes to a slightly stony or stoneless, mainly heavy silty clay loam upper subsoil which is dark yellowish brown, yellowish brown or brownish yellow (10YR4/6, 10YR5/4, 10YR5/6 or 10YR6/6). This transitions to a brown or strong brown (7.5YR5/4 or 7.5YR5/6) lower subsoil of heavy silty clay loam or silty clay lower subsoil in most cases, which is commonly mottled. In localised areas there is limestone present from depths of between 80cm and 100cm. The profiles are in WC I and limited mostly to Grade 2 by droughtiness and workability.

3.54 Across the east of Parcel 5, the soils are alluvial. The topsoil contains few or no stones and the texture varies from heavy clay loam to clay. In the grassland, the topsoil structural condition is good with 10% organic matter.

3.55 The subsoil is clayey, of various colours and is often but not always mottled/gleyed, and is occasionally slowly permeable. The clay can extend to depth but more frequently lies over calcareous sand and gravel (at as little as 50cm depth).

3.56 Depending on depth to the slowly permeable layer, if present, the WC varies from II to IV. The land is classified as Subgrade 3b in the eastern part regardless of the WC due to the heavy topsoil textures.

3.57 Groundwater was encountered at between 50cm and 100cm depth but seems to be adequately controlled. The land alongside the river is situated within Flood Zone 3 and has been restricted to Subgrade 3b in line with the potential for flooding.

Parcel 6 (Observations 265-273 and 651-652 on Figure RAC/9962/1B)

3.58 In the very south of Parcel 6, at Observation 265, the soil profile comprises a brashy silty clay topsoil to a depth of 25cm. The topsoil is dark yellowish brown (10YR4/4), moderately calcareous and moderately stony, to include around 5% hard stone and 15% limestone. Limestone is present at around 30cm depth, resulting in an equal droughtiness and depth limitation to Subgrade 3b.

3.59 In the south and west the topsoil is non-calcareous, heavy silty clay loam which is brown or yellowish brown (7.5YR4/3, 7.5YR5/3, 7.5YR5/4, 10YR5/3 or 10YR5/4) and of 26cm average depth. The stone content is low, typically around 4% by volume.

3.60 The upper subsoil is mainly heavy silty clay loam in the south, or clay or silty clay in the west, which is brown, light brown or pale brown (7.5YR5/3, 7.5YR6/4 or 10YR6/3). The stone content continues to be low at around 5%. Mottles are usually present and sometimes result in gleying. The lower subsoils are clay or silty clay and are mainly brown (7.5YR5/4, 7.5YR5/4 or 10YR5/3) but also occasionally strong brown or light brown (7.5YR4/6 or 7.5YR6/3). There is a moderate to poor structure with affected permeability and variable mottling. In the south, limestone occurs within 80cm depth, and across the west is slightly deeper. Profiles range from WC II in the south-west to WC IV in the west. With heavy topsoils, most are limited by wetness to Subgrade 3b, other than the profile of WC II which is limited to Subgrade 3a.

3.61 In the east and north of Parcel 6, the topsoil is calcareous heavy clay loam which is brown or dark yellowish brown (10YR4/3 or 10YR4/4). It is slightly to moderately stony, including hard stone and limestone. The topsoil has a loose, fine blocky and coarse granular structure and is well rooted.

3.62 Upper subsoil comprises yellowish brown or brown (10YR5/4 or 7.5YR5/4) heavy clay loam which is slightly or moderately calcareous. The stone content increases slightly with depth. A moderately calcareous, yellow (2.5Y7/6) clay lower subsoil has a moderate to poor structure which reduces permeability. Limestone bedrock is present from depths between 45cm and 90cm. The profiles are in WC I or II and are mainly limited by droughtiness to Subgrade 3a. Where the limestone is at greater depth in the north-east (Observation 272), the droughtiness limitation is less severe, to Grade 2. No limestone was present within Observation 652, instead this profile is limited to Grade 2 by wetness.

Parcels 7, 8 and 9 (Observations 274-280 on Figure RAC/9962/1C)

3.63 The water meadows of Parcels 7, 8 and 9 are all mapped as Flood Zone 3 and all share one main soil type, which can be subdivided by wetness class.

3.64 The topsoil is organic clay or silty clay which is most commonly olive brown (2.5Y4/3) but with instances of yellowish brown (10YR5/4), dark greyish brown (2.5Y4/2) and light olive brown (2.5Y5/3). The average depth is 24cm. The topsoils generally become more strongly calcareous with distance north. The topsoil is friable and well rooted with granular structure.

3.65 In most profiles, the upper subsoil is light yellowish brown or light olive brown (2.5Y5/6 or 2.5Y6/6) calcareous clay with little mottling and some organic matter inclusion, locally passing to less permeable, mottled, light brownish grey (2.5Y6/2) clay within 50cm and groundwater starting at depths of between 80cm and 100cm. The profiles are in WC II or III and with organic clay topsoil. Observation 279 is limited by wetness to Subgrade 3a. The remaining observations are restricted to Subgrade 3b by flood risk and are located in Flood Zone 3.

3.66 In Parcel 8, the topsoil/upper subsoil interface is greyish brown (2.5Y5/2) with many mottles and firm, medium subangular blocks. The main subsoils are light brownish grey to light yellowish brown (2.5Y6/2 or 2.5Y6/3) clay with a moderate, firm coarse angular to prismatic structure. The subsoils transition to greenish grey or light greenish grey (10Y6/1 or 10Y7/1) at variable depth. The profiles are slowly permeable within a depth of 40cm and are in WC IV. There is a wetness (and flood risk) limitation to Subgrade 3b.

Parcel 10 (Observations 281-288 on Figure RAC/9962/1C)

3.67 There is one main topsoil type in Parcel 10 which can be subdivided according to wetness class. The topsoil comprises dark greyish brown (10YR4/2) clay which is occasionally organic. The topsoil is variably calcareous and typically stoneless or slightly stony, although at Observations 283 and 288 there is substantially more stone, with the volume measuring around 30% in total and 20-25% larger than 2cm. The average topsoil depth is 27cm.

3.68 The upper subsoil is also clay which is brown (10YR5/3) in most places and occasionally grey or greyish brown (10YR6/1 or 2.5Y5/2), and passes to grey (10YR5/1 or 10YR6/1) clay with depth. The subsoil is variably calcareous and usually stoneless to slightly stony, other than where the corresponding topsoil is moderately stony where the stone content is around 20%.

3.69 In the west of Parcel 10, the upper subsoils are permeable and only sometimes gleyed, and only become slowly permeable at depth. The profiles in the west are in WC II and the main limitations are topsoil stone content (at Observations 283 and 288) or wetness which limit to Subgrade 3b.

3.70 Elsewhere in Parcel 10 the subsoil is gleyed and usually slowly permeable immediately beneath the topsoil and the profiles are in WC IV. With clay topsoil there is a wetness limitation to Subgrade 3b. One profile in WC III with organic clay topsoil is limited most by flood risk and is also classified as Subgrade 3b.

Parcel 11 (Observations 289-305 on Figure RAC/9962/1C)

3.71 The topsoil in Parcel 11 is mostly dark greyish brown (10YR4/2) clay or heavy clay loam. It is predominantly slightly stony and non-calcareous or occasionally slightly calcareous. Ochreous mottles are commonly seen in the topsoil which is gleyed in the east of Parcel 11.

3.72 Most of the subsoil material of the main soil type comprises greyish brown or grey (10YR5/2 or 10YR6/1) clay with many distinct ochreous mottles and which is gleyed and slowly permeable. In areas there is a thin intermediary upper subsoil of mottled brown (10YR5/3) clay which is gleyed but permeable. The profiles are in WC IV, or occasionally III, and are limited by wetness to Subgrade 3b.

3.73 Of the other profiles, the subsoil characteristics mainly include non-calcareous to very slightly calcareous, yellowish brown (10YR5/8) clay, with manganese nodules or occasionally ochreous mottles. The subsoil is slightly stony and permeable, sometimes passing to grey (10YR6/1) clay as in the main soil type. The profiles are in WC I or II and generally limited by wetness to Grade 2 or Subgrade 3a respectively.

3.74 At Observation 295, the subsoil is very calcareous, very stony (limestone gravel) dark yellowish brown (10YR4/6) medium sandy loam. The profile was only able to be observed to 45cm depth due to the high proportion of stone. It is assumed that the medium sandy loam material continues to moderate depth before passing to the clay characteristic over the rest of the parcel. The profile is assessed as WC I-II and is limited equally by soil wetness and droughtiness to Subgrade 3a.

Parcel 12 (Observations 306-312 on Figure RAC/9962/1C)

3.75 The topsoil is dark brown or dark greyish brown (10YR3/3 or 10YR4/2) heavy clay loam or clay. The average depth is 24cm but ranges from 10cm to 35cm. Most of the topsoil is friable and free of stones. Few mottles are occasionally observed.

3.76 On the lower slopes in the west of Parcel 12, the upper subsoil is greyish brown (10YR5/2 or 2.5Y5/2) and on the upper slopes in the east is brown or olive brown (10YR5/3 or 2.5Y4/3). The upper subsoil comprises mottled clay which is firm and free of stone. Generally on the eastern side, the upper subsoil is moderately well structured and is permeable, whilst in the west it is poorly structured and slowly permeable.

3.77 With the exception of the northernmost profile (Observation 312), the upper subsoils in Parcel 12 pass to grey or light olive brown (10Y5/1 or 2.5Y5/3) clay which is firm, gleyed and slowly permeable. The profiles are in WC III or IV depending on the permeability of the upper subsoil. With heavy clay loam and clay topsoil there is a wetness limitation in all profiles to Subgrade 3b.

3.78 Observation 312 has a permeable upper subsoil that extends to 70cm depth, beneath which is the slowly permeable clay. The profile is in WC II and is limited by wetness to Subgrade 3a.

Parcel 13 (Observation 313 and 654-657 on Figure RAC/9962/1C)

3.79 The topsoil is dark brown (10YR3/3) heavy clay loam. The topsoil is moderately stony at around 25% by volume and includes large stones which prevented progress of the auger beyond the topsoil. It is possible that this area has previously been subject to disturbance.

3.80 Assuming a slightly stony clay subsoil with reduced permeability in line with surrounding observations, there is likely to be a droughtiness limitation to Subgrade 3a due to the stone content reducing available water; however the heavy topsoil texture results in a more severe limitation to Subgrade 3b due to wetness.

Parcel 14 (Observations 314-333 and 653 on Figure RAC/9962/1C)

3.81 The topsoil in Parcel 14 is heavy clay loam or clay which is dark greyish brown or occasionally brown (10YR4/2 or 10YR4/3). The average depth is 26cm. The topsoil is slightly stony and is firm, with a weakly developed, medium angular blocky structure. Rare fine roots and visible channels and macropores are observed. There is an abrupt boundary to the upper subsoil.

3.82 Other than at Observation 320, the upper subsoil is clay and is mostly brown (10YR5/3) or otherwise greyish brown or light olive brown (10YR5/2 or 2.5Y5/3). The clay is firm or very firm, sometimes plastic, mottled and has a coarse angular blocky structure with rare fine roots and fissures.

3.83 The upper subsoil transitions to grey or greenish grey (10YR5/1 or 10Y5/1) clay lower subsoil across most of Parcel 14. In the west, there are instances of yellowish brown and brownish yellow subsoil (10YR5/4 and 10YR6/6). Rare fine roots were observed to around 50cm depth in

an excavated pit. The structure is weak and massive and the consistency is very firm. The lower subsoils are mostly non-calcareous but are moderately or very calcareous in a roughly crescent shape through Parcel 14.

3.84 The main soil type is poorly drained in WC IV and is limited by wetness to Subgrade 3b.

3.85 Observations 316 and 318 are better drained and in WC III but remain limited by wetness to Subgrade 3b. Observation 320 and 653 are in WC II with a wetness limitation to Subgrade 3a.

Worton (Observations 360-387 on Figure RAC/9962/1B)

3.86 The topsoil comprises heavy clay loam or clay of 29cm average depth, ranging from 20cm to 36cm. It is most often dark greyish brown or olive brown (10YR4/2, 2.5Y4/2 or 2.5Y4/2), slightly stony and non-calcareous. The structure is moderately developed and forms fine angular blocky peds. There is a straight, abrupt boundary to the upper subsoil.

3.87 The upper subsoil is brown or greyish brown (10YR5/2, 10YR5/3, 2.5Y5/2, 2.5Y5/3) clay which is distinctly mottled and gleyed. The clay is firm or plastic forming weakly developed, medium and coarse angular blocks which inhibit drainage. In the south of the parcel the stone content of the upper subsoil is moderate at 25%-30% but elsewhere is low at up to 10%. At Observations 368 and 369, the subsoil horizons are increasingly calcareous with depth.

3.88 The lower subsoils are similarly greyish brown or brown which some grey and light brownish grey (e.g. 10YR5/1 and 2.5Y6/2). Most are stoneless or only very slightly stony. The lower subsoil clay is plastic, gleyed and weakly developed. Profiles are in WC IV or occasionally WC III and, with non-calcareous heavy topsoils, are limited by wetness to Subgrade 3b.

3.89 One profile (Observation 367) differs. The upper subsoil is brown (7.5YR4/2) sandy clay loam which is moderately stony (25%) and mottled. The profile was observable to a depth of 60cm. No impermeable material was found within this depth. The profile is in WC II and limited by wetness to Subgrade 3a.

Parcel 15 (Observations 388-451 on Figure RAC/9962/1C)

3.90 Mainly across the north of the parcel, the topsoil is typically brown (7.5YR4/3, 10YR4/3), calcareous silty clay or heavy (silty) clay loam with 10-25% stone, predominantly limestone. The topsoil has excellent granular structure with abundant roots. There is occasionally a thin subsoil layer of moderately stony, yellowish brown or brownish yellow (10YR5/4, 10YR5/6 or 10YR6/6) heavy clay loam or silty clay but in most locations the topsoil lies directly over very stony or extremely stony material (50-75% limestone). Locally, large slabs of limestone occur within a

depth of 30cm. These profiles are well drained but limited to Subgrade 3b by both depth and droughtiness.

3.91 Mainly found along the north-eastern edge and in the very north, the soil characteristics are similar to those described above but the upper subsoil, present in all cases, is only slightly to moderately stony. Limestone is present from an average depth of 44cm. The profiles are limited by droughtiness, and sometimes also by depth, to Subgrade 3a.

3.92 Found centrally within Parcel 15, the soil profiles include slightly stony, non-calcareous, dark yellowish brown (10YR4/4) clay loam topsoil. The average depth is 25cm. The upper subsoil is brownish yellow (10YR6/6) or strong brown (7.5YR5/6) clay loam or silty clay, locally mottled. At depths of between 35cm and 60cm, this lies over limestone or a very stony sandy clay loam (Head) possibly overlying Kellaways Clay at a depth of 80cm. Within a few peripheral profiles, the slightly stony clay loam continues to depth.

3.93 The soil profiles are well drained or moderately well drained (WC I or II) and are mostly limited to Subgrade 3a by wetness and/or droughtiness (depending on the presence of and depth to very stony material or limestone).

3.94 Across the south and in some of the north-west of Parcel 15, there are deep clayey soils. The topsoil is commonly olive brown or light olive brown (2.5Y4/3 or 2.5Y5/3), slightly stony, non-calcareous heavy clay loam or clay.

3.95 The upper subsoils are also non-calcareous heavy clay loam or clay and are greyish brown (10YR5/2, 2.5Y5/2), light olive brown (2.5Y5/3, 2.5Y5/4) or light yellowish brown (2.5Y6/3). The upper subsoils are slightly stony, mottled and gleyed but permeable or moderately permeable. The upper subsoils pass to slowly permeable, light grey or light greenish grey (2.5Y7/2, N7/1 or 10Y7/1) clay at depths between 32cm and 50cm. Where the slowly permeable clay starts within a depth of 40cm, the profiles are WC IV, but otherwise WC III, and all are limited by wetness to Subgrade 3b, with a heavy topsoil. Observation 402 is assessed as Subgrade 3a with a medium clay loam topsoil.

Parcel 16 (Observations 452-462 on Figure RAC/9962/1C)

3.96 The topsoil comprises heavy clay loam or occasionally clay which is primarily dark greyish brown or brown (10YR4/2 or 10YR4/3). The topsoil is moderately to very calcareous in most of the Parcel but non-calcareous along the north-eastern edge. The topsoil is slightly to moderately stony which in places includes larger limestone stones.

3.97 At Observations 453 and 456, the topsoil lies directly over limestone. In most other locations, there is a very thin transitional upper subsoil horizon of brown, strong brown or yellowish brown (7.5YR5/4, 7.5YR5/6, or 10YR5/4) clay or occasionally heavy clay loam which is very calcareous and moderately to very stony with limestone fragments. The average depth to limestone in these profiles is 30cm. In both cases, there is an equal limitation from depth and droughtiness to Subgrade 3b.

3.98 At Observations 454 and 462, the upper subsoil is strong brown (7.5YR4/6 or 7.5YR5/8) non- to slightly calcareous, clay or heavy clay loam. The upper subsoil is stoneless to very slightly stony. The lower subsoil characteristics are similar but may be more calcareous, and pass to limestone at an average depth of 50cm. These profiles are limited by depth and droughtiness to Subgrade 3a.

3.99 In one profile (Observation 457), observed to depth, there is an additional lower subsoil horizon from 70cm depth comprising greenish grey (N5/1) gleyed and slowly permeable clay. The profile is in WC I to II and is limited by wetness to Subgrade 3a.

Parcel 17 (Observations 463-469 and 658-659 on Figure RAC/9962/1C)

3.100 Along the western and northern edge of the parcel the topsoil is yellowish brown or dark yellowish brown (10YR4/6 or 10YR5/4) heavy clay loam or clay of 25cm average depth. The topsoil is moderately calcareous, except in Observation 469, and slightly stony.

3.101 The subsoil is slightly or moderately stony, very calcareous (except in Observation 469), reddish yellow, brownish yellow or strong brown (7.5YR6/6 or 10YR6/6 or 7.5YR4/6) clay with some faint ochreous or common grey mottles. Limestone starts at depths of between 48cm and 60cm. The profiles are limited to Subgrade 3a due to droughtiness.

3.102 Along the eastern side of the parcel, the topsoil is brown (10YR4/3) heavy clay loam. The topsoil is non-calcareous and slightly stony. Upper subsoil horizons are generally clayey, non-calcareous and variably mottled but permeable. At Observation 464 there is a lower subsoil of moderately permeable clay with sand which extends to depth. This profile is WC I to II and is limited by wetness to Subgrade 3a. At Observation 466 the soil passes to limestone with some limestone gravel. This profile is affected most by droughtiness and is limited to Subgrade 3a.

3.103 Observation 463 to the south-west comprises heavy clay loam over medium clay loam. Within this profile, the lower subsoil comprises slightly stony, ochreous (7.5YR6/8) and grey mottled sandy (clay) loam to depth, which is assessed as WC II and classified as Grade 2.

3.104 Observation 658 is broadly similar to Observation 463 except that it contains slowly permeable sandy clay within the lower subsoil. This profile is of WC III and classified as Subgrade 3a.

3.105 One profile (Observation 468) includes clay textures throughout. The subsoil is light grey (5Y7/2 to N7/1), stoneless and slowly permeable from a depth of 35cm. The profile is poorly drained, in WC IV, and is limited by wetness to Subgrade 3b.

Lionza North (Observations 470-629 and 660-669 on Figure RAC/9962/1D)

3.106 Soils within Lionza North are predominantly shallow over limestone. Within this main soil unit, there are isolated patches of deeper clayey soils, some over limestone to a depth greater than 60cm.

3.107 The topsoil of the main soils comprises mostly calcareous clay or heavy clay loam with some silty clay and silty clay loam in the south. The topsoil is typically very dark greyish brown (10YR3/2), dark brown (10YR3/3) or brown (10YR4/3, 7.5YR4/4) with some more yellowish or olive colouring. The topsoil mostly has a fine to medium subangular blocky structure and is friable. Limestone fragments of variable size are present in the topsoil and, where the percentage of stones larger than 2cm is greater than 15%, the profiles are limited to Subgrade 3b.

3.108 The upper subsoil mostly comprises heavy clay loam or clay, which is brown (10YR5/3, 7.5YR4/4, 7.5YR5/4), yellowish brown (10YR5/4), strong brown 7.5YR4/6), pale brown (10YR6/3). The upper subsoil commonly has relatively high levels of fractured limestone, up to 60%, especially where the depth over limestone is shallow. There is a discernible upper subsoil horizon in many profiles across the parcel. The upper subsoil lies over the limestone bedrock.

3.109 These profiles drain freely into the bedrock and are WC I. Profiles are restricted to Subgrade 3b or Subgrade 3a depending on the depth to the bedrock and the volume of stone throughout the profile.

3.110 There are isolated patches of deeper clayey soils within the main soil unit. These topsoils comprise mostly calcareous, dark brown (10YR3/3), dark yellowish brown (10YR4/4), olive brown (2.5Y4/3) or light olive brown (2.5Y5/3) clay or, to a lesser extent, silty clay or heavy silty clay loam.

3.111 The topsoil lies over a mostly calcareous clay subsoil which has locally varied characteristics. Profiles with poorly structured, slowly permeable subsoils within a relatively shallow depth and subsoil gleying are assessed as WC III-IV. These profiles are classified as Subgrade 3a or Subgrade 3b depending on the extent of the wetness limitation.

3.112 Better drained profiles with permeable subsoils or a greater depth to a slowly permeable horizon are assessed as WC I or II and are classified as Grade 2 or Subgrade 3a. Some profiles within this type are also limited by droughtiness to Subgrade 3a where limestone is recorded at depth within the soil profile and subsoil stone is relatively high.

Overall site ALC

3.113 The ALC distribution within the site is shown in Figure RAC/9962/3 and the areas of each grade are given in Table 2.

Table 2: ALC areas

Grade	Description	Area (ha)	%
Grade 1	Excellent quality	2	0.15
Grade 2	Very good quality	97	7.4
Subgrade 3a	Good quality	406	30.8
Subgrade 3b	Moderate quality	810	61.5
Non-agricultural		2	0.15
Total		1,317	100.0

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Appendix 1: Laboratory Data

Parcel #	Profile No.	pH	P		K		Mg		Sand	Silt	Clay	OM	Texture
			mg/l	Index	mg/l	Index	mg/l	Index	%	%	%	%	
Denmans Farm	7, 8, 10	8.1	26.4	3	253	3	206	4	16	32	52	3.2	C
Denmans Farm	20-21	7.2	32.6	3	193	2+	232	4	15	37	48	2.9	C
Denmans Farm	Near 23	5.1	-	-	-	-	-	-	-	-	-	-	-
Parcel 1	54	7.2	8.8	0	153	2-	54.5	2	25	34	41	4.1	C
Parcel 1	59/63	5.8	8.2	0	74.5	1	38.5	1	29	52	19	2.2	MCL
Parcel 2	83	6.9	12.8	1	134	2-	59.7	2	28	32	40	4.1	C
Parcel 3	100	7.9	20.8	2	151	2-	28.8	1	48	25	27	3.9	HCL
Parcel 3	130	7.8	15.6	2	157	2-	47	1	31	33	36	3.6	C
Parcel 3	155	8.3	12.4	1	130	2-	33.4	1	62	18	20	4.4	SCL
Parcel 3	197	7.4	6.4	0	195	2+	64.8	2	21	34	45	4.0	C
Parcel 5	242	6.8	9.2	0	86.6	1	38.8	1	24	47	29	3.1	HCL
Parcel 5	254	7.5	9.4	0	154	2-	102	3	3	25	72	9.5	oC
Parcel 6	268	7.9	10	1	174	2-	39.6	1	33	33	34	4.2	HCL
Parcel 8	277-278	7.4	18	2	172	2-	101	3	2	26	72	10.0	oC
Parcel 10	286	7.7	14.8	1	151	2-	91.4	2	6	33	61	9.7	oC
Parcel 11	293	5.9	7.4	0	102	1	56.4	2	24	44	32	3.6	HCL
Parcel 14	325	7.8	28.8	3	208	2+	129	3	9	33	58	4.0	C
Worton	386	7.9	91.2	5	188	2+	97.8	2	17	32	51	4.5	C
Parcel 15	399	6.6	35.6	3	120	1	55.1	2	35	37	28	4.0	HCL
Parcel 15	438, 442	7.7	60.6	4	290	3	63.6	2	19	45	36	7.2	OC/ZC
Parcel 15	450,451	7.8	27.2	3	299	3	52	2	17	46	22	7.6	HCL
Lionza North	598	-	-	-	-	-	-	-	27	38	35	-	C/HCL
Lionza North	605	-	-	-	-	-	-	-	23	30	47	-	C
Lionza North	614	-	-	-	-	-	-	-	22	31	47	-	C
Lionza North	628	-	-	-	-	-	-	-	7	33	60	-	C

* - Indicates not tested

Appendix 2: Soil Profile Summaries and Droughtiness Calculations

Wetness / workability limitations are determined according to the methodology given in Appendix 3 of the ALC guidelines, MAFF 1988

Droughtiness calculations are made according to the methodology given in Appendix 4 of the ALC guidelines, MAFF 1988.

Grades are shown for drought, wetness and any other soil or site factors which are relevant. The overall Grade is set by the most limiting factor and shown on the right.

445925 205378

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3

hard

Climate Data	
MDwheat	110
MDpotato	103
FCD	136
AAR	646

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>64cm	37-64cm	<37cm	
SPL within 80cm, gleying at 40-70cm	>46cm	<46cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1427 D^o
Limitation
Grade 1
75 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
1	T	0	18	hZCL	n	2.5Y4/3						34	34	n	n	*IV*	3b	**3b**	WE
		18	32	ZC	n	2.5Y5/3	Fe*	many				21	21	y	n				
		32	63	ZC	n	2.5Y5/3	Fe*	many			poor	31	37	y	y				
		63	105	C	mod	N7/1	Fe	many		5	poor	29	9	y	y				
		105	120	MSt								8	0	y	y				
						6/6 & 5/3					Total	**122**	**101**		GR.gradient			2o	NW
						Head					MB	12	-2		ST.stone>2cm				
									Droughtiness grade (DR)			2	2		Maize stubble				
2	T	0	28	ZC	vslight	2.5Y5/3				2		47	47	n	n	*III*	3b	**3b**	WE
		28	40	C	slight	5Y5/4				2	poor	15	15	n	n				
		40	60	C	slight	5Y6/4	OMFe	com f		2		24	32	y	n				
		60	90	C	mod	5Y5/2	Fe	many			poor	21	13	y	y				
		90	120	MSt		N6/1					poor	15	0	y	y				
						Granular					Total	**122**	**107**		GR.gradient				
						topsoil					MB	12	4		ST.stone>2cm				
						or ZC													
									Droughtiness grade (DR)			2	2		Sown. Wet spot to east				
3	T	0	30	ZC	vslight	2.5Y5/3				2		53	53	n	n	*III*	3b	**3b**	WE
		30	45	C	vslight	5Y5/4					m/poor	22	22	n	n				
		45	60	C	slight	5Y6/4	Fe	com f			poor	14	20	y	y				
		60	90	C	mod	5Y6/2	Fe	com			poor	21	13	y	y				
		90	120	MSt		N6/1					poor	15	0	y	y				
						Granular					Total	**124**	**107**		GR.gradient			1o	NE

						topsoil						MB	14	4		ST.stone>2cm						
											Droughtiness grade (DR)		2	2		Sown						
4	T	0	35	hCL	very	2.5Y4/2			4	4			59	59	n	n	*I*	2	**2**	WK	DR	
		35	50	SL	very	2.5Y6/8	OM		8	5			20	20	n	n						
		50	60	SL	very				10	10			9	13	n	n						
		60	100	SL/LS	very				20	20			23	8	n	n						
		100	120	MSt									10	0	n	n						
						Granular						Total	**121**	**99**		GR.gradient				2o	NE	
						topsoil						MB	11	-4		ST.stone>2cm						
											Droughtiness grade (DR)		2	2		Sown						
5	T	0	28	LC	mod	2.5Y4/2			4	4			44	44	n	n	*I*	2	**2**	WK	DR	
		28	38	LC	mod	2.5Y5/2	OM		4	4		good	20	20	n	n						
		38	80	SCL	mod	5Y4/4	Fe	com	10	4			42	42	n	n						
		80	120	SCL	mod		Fe	many	10	4		poor	28	0	y	n						
						Granular						Total	**134**	**106**		GR.gradient				3o	NE	
						topsoil						MB	24	3		ST.stone>2cm						
											Droughtiness grade (DR)		2	2		On a rise						
6	T	0	25	ZC	mod	2.5Y5/3				4			41	41	n	n	*II*	3a	**3a**	WE		
		25	65	C	mod	5Y5/4						m/poor	48	58	n	n						
		65	85	C	mod	5Y5/2	Fe	com				poor	14	7	y	y						
		85	110	C	mod	N6/1	Fe	many				poor	18	0	y	y						
		110	120	MSt								poor	5	0	y	y						
						Granular						Total	**125**	**106**		GR.gradient				1o	N	
						topsoil						MB	15	3		ST.stone>2cm						
											Droughtiness grade (DR)		2	2		Sown						
7	T	0	20	C	mod	2.5Y5/3			2	2			33	33	n	n	*IV*	3b	**3b**	WE		
		20	30	C	slight	2.5Y5/3	OM					good	21	21	n	n						
		30	65	C	n	2.5Y5/3	Fe	com				poor	35	42	y	y						
		65	75	C	n	2.5Y5/4	FeMn	many				poor	7	7	y	y						
		75	105	C	mod	N7/1	Fe	many				poor	21	0	y	y						
		105	120	MSt								poor	8	0	y	y						
						Granular						Total	**124**	**102**		GR.gradient				1o	N	

						topsoil					MB	14	-1		ST.stone>2cm							
						o hCL				**Droughtiness grade (DR)**		2	2		Sown							
8	T	0	28	ZC	trace	2.5Y5/3						48	48	n	n	*II*	3b	**3b**	WE			
		28	40	C	trace	5Y5/3	Fe	com			poor	16	16	y	n							
		40	75	C	slight	5Y5/2	Fe	com f			m/poor	33	44	y	n							
		75	90	C	mod	7.5Y6/2	Fe	com			poor	11	0	y	y							
		90	120	MSt							poor	15	0	y	y							
						Granular					Total	**122**	**107**		GR.gradient			1-2o	N			
						topsoil					MB	12	4		ST.stone>2cm							
										Droughtiness grade (DR)		2	2		Sown							
9	T	0	20	hZCL	n	2.5Y4/2						38	38	n	n	*III*	3b	**3b**	WE			
		20	30	ZC	n	5Y5/2	OMFe	com f				15	15	y	n							
		30	42	ZC	n	5Y5/3	Fe	com			poor	14	14	y	y							
		42	65	ZC	mod	5Y5/2	N6/1	many		5	m/poor	21	30	y	n							
		65	120	C	mod	N6/1	Fe	com			poor	39	7	y	y							
											Total	**127**	**104**		+			5o	NE			
						Olive-blue					MB	17	1		ST.stone>2cm							
						42-65				**Droughtiness grade (DR)**		2	2		Grass							
10	T	0	25	C	slight	2.5Y4/3						43	43	n	n	*III*	3b	**3b**	WE			
		25	32	C	n	5Y5/3	OM					11	11	n	n							
		32	50	C	n	5Y6/4		com f			m/poor	26	26	y	n							
		50	85	C	mod	5Y5/2	Fe	com			poor	25	26	y	y							
		85	105	C	mod	N6/1	Fe	many			poor	14	0	y	y							
		105	120	MSt							poor	8	0	y	y							
						Granular					Total	**126**	**106**		GR.gradient			1o	N			
						topsoil					MB	16	3		ST.stone>2cm							
						or hCL				**Droughtiness grade (DR)**		2	2		Sown							
11	T	0	28	ZC	slight	2.5Y5/3						48	48	n	n	*III*	3a	**3a**	WE			
		32	45	C	n	2.5Y5/4	OMFe	com f			m/poor	19	19	n	n							
		45	70	LC	slight	10YR6/3	Fe	com f		5	poor	20	30	y	y							
		70	120	ZC	slight	10YR6/3	Fe	many			poor	35	0	y	y							
						10YR6/3					Total	**121**	**97**		GR.gradient			5o	NE			

						& 6/6					MB	11	-6		ST.stone>2cm							
						Head				**Droughtiness grade (DR)**		2	2		Winter beans							
Pit 1	T	0	25	C	slight	2.5Y5/3				1		42	42	n	n	*II*	3a	**3a**	WE			
		25	40	C	mod	5Y5/2				2		24	24	n	n							
		40	55	C	mod	5Y5/3	Fe	com f		2		20	24	y	n							
		55	80	C	mod	N7/1	5Y6/6	many		5	poor	17	19	y	y							
		80	100	hZCL	mod						m/poor	16	0	y	y							
		100	120	MSt							poor	10	0	y	y							
											Total	**129**	**108**		GR.gradient			4o	N			
											MB	19	5		ST.stone>2cm							
										Droughtiness grade (DR)		2	2		Winter beans.							
12	T	0	25	C+	slight	2.5Y5/3						43	43	n	n	*III*	3a	**3a**	WE			
		25	65	C	mod	N5/1	5Y5/4	many			m/poor	48	58	y	n							
		65	105	C	mod	N6/1	Fe	many		5	poor	27	6	y	y							
		105	120	MSt							poor	8	0	y	y							
						Blue-olive					Total	**125**	**107**		GR.gradient			4o	NW			
						relic					MB	15	4		ST.stone>2cm							
						mottled?				**Droughtiness grade (DR)**		2	2		Winter beans. Compact 18-25cm							
13	T	0	25	ZC	slight	2.5Y4/2			2	2		41	41	n	n	*III*	3a	**3a**	WE			
		25	45	ZC	slight	2.5Y5/3	OM		2	2	m/poor	26	26	n	n							
		45	65	ZC	mod	2.5Y5/4	Fe	com	5	5	m/poor	17	25	n	(y)							
		65	100	C	very	N6/1	5Y5/4	many			poor	25	7	y	y							
		100	120	MSt							poor	10	0	y	y							
											Total	**118**	**98**		GR.gradient			5o	NW			
											MB	8	-5		ST.stone>2cm							
										Droughtiness grade (DR)		2	2		Winter beans. Better drained							
14	T	0	20	ZC	n	5Y5/4						34	34	n	n	*III*	3b	**3b**	WE			
		20	44	C	n	5Y5/3	OM				m/poor	35	35	n	n							
		44	100	C	mod	10Y5/1	Fe	com			poor	43	34	y	y							
		100	120	MSt							poor	10	0	y	y							
											Total	**122**	**103**		GR.gradient			5o	NW			
											MB	12	0		ST.stone>2cm							

										Droughtiness grade (DR)		2	2							
																			Winter beans. Wet in valley to NW		
15	T	0	20	C	slight	2.5Y5/3						48	48	n	n	*IV*	3b	**3b**	WE		
		20	35	C	mod	2.5Y5/3	Fe	com			m/poor	19	19	y	n						
		35	68	C	mod	N6/1	5Y5/4	many		5	poor	20	30	y	y						
		68	100	C	very	N7/1	Fe	many			poor	35	0	y	y						
		100	120	MSt							poor	35	0	y	y						
											Total	**121**	**97**		GR.gradient			5o	NW		
											MB	11	-6		ST.stone>2cm						
										Droughtiness grade (DR)		2	2							
																			Winter beans. Difficult soil		
16	T	0	32	ZC	slight	2.5Y4/3			2			53	53	n	n	*III*	3b	**3b**	WE		
		32	50	C	n	2.5Y5/3	Fe	com f	2		poor	23	23	y	(y)						
		50	70	hZCL	mod	5Y5/2	Fe	com	2	3	m/poor	15	28	y	n						
		70	100	C	mod	N6/1	Fe	com			poor	21	0	y	y						
		100	120	MSt							poor	10	0	y	y						
											Total	**123**	**104**		GR.gradient			3o	NW		
											MB	13	1		ST.stone>2cm						
										Droughtiness grade (DR)		2	2							
																			Winter beans (wet in valley to west)		
17	T	0	25	C+	trace	2.5Y4/2			2			42	42	n	n	*III*	3b	**3b**	WE		
		28	35	C	n	5Y5/3	OM				m/poor	10	10	n	n						
		35	44	C	n	5Y6/4	Fe	com f			m/poor	13	13	y	(y)						
		44	75	C	slight	5Y5/2	Fe	com			poor	25	34	y	y						
		75	100	C	very	N7/1	Fe	com			poor	18	0	y	y						
		100	120	MSt							poor	10	0	y	y						
											Total	**118**	**99**		GR.gradient						
											MB	8	-4		ST.stone>2cm						
										Droughtiness grade (DR)		2	2							
																			Stubble		
18	T	0	23	C	n	2.5Y4/2						39	39	n	n	*II*	3b	**3b**	WE		
		23	33	C	n	2.5Y5/2	OM					16	16	n	n						
		33	50	C		5Y5/3	Fe	few f			m/poor	25	25	n	n						
		50	70	C		5Y5/2	Fe	com			poor	14	26	y	y						
		70	100	C	mod	10Y6/1	Fe	com			poor	21	0	y	y						
		100	120	MSt							poor	10	0	y	y						

										Total	**125**	**106**		GR.gradient					1o	NW
										MB	15	3		ST.stone>2cm						
									Droughtiness grade (DR)		2	2		Stubble						
19	T	0	25	C	n	2.5Y4/2			2		42	42	n	n	*II*	3b	**3b**	WE			
		28	35	C	n	2.5Y5/2	OM		2		11	11	n	n							
		35	55	C	n	5Y5/4				poor	23	26	n	n							
		55	80	C	mod	5Y6/3	Fe	com f		poor	18	20	y	y							
		80	100	C	mod	N5/1	Fe	many		poor	14	0	y	y							
		100	120	MSt						poor	10	0	y	y							
										Total	**117**	**98**		GR.gradient						
										MB	7	-5		ST.stone>2cm						
									Droughtiness grade (DR)		2	2		Stubble						
20	T	0	25	C+	n	2.5Y5/3					43	43	n	n	*II*	3b	**3b**	WE			
		25	42	C	n	2.5Y5/4	OMFe	com f		m/poor	25	25	(y)	n							
		42	70	ZC	n	5Y6/4				m/poor	26	38	n	n							
		70	100	ZC	v.slight	10Y6/2	Fe	com		poor	21	0	y	y							
		100	120	C	MSt					poor	14	0	y	y							
										Total	**128**	**105**		GR.gradient						
										MB	18	2		ST.stone>2cm						
									Droughtiness grade (DR)		2	2		Stubble						
Pit 1	T	0	24	C+	n	2.5Y4/3					41	41	n	n	*III*	3b	**3b**	WE			
		24	39	C	n	5Y5/3	OMFe	com f		poor	20	20	y	(y)							
		39	58	C	slight	5Y6/4	OMFe	few	5	5	22	28	n	n							
		58	100	C	mod	N6/1	Fe	com		poor	29	16	y	y							
		100	120	MSt						poor	10	0	y	y							
										Total	**122**	**104**		GR.gradient					1o	N
										MB	12	1		ST.stone>2cm						
									Droughtiness grade (DR)		2	2		Spring barley. Wet spot to east						
21	T	0	25	C+	n	2.5Y4/3					43	43	n	n	*III*	3b	**3b**	WE			
		25	35	C	n	2.5Y5/4	OMFe	com f		poor	13	13	(y)	n							
		35	70	C	slight	5Y5/2	OM		5	5	37	51	(y)	n							
		70	100	C	mod	N6/1	Fe	com		poor	21	0	y	y							

		100	120	MSt						poor	10	0	y	y							
										Total	**123**	**107**		GR.gradient				1o		N	
										MB	13	4		ST.stone>2cm							
									Droughtiness grade (DR)		2	2		Spring barley. Wet spot to south							
22	T	0	23	C+	slight	5Y5/3			2		39	39	n	n	*II*	3b	**3a**		WE			
		23	50	C	slight	5Y5/4	OM		2	m/poor	39	39	n	n								
		50	70	C	mod	5Y5/2	Fe	com		poor	14	26	y	y								
		70	120	C	mod	N6/1	Fe	many		poor	35	0	y	y								
										Total	**126**	**103**		GR.gradient				1o		N	
						Granular				MB	16	0		ST.stone>2cm							
						topsoil			**Droughtiness grade (DR)**		2	2		Spring barley. Wet spot to south							
23	T	0	27	C	n	2.5Y5/3					46	46	n	n	*IV*	3b	**3b**		WE			
		28	35	C	n	2.5Y5/4	OM			m/poor	10	10	n	n								
		35	45	C	n	5Y5/3	Fe	com		poor	13	13	y	y								
		45	70	C	slight	5Y6/4	Fe	com	5	poor	20	31	y	y								
		70	93	C	mod	5Y6/4	Fe	com	5	poor	16	0	y	y								
		93	120	MSt						poor	14	0	y	y								
										Total	**118**	**100**		GR.gradient							
										MB	8	-3		ST.stone>2cm							
									Droughtiness grade (DR)		2	2		Stubble, rutted							
24	T	0	25	C+	trace	2.5Y4/3					42	42	n	n	*III*	3b	**3b**		WE			
		25	52	C	n	2.5Y5/4	OM			poor	36	36	n	n								
		52	100	C	n	5Y6/2	Fe	com f		poor	14	26	y	y								
		100	120	C	MSt					poor	35	0	y	y								
										Total	**127**	**104**		GR.gradient							
						Granular				MB	17	1		ST.stone>2cm							
						topsoil			**Droughtiness grade (DR)**		2	2		Spring barley.							
25	T	0	28	hCL	n	2.5Y4/3					50	50	n	n	*II*	3a	**3a**		WE			
		28	35	hCL	n	2.5Y4/2					11	11	n	n								
		35	50	C	n	2.5Y5/4	OM			m/poor	22	22	n	n								
		50	90	C/CL	n	2.5Y6/4	Mn	com		poor	28	25	n	y								
		90	120	C	mod	N6/1				poor	21	0	y	y								

											Total	**132**	**108**		GR.gradient						
						Head					MB	22	5		ST.stone>2cm						
										Droughtiness grade (DR)		2	2		Spring barley						
26	T	0	28	ZC	n	5Y5/3	Fe	few				48	48	n	n	*IV*	3b	**3b**	WE		
		28	40	C		5Y6/3	Fe	com			poor	16	16	y	y						
		40	65	C	slight	5Y6/3	Fe	com			poor	24	33	y	y						
		65	120	C	mod	N5/1	Fe	many			poor	39	7	y	y						
											Total	**125**	**102**		GR.gradient			6o	NW		
					or C						MB	15	-1		ST.stone>2cm						
										Droughtiness grade (DR)		2	2		Spring barley (eroded soil on slope)						
27	T	0	28	hCL	n	2.5Y4/2						50	50	n	n	*III*	3b	**3b**	WE		
		28	34	hCL	n	2.5Y4/2						10	10	n	n						
		34	55	C	n	5Y6/3	Fe	com f			m/poor	27	30	y	n						
		55	75	C	n	10Y6/1	Fe	com			poor	14	20	y	y						
		75	88	C/CL	n	2.5Y6/4	Mn	com	10		poor	8	0	y	y						
		88	120	C	mod	7.5GY6/1					poor	22	0	y	y						
											Total	**132**	**110**		GR.gradient						
						Head					MB	22	7		ST.stone>2cm						
										Droughtiness grade (DR)		2	2		Spring barley (wet areas to north)						
28	T	0	27	C	n	2.5Y5/3			2			45	45	n	n	*III*	3b	**3b**	WE	FL	
		27	35	C	n	2.5Y5/4			2		poor	10	10	n	n						
		35	50	hCL	mod	5Y6/3	FeMn	com	3	3		23	23	y	n						
		50	65	C	mod	5Y6/3	Fe	many			poor	11	20	y	y						
		65	100	C	very	10Y7/1	Fe	com			poor	25	7	y	y						
		100	120	MSt							poor	10	0	y	y						
											Total	**123**	**104**		FL.Flood Risk			EA Fz 3			
											MB	13	1		ST.stone>2cm						
										Droughtiness grade (DR)		2	2		Ley						
29	T	0	28	ZC	n	2.5Y5/3						48	48	n	n	*II*	3b	**3b**	WE		
		28	45	C	n	2.5Y5/4	OM				m/poor	25	25	n	n						
		45	70	C	slight	10YR6/3	Mn	com	3	3	m/poor	21	32	y	n						
		70	95	C	very	N7/1	Fe	com			poor	18	0	y	y						

		95	120	MSt							poor	13	0	y	y							
						10YR6/6					Total	**123**	**105**		GR.gradient							
						& 6/3					MB	13	2		ST.stone>2cm							
									Droughtiness grade (DR)			2	2		Ley							
30	T	0	28	C	slight	2.5Y4/3			2	2		46	46	n	n	*III*	3a	**3a**	WE			
		28	42	C	slight	2.5Y5/4	OM		2	2	m/poor	20	20	n	n							
		42	55	C	mod	5Y6/3	Fe	com		10	poor	13	16	y	y							
		55	80	C	mod	5Y6/2	Fe	com			poor	18	20	y	y							
		80	120	C	very	10GY6/1					poor	28	0	y	y							
						Granular					Total	**124**	**101**		GR.gradient							
						topsoil					MB	14	-2		ST.stone>2cm							
									Droughtiness grade (DR)			2	2		Ley							
31	T	0	24	oZC	n	2.5Y3/2						55	55	n	n	*III*	3a	**3a**	WE			
		24	45	C		2.5Y4/2	OMFe	many			m/poor	30	30	y	n							
		45	90	C	slight	7.5Y5/2	Fe	com			poor	35	33	y	y							
		90	120	MSt							poor	15	0	y	y							
											Total	**135**	**118**		GR.gradient				1-2o	N		
											MB	25	15		ST.stone>2cm							
									Droughtiness grade (DR)			2	1		Permanent Grass							
32	T	0	24	hZCL	n	2.5Y4/2						46	46	n	n	*III*	3b	**3b**	WE			
		24	38	ZC		2.5Y5/2	OMFe	com			m/poor	19	19	y	n							
		38	55	C		10Y5/1	Fe	com			poor	19	22	y	y							
		55	100	C	slight	5Y6/3	Fe	few			poor	32	20	y	y							
		100	120	MSt							poor	10	0	y	y							
											Total	**125**	**106**		GR.gradient				2o	N		
											MB	15	3		ST.stone>2cm							
									Droughtiness grade (DR)			2	2		Permanent Grass							
33	T	0	28	C	n	2.5Y5/3						48	48	n	n	*IV*	3b	**3b**	WE			
		28	32	C		2.5Y5/2	OMFe	com				6	6	y	n							
		32	70	C	n	2.5Y5/2	Fe	com			poor	37	49	y	y							
		70	100	C	slight	N7/1	Fe	many			poor	21	0	y	y							
		100	120	MSt							poor	10	0	y	y							

												Total	**122**	**103**		GR.gradient			3o	N		
												MB	12	0		ST.stone>2cm						
											Droughtiness grade (DR)		2	2		Ley						
34	T	0	28	ZC	n	2.5Y5/3							48	48	n	n	*III*	3b	**3b**	WE		
		28	40	C		5Y5/3	OMFe	com f				poor	16	16	y	(y)						
		40	70	C	mod	5Y6/3	Fe	com				poor	27	39	y	y						
		70	120	C	very	N7/1	Fe	many				poor	35	0	y	y						
												Total	**125**	**102**		GR.gradient			2o	NE		
												MB	15	-1		ST.stone>2cm						
											Droughtiness grade (DR)		2	2		Ley						
35	T	0	30	hCL	slight	2.5Y4/2			3	2			52	52	n	n	*II*	2	**2**	WE	DR	
		30	50	hCL	mod	2.5Y4/2	OM	com	3	2			31	31	n	n	*or I*					
		50	80	SCL	mod	10YR6/4	Fe	com	10	5			26	26	y	(y)						
		80	100	C	mod	N6/0	Fe	com	0			poor	14	0	y	y						
		100	120	MSt								poor	10	0	y	y						
						Granular						Total	**132**	**108**		GR.gradient			1o	N		
						Top						MB	22	5		ST.stone>2cm						
						Head					**Droughtiness grade (DR)**		2	2		Winter wheat						
35a	T	0	28	C	n	2.5Y4/3							48	48	n	n	*III*	3b	**3b**	WE		
		28	42	C		2.5Y5/2	OMFe	com f				m/poor	20	20	y	n						
		42	80	C	n	2.5Y5/2	Fe	com				poor	31	36	y	y						
		80	120	C/CL	n				30			poor	20	0	y	y						
												Total	**120**	**104**		GR.gradient			1o	NE		
						Head						MB	10	1		ST.stone>2cm						
											Droughtiness grade (DR)		2	2		Ley						
36	T	0	28	LC	n	2.5Y4/2							48	48	n	n	*III*	3b	**3b**	WE		
		28	45	LC	n	2.5Y5/4	OM					m/poor	25	25	n	n						
		45	65	LC	n	2.5Y6/4	Fe	com				poor	20	29	y	y						
		65	105	C	n	2.5Y6/3	OMFe	com				poor	28	7	y	y						
		105	120	C/CL					30			poor	8	0	y	y						
												Total	**128**	**108**		GR.gradient			2o	N		
						Head						MB	18	5		ST.stone>2cm						

									Droughtiness grade (DR)		2	2		Winter wheat						
37	T	0	28	ZC	n	2.5Y4/3	Fe	few			48	48	n	n	*IV*	3b	**3b**	WE		
		28	34	C		2.5Y4/2	OMFe	com		m/poor	25	25	y	n						
		34	50	C	n	5Y6/3	Fe	com		poor	20	29	y	y						
		50	100	C	mod	7.5GY7/1	Fe	many		poor	28	7	y	y						
		100	120	MSt						poor	8	0	y	y						
										Total	**128**	**108**		GR.gradient			2o	N		
										MB	18	5		ST.stone>2cm						
									Droughtiness grade (DR)		2	2		Winter wheat (wet by wood)						

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3

hard

Climate Data	
MDwheat	105
MDpotato	97
FCD	146
AAR	673

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>67cm	39-67cm	<39cm	
SPL within 80cm, gleying at 40-70cm	>50cm	<50cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1427 D^o
Limitation
Grade 1
75 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
38	T	0	29	LC	slight	10YR4/3			12	12		39	39	n	n	I	2	**3a**	DR
		29	50	hCL	very	10YR5/4			15	25	good	29	29	n	n				
		50	120	Lst								21	8						
											Total	**89**	**76**						
											MB	-16	-21		ST.stone>2cm			>5%	2
											Droughtiness grade (DR)	3a	3a		Drilled (maize?)				
39	T	0	28	hCL	v.slight	10YR4/6			10	5		44	44	n	n	I	2	**3a**	DR
		28	40	hCL	very	10YR5/4			10	15	good	20	20	n	n				
		40	50	hCL	very				10	15		13	13	n	n				
		50	120	Lst								21	8						
											Total	**97**	**84**		GR.gradient			1o	S
											MB	-8	-13						
											Droughtiness grade (DR)	3a	3a		Drilled (maize?)				
40	T	0	30	hCL	n	10YR4/6			9	3		48	48	n	n	I	2	**3a**	DR
		30	40	hCL	mod	10YR5/4			0	15	good	18	18	n	n				
		40	50	SCL	very				0	35		11	11	n	n				
		50	120	Lst								21	8						
											Total	**99**	**86**						
											MB	-6	-11						
											Droughtiness grade (DR)	3a	3a		Drilled (maize?)				
41	T	0	30	hCL	mod	10YR4/4			10	10		45	45	n	n	I	2	**3a**	DR
		30	40	hCL	mod	10YR5/4			10	20	good	16	16	n	n				
		40	50	SCL	very				0	60		8	8	n	n				
		50	120	Lst								21	8						
											Total	**90**	**77**						

												MB	-15	-20		ST.stone>2cm			>5%	2		
											Droughtiness grade (DR)		3a	3a		Drilled (maize?)						
42	T	0	28	hCL	slight	10YR4/4			10	5			44	44	n	n	*I*	2	**3a**	DR		
		28	40	hCL	very	10YR5/4			5	10	good		22	22	n	n						
		40	52	hCL	very				5	10			16	17	n	n						
		52	120	Lst									20	7								
												Total	**102**	**90**								
												MB	-3	-7								
											Droughtiness grade (DR)		3a	2		Drilled (maize?)						
43	T	0	27	hCL	slight	7.5YR4/3			8	4			43	43	n	n	*I*	2	**3a**	DR		
		27	37	LC	slight	7.5YR5/3			4	10			14	14	n	n						
		37	50	SCL	very	10YR5/4			0	30	good		19	19	n	n						
		50	120	Lst									21	8								
												Total	**97**	**84**								
												MB	-8	-13								
											Droughtiness grade (DR)		3a	3a		Spring beans						
44	T	0	27	hCL	n	10YR5/4			10	0			44	44	n	n	*III*	3b	**3b**	WE		
		27	46	hCL	n	2.5Y7/8	Fe	com	10	0			28	28	n	n						
		46	67	C	n	2.5Y6/4	FeMn	many	10	0	poor		16	25	y	y						
		67	120	hCL					40	0			33	3	n	n						
						Stony						Total	**120**	**99**								
						Head						MB	15	2								
											Droughtiness grade (DR)		2	2		Spring beans (poor)						
45	T	0	32	hCL	v.slight	10YR4/6			6	6			52	52	n	n	*I*	2	**3a**	DR		
		32	42	hCL	slight	10YR5/4			6	10	good		18	18	n	n						
		42	55	hZCL		7.5YR6/4			0	10			17	20	n	n						
		55	120	Lst									20	6								
												Total	**106**	**96**								
												MB	1	-1								
											Droughtiness grade (DR)		3a	2		Drilled (maize?)						
46	T	0	32	hZCL	n	7.5YR4/4			6	0			57	57	n	n	*I*	2	**2**	WK DR		
		32	45	ZC	n	7.5YR5/4			5	0			19	19	n	n						

		45	80	ZC		7.5YR6/4			5	0	m/poor	28	32	n	n								
		80	120	Lst								12	0										
											Total	**116**	**108**										
											MB	11	11										
											Droughtiness grade (DR)	2	1										
47	T	0	30	hCL	slight	7.5YR4/4			6	4		49	49	n	n	*I*	2	**3a**	DR				
		30	40	hCL	slight	7.5YR4/6			6	4		15	15	n	n								
		40	52	ZC	mod	7.5YR6/8			0	20		14	15	n	n								
		60	120	Lst								18	4										
											Total	**96**	**83**										
											MB	-9	-14										
											Droughtiness grade (DR)	3a	3a										
48	T	0	28	hCL	n	10YR4/4			10	0		46	46	n	n	*I*	2	**2**	WE DR				
		28	40	hCL		10YR5/4			10	0		17	17	n	n								
		40	55	hCL		10YR6/6	OM		20	0	m/poor	15	17	n	n								
		55	80	C	n	2.5Y7/6	Fe	com f	0	0	poor	18	20	n	y								
		80	120	C	n	2.5Y6/4	Fe	many	0	0	poor	28	0	y	y								
											Total	**123**	**100**										
						Head					MB	18	3										
						on Clay					**Droughtiness grade (DR)**	2	2										
49	T	0	27	hCL	slight	7.5YR4/3			3	3		46	46	n	n	*I*	2	**3a**	DR				
		27	39	hCL	slight	7.5YR5/4			4	4		18	18	n	n								
		39	48	SCL	very				0	30	good	13	13	n	n								
		48	120	Lst								22	9										
											Total	**99**	**86**										
						or LC					MB	-6	-11										
											Droughtiness grade (DR)	3a	3a										
50	T	0	27	hZCL	n	7.5YR4/4			4	0		44	44	n	n	*I*	2	**3a**	DR				
		27	50	ZC	n	7.5YR5/4			4	0	m/poor	30	30	n	n								
		50	65	LC	slight	10YR5/6			0	10		13	22	n	n								
		65	120	Lst								17	2										
											Total	**103**	**98**										

Drilled (maize?)

GR.gradient 2o E

Spring beans

GR.gradient 2o N

Spring beans

											MB	-2	1								
										Droughtiness grade (DR)		3a	2								
51	T	0	27	hCL	n	10YR4/4			12	0		43	43	n	n	*II*	3a	**3a**	WE			
		28	38	hCL		10YR5/4	OM		5	0		15	15	n	n							
		38	55	LC		2.5Y5/4	Fe	com	5	0	m/poor	21	24	n	n							
		55	100	LC	n	2.5Y6/4	FeMn	pred	0	0	poor	32	19	y	y							
		100	120	CL					0	0	poor	14	0	y	y							
						or LC top					Total	**124**	**101**		GR.gradient			1o	SE			
						Clay YR					MB	19	4									
						and grey					**Droughtiness grade (DR)**	2	2		Spring beans							
52	T	0	27	mCL	n	7.5YR5/4			6	0		46	46	n	n	*I*	1	**2**	DR			
		27	45	hZCL		7.5YR5/4	Fe	com f	5	0	m/poor	25	25	n	n							
		45	90	ZC		5YR5/4			0	0	m/poor	37	34	n	n							
		90	120	Lst								9	0									
											Total	**116**	**104**									
											MB	11	7									
											Droughtiness grade (DR)	2	2		Spring beans							
53	T	0	25	mCL	n	7.5YR4/4			12	0		40	40	n	n	*I*	1	**2**	DR			
		25	45	mCL		7.5YR4/6			10	0		29	29	n	n							
		45	70	hZCL	n	7.5YR6/6	grey	com f	5	0	m/poor	22	35	n	n							
		70	120	SCL					40	20		24	0	n	n							
											Total	**115**	**103**		GR.gradient			1o	SE			
											MB	10	6									
											Droughtiness grade (DR)	2	2		Spring beans (poor)							
54	T	0	32	LC	n	2.5Y5/3			4	0		52	52	n	n	*III*	3b	**3b**	WE			
		28	42	C		5Y6/4	OMFe		5	0	m/poor	19	19	y	n							
		42	50	C	slight	2.5Y6/4	Fe	com	0	5	m/poor	11	11	y	n							
		50	80	LC	n	10YR7/6	Fe	com	0	0	poor	21	25	n	y							
		80	120	CL	n	7.5YR6/8	Grey	many	0	0	poor	28	0	n	y							
											Total	**132**	**108**		GR.gradient			2-3o	SW			
						Clay YR					MB	27	11									
						and grey					**Droughtiness grade (DR)**	2	1		Spring beans							

Pit 3	T	0	24	LC	n	2.5Y4/3			4	0		39	39	n	n	*IV*	3b	**3b**	WE
		24	30	C		2.5Y5/4	OM	com	5	0	m/poor	8	8	n	n				
		30	50	C		2.5Y6/6	Grey	com	0	0	poor	26	26	n	y				
		50	100	C	v.slight	5Y6/2	Fe	com	0	0	poor	35	26	y	y				
		100	120	MSt					0	0	poor	10	0	y	y				
											Total	**119**	**100**		GR.gradient			2o	S
											MB	14	3						
											Droughtiness grade (DR)	2	2		Spring beans				
55	T	0	24	LC	v.slight	10YR4/3			5	3		38	38	n	n	*I*	2	**3a**	DR
		24	35	LC	slight	10YR5/3			5	3		16	16	n	n				
		35	48	SCL	very				n	30	good	19	19	n	n				
		48	120	Lst								21	9						
											Total	**94**	**82**						
											MB	-11	-15						
											Droughtiness grade (DR)	3a	3a		Spring beans (better)				
56	T	0	27	SZL	n	7.5YR4/4			8	0		47	47	n	n	*I*	1	**2**	DR
		27	55	mCL		7.5YR5/4			10	0		38	41	n	n				
		55	80	hZCL	n	7.5YR6/4			5	0	m/poor	19	21	n	n				
		80	120	C		5YR5/4	grey	com	0	0	poor	28	0	n	y				
											Total	**132**	**109**						
											MB	27	12						
											Droughtiness grade (DR)	2	1		Spring beans				
57	T	0	27	hCL	n	10YR4/4			12	0		43	43	n	n	*III*	3b	**3b**	WE
		28	42	LC		2.5Y5/4	Fe	com f	5	0	m/poor	19	19	n	n				
		42	60	C		2.5Y6/3	Mn	com	5	0	poor	17	22	y	y				
		60	100	C		7.5YR6/8	grey	many	0	0	poor	28	13	n	y				
		100	120	MSt					0	0	poor	10	0	y	y				
											Total	**117**	**98**		GR.gradient			4o	SE
											MB	12	1						
											Droughtiness grade (DR)	2	2		Spring beans				
58	T	0	25	ZC	n	2.5Y4/2	Fe	few	4	0		41	41	n	n	*IV*	3b	**3b**	WE
		28	35	C		5Y6/4	OM		4	0	m/poor	10	10	y	n				

		35	50	C	n	5Y7/4	Fe	many	0	5	poor	19	19	y	y							
		50	100	LC	n	10YR6/2	Fe	many	0	0	poor	35	25	y	y							
		100	120	CL	n	7.5YR6/8	grey	many	0	0	poor	14	0	n	y							
											Total	**118**	**94**		GR.gradient				4o	SW		
						Clay YR					MB	13	-3									
						and grey					**Droughtiness grade (DR)**	2	2		Rough grass							
59	T	0	28	mCL	n	7.5YR45/4			5	0		48	48	n	n	*I*	2	**2**	WE DR			
Pit 4		28	48	mCL		10YR6/6			5	0	m/poor	27	27	n	n							
		48	70	hZCL		7.5YR5/4			0	0		23	37	n	n							
		70	85	ZC		5YR4/6	& 5/3	com	0	0	poor	11	0	n	(y)							
		85	120	Lst								11	0									
											Total	**119**	**112**									
											MB	14	15									
											Droughtiness grade (DR)	2	1		Spring beans							
60	T	0	22	C	n	2.5Y5/4			4	0		36	36	n	n	*IV*	3b	**3b**	WE			
		22	32	C		5Y7/4	Fe	com	0	0		16	16	y	n							
		32	60	C		5Y7/4	Fe	many	0	0	poor	30	36	y	y							
		60	95	C	n	5Y7/8	FeMn	many	0	0	poor	25	13	n	y							
		95	120	Mst					0	0	poor	13	0	y	y							
											Total	**119**	**101**		GR.gradient				3o	E		
											MB	14	4									
											Droughtiness grade (DR)	2	2		Spring beans (better crop)							
61	T	0	25	LC	slight	2.5Y4/3			15	5		35	35	n	n	*IV*	3b	**3b**	WE			
		28	35	C	slight	5Y6/3	Fe	com	15	5		9	9	y	n							
		35	70	C	mod	5Y7/4	Fe	many	0	0	poor	34	46	y	y							
		70	100	C	slight	10GY7/1	Fe	many	0	0	poor	21	0	y	y							
		100	120	Mst					0	0	poor	10	0	y	y							
											Total	**109**	**90**		GR.gradient				Brow			
											MB	4	-7		ST.stone>2cm				>5%	2		
											Droughtiness grade (DR)	3a	2		Spring beans							
62	T	0	24	C	slight	2.5Y5/4			10	5		35	35	n	n	*IV*	3b	**3b**	WE			
		24	33	C	slight	2.5Y5/3	Fe	com	5	5		13	13	y	n							

		33	70	C	slight	5Y6/4	Fe	many	0	0	poor	36	48	y	y								
		70	110	C	v.slight	10GY7/1	Fe	many	0	0	poor	28	0	y	y								
		110	120	Mst					0	0	poor	5	0	y	y								
											Total	**118**	**97**		GR.gradient					3o		E	
											MB	13	0										
											Droughtiness grade (DR)	2	2		Spring beans (better crop)								
63	T	0	27	mCL	n	7.5YR5/4			8	0		45	45	n	n	*I*	1	**2**	DR				
		27	42	mCL		7.5YR5/4			5	0		23	23	n	n								
		42	70	ZC		7.5YR5/6			0	0	m/poor	26	38	n	n								
		70	120	C	n	5YR5/4	grey	com	0	0	poor	35	0	n	y								
											Total	**129**	**106**										
											MB	24	9										
											Droughtiness grade (DR)	2	2		Spring beans								
63a	T	0	27	mCL	n	7.5YR5/4			10	0		44	44	n	n	*II*	2	**2**	DR	WE			
		27	65	mCL		7.5YR5/4	OM		5	0		49	58	n	n								
		65	120	ZC	n	5YR6/4	grey	com	0	0	poor	39	6	y	y								
											Total	**132**	**108**		GR.gradient					1-2o		E	
											MB	27	11										
											Droughtiness grade (DR)	2	1		Spring beans								
64	T	0	27	hCL	n	7.5YR4/4			4	0		44	44	n	n	*I*	2	**2**	WK	DR			
		27	50	ZC		7.5YR5/4			0	0		35	35	n	n								
		50	70	ZC		7.5YR6/4			0	0	m/poor	15	27	n	n								
		70	86	hCL	very	5YR5/4	Fe	com	0	10		15	0	y	n								
		86	120	Lst								10	0										
											Total	**119**	**106**										
											MB	14	9										
											Droughtiness grade (DR)	2	2		Spring beans								
65	T	0	27	hCL	vslight	7.5YR4/4			6	4		44	44	n	n	*I*	2	**3a**	DR				
		27	42	hCL		7.5YR5/4			6	4		22	22	n	n								
		42	50	ZC		7.5YR6/6			0	0	m/poor	11	11	n	n								
		50	65	hCL	very				0	10		14	22	n	n								
		65	120	Lst								17	2										

												Total	**108**	**101**								
												MB	3	4								
											Droughtiness grade (DR)		3a	2								
																Spring beans						
66	T	0	27	hCL	n	7.5YR4/3			20	0			39	39	n	n	*II*	3a	**3a**	WE		
		27	35	hCL	n	7.5YR5/3			20	0	good		14	14	n	n						
		35	55	LC		5YR6/6	Fe	com	10	0	poor		20	23	n	n						
		55	120	LC		5Y7/6	Fe	com	0	0	poor		46	19	n	y						
												Total	**119**	**94**		GR.gradient			3o	E		
						or LC						MB	14	-3								
											Droughtiness grade (DR)		2	2		Spring beans						
67	T	0	28	hCL	mod	10YR4/3			10	20			38	38	n	n	*I*	2	**3a**	DR		
		28	45	hCL	very		OM		10	20	good		27	27	n	n						
		45	80	SCL					40	20			18	18	n	n						
		80	120	C					0	0	poor		28	0	n	n						
												Total	**110**	**82**		GR.gradient			1o	E		
						Gravel						MB	5	-15		ST.stone>2cm			>5%	2		
						Cap					**Droughtiness grade (DR)**		2	3a		Spring beans						
68	T	0	25	C	n	2.5Y4/4			15	0			37	37	n	n	*IV*	3b	**3b**	WE		
		25	30	C			Fe	com	15	0			7	7	y	n						
		30	75	C		2.5Y7/6	Fe	com	0	0	poor		44	52	n	y						
		75	100	C	n	5Y5/6	& 7/6	many	0	0	poor		18	0	n	y						
		100	120	Mst					0	0	poor		10	0	y	y						
												Total	**114**	**95**		GR.gradient			3o	E		
												MB	9	-2								
											Droughtiness grade (DR)		2	2		Spring beans						
69	T	0	27	hCL	n	7.5YR5/4			8	0			45	45	n	n	*I*	2	**2**	WE		
		27	35	hCL		10YR6/6			8	0			12	12	n	n						
		35	70	LC		7.5YR6/6	Fe	com f	10	0			38	51	n	n						
		70	120	C		10Y6/1	Fe	com	0	0	poor		35	0	y	y						
												Total	**130**	**108**								
												MB	25	11								
											Droughtiness grade (DR)		2	1		Drilled						

70	T	0	27	LC	slight	10YR4/3			5	10		40	40	n	n	*I*	2	**3a**	DR		
		27	45	C	mod	10YR5/3			5	10		25	25	n	n						
		45	120	Lst								23	10								
											Total	**89**	**76**		ST.stone>2cm			>5%	2		
											MB	-16	-21								
											Droughtiness grade (DR)	3a	3a		Drilled						
71	T	0	28	hCL	n	10YR5/3			8	0		47	47	n	n	*II*	3a	**3a**	WE		
		28	44	hCL		7.5YR5/4			8	0		24	24	n	n						
		44	65	LC		7.5YR6/4	Fe	com f	10	0		21	30	y	n						
		65	82	C		7.5YR6/4	Fe	com	0	0	poor	12	7	y	y						
		82	120	Lst								11	0								
											Total	**114**	**107**								
											MB	9	10								
											Droughtiness grade (DR)	2	1		Drilled						
71a	T	0	28	C	slight	10YR5/4			5	10		42	42	n	n	*I*	2	**3a**	DR		
		28	47	C	mod	10YR5/3			5	20	good	32	32	n	n						
		47	120	Lst								22	9								
											Total	**95**	**82**		ST.stone>2cm			>5%	2		
											MB	-10	-15								
											Droughtiness grade (DR)	3a	3a		Drilled						
72	T	0	28	SZL	n	10YR5/4			8	0		49	49	n	n	*I*	1	**2**	DR		
		28	40	mCL		10YR6/6			8	0		18	18	n	n						
		40	50	hCL					25	0	good	16	16	n	n						
		50	80	SCL					40	20		14	14	n	n						
		80	120	Mst					0	0	poor	20	0	y	y						
						Gravel					Total	**117**	**97**		GR.gradient			1o	E		
						depth					MB	12	0								
						uncertain					**Droughtiness grade (DR)**	2	2		Drilled						
73	T	0	28	hCL	mod	2.5Y4/4			15	10		39	39	n	n	*I*	2	**3a**	DR		
		28	50	hCL	mod	2.5Y5/3			15	10		28	28	n	n						
		50	80	SCL					40	20		14	14	n	n						
		80	120	C							poor	28	0	n	n						

												Total	**109**	**81**		GR.gradient			2o	E
						Gravel						MB	4	-16		ST.stone>2cm			>5%	2
						Cap					**Droughtiness grade (DR)**		3a	3a		Spring beans				
74	T	0	28	LC	n	2.5Y4/3			10	0			43	43	n	n	*III*	3b	**3b**	WE
		28	32	LC		5Y7/4	Mn		15	0			6	6	n	n				
		32	70	C		2.5Y7/6			0	0	poor		37	49	n	y				
		70	120	C	n	2.5Y7/8	grey	many f	0	0	poor		35	0	n	y				
												Total	**121**	**98**		GR.gradient			2o	E
												MB	16	1						
											Droughtiness grade (DR)		2	2		Spring beans				
75	T	0	28	SZL	slight	10YR4/4			6	2			49	49	n	n	*I*	1	**2**	DR
		28	65	mCL		7.5YR5/4	OM		10	0			45	54	n	n				
		65	80	SCL					40	20			7	4	n	n				
		80	120	Mst					0	0	poor		20	0	y	y				
						Gravel						Total	**122**	**107**		GR.gradient			1o	E
						depth						MB	17	10						
						uncertain					**Droughtiness grade (DR)**		2	2		Drilled				
76	T	0	28	LC	n	2.5Y4/4			4	0			46	46	n	n	*II*	3b	**3b**	WE
		28	45	C		2.5Y7/8	FeOM	com	0	0	m/poor		25	25	n	(y)				
		45	70	mCL		2.5Y7/6	Fe	com	0	0	m/poor		24	35	n	n				
		70	120	mCL		2.5Y7/6	Fe	many	0	0	poor		35	0	n	y				
												Total	**129**	**105**		GR.gradient			2o	E
												MB	24	8						
											Droughtiness grade (DR)		2	2		Spring beans				

Stone types		
%	TAv	EAv
hard	1	0.5
Lstone	4	3
hard	flint & pebble	

Climate Data	
MDwheat	108
MDpotato	100
FCD	144
AAR	660

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>66cm	39-66cm	<39cm	
SPL within 80cm, gleying at 40-70cm	>49cm	<49cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1436
Limitation
Grade 1

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lstone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
77	T	0	22	C	n	10YR4/2	Fe	com	0	0		37	37	y	n	*IV*	3b	**3b**	WE FL
		22	120	C	n	N5/	Fe	many	0	0	poor	85	62	y	y				
											Total	**123**	**100**		EA-FZ3-3b				
											MB	15	0						
											Droughtiness grade (DR)	2	2						
78	T	0	20	C	n	10YR4/2			0	3		33	33	n	n	*IV*	3b	**3b**	WE GW FL
		20	52	C	n	10YR6/1	Fe	many	0	0	poor	40	42	y	y				
		52	120	OC	n	10YR2/1			0	0		109	41	n	n				
											Total	**182**	**116**		LSS- saturated				
											MB	74	16		EA-FZ3-3b				
											Droughtiness grade (DR)	1	1						
79	T	0	26	hCL	n	10YR4/2			3	0		45	45	n	n	*II*	3a	**3a**	WE
Pit 5		26	57	hCL	n	10YR5/3	Femn	com	3	0		44	48	y	n				
		57	120	C	n	10YR5/3	Femn	many	10	0		46	19	y	n				
											Total	**135**	**113**						
											MB	27	13						
											Droughtiness grade (DR)	2	1						
80	T	0	25	hCL	n	10YR3/3			3	0		44	44	n	n	*II*	3a	**3a**	WE
		25	53	hCL	n	10YR5/3	Fe	com	0	0		43	45	y	n				
		53	70	hCL	n	10YR5/2	Femn	many	0	0		17	27	y	n				
		70	80	mSL	very	10YR5/6			0	40		8	0	n	n				
		80	120	LmS	very	10YR5/6			0	40		19	0	n	n				
											Total	**131**	**116**						
											MB	23	16						
											Droughtiness grade (DR)	2	1						

81	T	0	27	C	calc	10YR4/2			5	25		35	35	n	n	*I*	2	**3b**	DR
		27	40	C	mod	10YR5/4			0	30		16	16	n	n				
		40	120	LmS	very	10YR4/6			10	40		36	19	n	n				
											Total	**87**	**70**						
											MB	-21	-30						
											Droughtiness grade (DR)	3b	3b						
82	T	0	23	C	n	10YR3/2			1	2		38	38	n	n	*IV*	3b	**3b**	WE FL
		23	120	C	n	10YR6/1	Fe	many	0	0	poor	84	61	y	y				
											Total	**122**	**99**	EA-FZ3-3b					
											MB	14	-1						
											Droughtiness grade (DR)	2	2						
83	T	0	28	C	sli	10YR4/2			5	10		42	42	n	n	*I*	2	**3a**	DR
Pit 6		28	35	C	sli	10YR4/4			5	10		10	10	n	n				
		35	45	C	sli	10YR5/4			0	30		12	12	n	n				
		45	120	LmS	very	10YR4/6			0	40		37	18	n	n				
											Total	**101**	**81**						
											MB	-7	-19						
											Droughtiness grade (DR)	3a	3a						
84	T	0	24	hCL	mod	10YR3/3			5	10		38	38	n	n	*I*	2	**3a**	DR
		24	36	C	mod	10YR4/4			5	10		17	17	n	n				
		36	120	LmS	very	10YR4/6			0	40		43	24	n	n				
											Total	**98**	**78**						
											MB	-10	-22						
											Droughtiness grade (DR)	3a	3a						
85	T	0	25	SCL	calc	10YR3/3			5	30		31	31	n	n	*I*	1	**3b**	DR
		25	120	LmS	very	10YR5/6			0	40		51	32	n	n				
											Total	**82**	**62**						
											MB	-26	-38						
											Droughtiness grade (DR)	3b	3b						
86	T	0	24	C	mod	10YR4/2			1	0		40	40	n	n	*IV*	3b	**3b**	WE FL
		24	120	C	mod	10YR6/1	Fe	many	0	0	poor	83	60	y	y				
											Total	**123**	**100**	EA-FZ3-3b					

												MB	15	0								
											Droughtiness grade (DR)		2	2								
87	T	0	28	C	n	10YR4/2			3	2			46	46	n	n	*I*	3a	**3a**	WE DR		
		28	45	C	n	10YR4/4			5	5			25	25	n	n						
		45	120	LmS	very	10YR4/6			0	40			37	18	n	n						
												Total	**108**	**88**								
												MB	0	-12								
											Droughtiness grade (DR)		3a	3a								
88	T	0	25	hCL	mod	10YR4/4			12	8			37	37	n	n	*I*	2	**3b**	DR		
		25	32	hCL	very	10YR7/4			10	20		good	11	11	n	n						
		32	120	Lst									28	15								
												Total	**76**	**63**		GR.gradient						
												MB	-32	-37		ST.stone>2cm			>5%	2		
						Dry					**Droughtiness grade (DR)**		3b	3b		Grass ley						
89	T	0	25	hCL	mod	10YR4/3			12	8			37	37	n	n	*I*	2	**3b**	DR		
		25	38	hCL	very	10YR7/4			10	20		good	20	20	n	n						
		38	120	Lst									26	13								
						or Lst						Total	**83**	**70**		GR.gradient						
						gravel						MB	-25	-30		ST.stone>2cm			>5%	2		
						Dry					**Droughtiness grade (DR)**		3b	3a		Grass ley						
90	T	0	23	C	sli	10YR4/2			2	0			38	38	n	n	*IV*	3b	**3b**	WE FL		
		23	45	C	sli	10YR5/2	Fe	many	0	0		poor	29	29	y	y						
		45	120	C	mod	10YR6/1	Femn	many	0	0		poor	56	33	y	y						
												Total	**122**	**99**		EA-FZ3-3b						
												MB	14	-1								
											Droughtiness grade (DR)		2	2								
91	T	0	25	hCL	mod	10YR4/4			8	4			40	40	n	n	*I*	2	**3a**	DR		
		25	50	SCL	extr	10YR7/3			5	15			32	32	n	n						
		50	120	Lst									21	8								
						Soft						Total	**93**	**80**		GR.gradient						
						sandy						MB	-15	-20		ST.stone>2cm						
						Lst					**Droughtiness grade (DR)**		3a	3a		Grass ley						

91a	T	0	30	hCL	n	7.5YR4/4	0	0		54	54	n	n	/	2	**2**	DR WK		
		30	79	hCL		7.5YR6/6	0	0		61	64	n	n						
		79	120	Lst						12	0								
						Fine			Total	**127**	**118**		GR.gradient						
						sandy			MB	19	18		ST.stone>2cm						
						to silty			**Droughtiness grade (DR)**	2	1		Grass ley						
92	T	0	25	hZCL	mod	10YR4/3	10	5		41	41	n	n	/	2	**3a**	DR DP		
		25	35	hCL	mod	10YR7/4	5	10	good	18	18	n	n						
		35	45	hCL	very	10YR7/4	10	20		12	12	n	n						
		45	120	Lst						23	10								
									Total	**95**	**82**		GR.gradient			1o	E		
									MB	-13	-18		ST.stone>2cm						
						Dry			**Droughtiness grade (DR)**	3a	3a		Grass ley						
92a	T	0	25	hZCL	slight	10YR4/3	8	4		42	42	n	n	/	2	**3b**	DR		
		25	32	hCL	mod	10YR7/4	10	20	good	11	11	n	n						
		32	120	Lst						28	15								
									Total	**82**	**69**		GR.gradient						
									MB	-26	-31		ST.stone>2cm			>5%	2		
						Dry			**Droughtiness grade (DR)**	3b	3b		Grass ley						

Stone types		
%	TAv	EAv
hard	1	0.5
Lstone	4	3
hard	flint & pebble	

Climate Data	
MDwheat	105
MDpotato	97
FCD	144
AAR	668

Wetness Class Guidelines	II	III	IV	V	Climate
SPL within 80cm, gleying within 40cm	>66cm	39-66cm	<39cm		1414
SPL within 80cm, gleying at 40-70cm	>49cm	<49cm			Limitation
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II	Grade 1

Maximum depth of auger penetration is underlined

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lstone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
93	T	0	18	hCL	n	10YR3/3			0	0		32	32	n	n	*IV*	3b	**3b**	WE FL
		18	35	C	sli	10YR5/2	Fe	com	0	0	poor	22	22	y	y				
		35	60	C	mod	10YR5/2	Fe	many	0	0	poor	27	33	y	y				
		60	120	C	n	10YR5/1	Femn	many	0	0	poor	42	13	y	y				
											Total	**123**	**100**		EAZFZ3-3b				
											MB	18	3						
									Droughtiness grade (DR)			2	2						
94	T	0	25	hCL	mod	10YR4/2			5	10		39	39	n	n	*I*	2	**2**	WE DR
		25	65	SCL	very	10YR4/6			0	15		47	53	n	n				
		65	120	SCL	very	10YR5/8			0	10		51	7	n	n				
											Total	**137**	**100**						
											MB	32	3						
									Droughtiness grade (DR)			1	2						
95	T	0	20	hCL	n	10YR3/3	Fe	com	2	0		35	35	n	n	*IV*	3b	**3b**	WE
		20	62	C	mod	2.5Y5/2	Fe	com	0	0	poor	47	55	y	y				
		62	120	C	mod	10YR6/1	Femn	many	0	0	poor	41	10	y	y				
											Total	**123**	**100**		Just outside EAFZ3				
											MB	18	3						
									Droughtiness grade (DR)			2	2						
96	T	0	27	hCL	n	10YR4/2			3	5		45	45	n	n	*I*	2	**2**	WE
		27	96	C	v.sli	10YR4/3			0	7		70	65	n	n				
		96	120	hCL	mod	10YR4/6			0	7		23	0	n	n				
											Total	**138**	**111**						
											MB	33	14						
									Droughtiness grade (DR)			1	1						

97	T	0	24	mCL	mod	10YR3/3			2	10		39	39	n	n	*I*	1	**3a**	DR
		24	40	mCL	mod	10YR4/4			0	15		23	23	n	n				
		40	60	LmS	very	10YR4/4			0	20		13	16	n	n				
		60	120	LmS	very	10YR4/6			0	50		27	7	n	n				
											Total	**102**	**84**						
											MB	-3	-13						
											Droughtiness grade (DR)	3a	3a						
98	T	0	35	C	n	10YR3/3	Fe	com	5	2		56	56	n	n	*IV*	3b	**3b**	WE GR
		35	86	C	v.sli	10YR5/2	Fe	many	3	0	poor	43	44	y	y				
		86	120	C	sli	10YR5/1	Femn	v.many	0	0	poor	24	0	y	y				
											Total	**123**	**100**						
											MB	18	3						
											Droughtiness grade (DR)	2	2						
99	T	0	25	C	sli	10YR3/3			3	5		40	40	n	n	*III*	3a	**3a**	WE
		25	57	C	mod	2.5Y5/3	Fe	com	10	0		41	46	y	n				
		57	120	C	very	10YR5/1	Fe	com	10	0	poor	40	15	y	y				
											Total	**121**	**101**						
											MB	16	4						
											Droughtiness grade (DR)	2	2						
100	T	0	27	hCL	mod	10YR3/3			3	10		43	43	n	n	*I*	2	**3a**	DR
Pit 7		27	60	LmS	very	10YR4/6			0	50		19	21	n	n				
		60	120	LmS	very	10YR4/6			0	50		27	7	n	n				
											Total	**90**	**71**						
											MB	-15	-26						
											Droughtiness grade (DR)	3a	3a						
101	T	0	25	mCL	mod	10YR3/3			2	10		41	41	n	n	*I*	1	**3a**	DR
		25	30	mCL	mod	10YR4/4			0	20		7	7	n	n				
		30	120	LmS	very	10YR4/6			0	50		45	26	n	n				
											Total	**92**	**73**						
											MB	-13	-24						
											Droughtiness grade (DR)	3a	3a						
102	T	0	27	C	n	10YR3/3			2	3		44	44	n	n	*I-II*	3b	**3b**	WE GR

Base of 7de slope- 3b (GR)

		27	75	C	sli	2.5Y5/3			0	3		56	67	n	n					
		75	120	C	mod	10YR5/2	Femn	com	0	3	poor	31	0	y	y					
											Total	**131**	**111**		Base of 8-9 de slope- 3b (GR)					
											MB	26	14							
											Droughtiness grade (DR)	2	1							
103	T	0	27	C	n	10YR4/2			7	2		42	42	n	n	*IV*	3b	**3b**	WE	
		27	45	C	sli	10YR5/2	Fe	many	0	5	poor	23	23	y	y					
		45	120	C	n	10YR5/1	Fe	com	0	0	poor	56	33	y	y					
											Total	**120**	**97**							
											MB	15	0							
											Droughtiness grade (DR)	2	2							
104	T	0	25	hCL	trace	10YR3/3			12	0		40	40	n	n	*I*	2	**2**	WE DR	
		25	70	hCL	v.sli	10YR4/4			12	0		53	64	n	n					
		70	120	hCL	v.sli	10YR5/8	Mn	com	5	0		48	0	n	n					
											Total	**141**	**104**							
											MB	36	7							
											Droughtiness grade (DR)	1	2							
105	T	0	24	hCL	sli	10YR3/3			2	5		41	41	n	n	*I*	2	**3a**	DR	
		24	50	mSL	very	10YR4/4			0	50		25	25	n	n					
		50	120	LmS	very	10YR4/6			0	50		32	13	n	n					
											Total	**97**	**78**							
											MB	-8	-19							
											Droughtiness grade (DR)	3a	3a							
106	T	0	23	C	n	10YR4/2			5	3		36	36	n	n	*II*	3b	**3b**	WE	
		23	69	C	sli	2.5Y5/3			3	0		57	72	n	n					
		69	120	C	mod	10YR6/1	Fe	com	0	0		41	2	y	y					
											Total	**134**	**109**							
											MB	29	12							
											Droughtiness grade (DR)	2	1							
107	T	0	26	C	n	10YR4/2			7	3		40	40	n	n	*II*	3b	**3b**	WE	
		26	55	C	sli	2.5Y5/3			3	0		41	45	n	n					
		55	120	C	n	10YR5/2	Fe	com	0	5	poor	44	19	y	y					

											Total	**126**	**104**						
											MB	21	7						
										Droughtiness grade (DR)		2	2						
108	T	0	26	hCL	n	10YR4/2			10	2		42	42	n	n	*III*	3b	**3b**	WE
		26	52	C	n	10YR5/3	Femn	many	3	0		39	40	y	n				
		52	120	C	n	10YR5/1	Fe	com	0	0	poor	48	23	y	y				
											Total	**128**	**105**						
											MB	23	8						
										Droughtiness grade (DR)		2	2						
109	T	0	25	hCL	n	10YR3/3			5	0		43	43	n	n	*I*	2	**2**	WE
		25	72	hCL	n	10YR4/4			3	2		59	69	n	n				
		72	120	hCL	n	10YR4/6	mn	com	3	2		46	0	n	n				
											Total	**148**	**112**						
											MB	43	15						
										Droughtiness grade (DR)		1	1						
110	T	0	25	C	n	10YR3/3	Fe	com	2	0		42	42	n	n	*IV*	3b	**3b**	WE FL
		25	120	C	sli	10YR6/1	Fe	many	0	0	poor	82	59	y	y				
											Total	**123**	**100**		EAZFZ3-3b				
											MB	18	3						
										Droughtiness grade (DR)		2	2						
111	T	0	27	hCL	mod	10YR3/3			5	20		39	39	n	n	*I*	2	**3a**	DR
		27	100	hCL	very	10YR4/6			0	40		62	48	n	n				
		100	120	hCL	very	10YR4/6			0	40		14	0	n	n				
											Total	**115**	**87**						
											MB	10	-10						
										Droughtiness grade (DR)		2	3a						
112	T	0	25	C	n	10YR4/2			7	0		40	40	n	n	*II-III*	3b	**3b**	WE
		25	49	C	n	2.5Y5/3	Fe	few	0	0		38	38	n	n				
		49	120	C	n	10YR5/1	Fe	com	0	0	poor	50	27	y	y				
											Total	**128**	**105**						
											MB	23	8						
										Droughtiness grade (DR)		2	2						

113	T	0	28	hCL	n	10YR4/2			5	2		47	47	n	n	*IV*	3b	**3b**	WE	
		28	120	C	n	10YR5/1	Fe	many	0	0	poor	78	55	y	y					
											Total	**125**	**102**							
											MB	20	5							
											Droughtiness grade (DR)	2	2							
114	T	0	26	hCL	sli	10YR4/2			5	2		44	44	n	n	*I*	2	**2**	WE	
		26	63	hCL	n	10YR4/4			10	0		47	54	n	n					
		63	120	hCL	v.sli	10YR5/8	mn	com	10	3		50	10	n	n					
											Total	**141**	**107**							
											MB	36	10							
											Droughtiness grade (DR)	1	1							
115	T	0	24	hCL	n	10YR3/3			3	2		41	41	n	n	*III*	3b	**3b**	WE FL	
		24	56	C	v.sli	10YR5/3	Femn	many	0	2		46	50	y	n					
		56	120	C	mod	10YR5/1	Fe	many	0	0	poor	45	18	y	y					
											Total	**132**	**110**		EAZFZ3-3b					
											MB	27	13							
											Droughtiness grade (DR)	2	1							
116	T	0	28	hCL	mod	10YR3/3			5	30		36	36	n	n	*III*	3b	**3b**	WE GR	
		28	40	hCL	very	10YR4/6			0	40		13	13	n	n					
		40	120	C	mod	N5/1	Fe	com	2	0	poor	61	38	y	y					
											Total	**111**	**88**		Top of 8-10 de slope- 3b (GR)					
											MB	6	-9							
											Droughtiness grade (DR)	2	2							
117	T	0	30	hCL	sli	10YR4/2			10	5		47	47	n	n	*I*	2	**2**	WE DR	
		30	71	C	sli	10YR5/3			0	7		46	61	n	n					
		71	107	SCL	very	10YR5/8			0	20		31	0	n	n					
		107	120	C	mod	10YR5/1	Fe	many	0	0	poor	9	0	y	y					
											Total	**133**	**107**							
											MB	28	10							
											Droughtiness grade (DR)	2	1							
118	T	0	28	C	n	10YR4/2			7	2		44	44	n	n	*IV*	3b	**3b**	WE	
		28	70	C	n	10YR5/1	Fe	many	0	0	poor	43	55	y	y					

		70	120	C	n	N5/	Fe	com	0	0	poor	35	0	y	y					
											Total	**121**	**98**							
											MB	16	1							
											Droughtiness grade (DR)	2	2							
119	T	0	26	hCL	n	10YR4/2			7	0		44	44	n	n	*IV*	3b	**3b**	WE	
		26	120	C	n	10YR5/2	Femn	v.many	0	0	poor	80	57	y	y					
											Total	**124**	**101**							
											MB	19	4							
											Droughtiness grade (DR)	2	2							
120	T	0	25	hCL	mod	10YR3/3			3	5		42	42	n	n	*I*	2	**2**	WE DR	
		25	48	C	mod	10YR4/4			10	3		33	33	n	n					
		48	120	C	n	10YR5/8			10	5		52	31	n	n					
											Total	**126**	**105**							
											MB	21	8							
											Droughtiness grade (DR)	2	2							
121	T	0	17	hCL	n	10YR4/2			2	0		30	30	n	n	*IV*	3b	**3b**	WE MR GR	
		17	38	C	n	10YR5/2	Fe	com	0	0		34	34	y	n					
		38	120	C	sli	10YR6/1	Fe	many	0	0	poor	65	42	y	y					
											Total	**128**	**105**	R+F on uneven slope-3b MR						
											MB	23	8	9-10 de slope- 3b (GR)						
											Droughtiness grade (DR)	2	2							
122	T	0	30	SCL	mod	10YR4/2			10	7		43	43	n	n	*I*	1	**3a**	DR	
		30	40	mSL	very	10YR4/3			5	15		13	13	n	n					
		40	80	mSL	very	10YR5/3			0	40		34	32	n	n					
		80	120	LmS	very	10YR5/3			0	40		19	0	n	n					
											Total	**109**	**88**							
											MB	4	-9							
											Droughtiness grade (DR)	3a	2							
123	T	0	27	C	n	10YR4/2			7	3		42	42	n	n	*II*	3b	**3b**	WE	
		27	60	C	n	10YR5/3			10	0		41	48	n	n					
		60	120	C	mod	N5/	Fe	many	0	0	poor	42	13	y	y					
											Total	**124**	**103**							

											MB	19	6						
										Droughtiness grade (DR)		2	2						
124	T	0	27	C	n	10YR4/2			5	2		43	43	n	n	*IV*	3b	**3b**	WE
		27	120	C	n	10YR6/1	Fe	many	0	0	poor	79	56	y	y				
											Total	**122**	**99**						
											MB	17	2						
										Droughtiness grade (DR)		2	2						
125	T	0	26	hCL	n	10YR4/2			10	2		42	42	n	n	*II*	3a	**3a**	WE
		26	37	hCL	n	10YR4/4			15	0		15	15	n	n				
		37	120	hCL	n	10YR5/2, 10YR4/4	Fe	com	20	0		74	43	y	n				
											Total	**130**	**100**						
											MB	25	3						
										Droughtiness grade (DR)		2	2						
126	T	0	24	hCL	mod	10YR3/3			10	3		38	38	n	n	*I*	2	**2**	WE DR
		24	65	hCL	mod	10YR4/4			10	5		49	57	n	n				
		65	80	C	sli	10YR4/6			7	0		11	7	n	n				
		80	120	C	sli	10YR4/6			7	0		30	0	n	n				
											Total	**128**	**103**						
											MB	23	6						
										Droughtiness grade (DR)		2	2						
127	T	0	25	hCL	n	10YR4/2			2	0		44	44	n	n	*I*	2	**3b**	MR GR
		25	90	C	n	10YR5/3			2	0		71	71	n	n				
		90	120	C	n	10YR4/3	Fe	com	0	0		24	0	y	n				
											Total	**139**	**115**	Remnant R+F on uneven slope-3b MR					
											MB	34	18	7-9 de slope- 3b (GR)					
										Droughtiness grade (DR)		1	1						
128	T	0	30	SCL	mod	10YR4/2			10	2		45	45	n	n	*I*	1	**3a**	DR
		30	44	SCL	mod	10YR4/6			10	5		18	18	n	n				
		44	50	mSL	very	10YR5/3			0	40		6	6	n	n				
		50	120	LmS	very	10YR5/3			0	40		34	14	n	n				
											Total	**104**	**84**						
											MB	-1	-13						

												Droughtiness grade (DR)	3a	3a						
129	T	0	25	C	n	10YR4/2			5	7			38	38	n	n	*II*	3b	**3b**	WE
		25	45	C	n	10YR5/3			5	7			29	29	n	n				
		45	68	hCL	very	10YR5/8			0	20			22	31	n	n				
		68	120	C	n	5N/	Fe	com	0	0	poor		36	3	y	y				
												Total	**126**	**101**						
												MB	21	4						
												Droughtiness grade (DR)	2	2						
130	T	0	25	C	mod	10YR4/2			10	3			40	40	n	n	*I*	2	**2**	WE DR
		25	120	C	sli	10YR4/4			15	5			79	59	n	n				
												Total	**119**	**99**						
												MB	14	2						
												Droughtiness grade (DR)	2	2						
131	T	0	26	C	mod	10YR3/3			7	7			39	39	n	n	*I*	2	**2**	WE DR
		26	50	C	sli	10YR4/4			10	0			35	35	n	n				
		50	62	C	sli	10YR4/6			5	0			9	18	n	n				
		62	120	LmS	very	10YR5/8			0	30			30	6	n	n				
												Total	**112**	**98**						
												MB	7	1						
												Droughtiness grade (DR)	2	2						
132	T	0	24	C	n	10YR3/3	Fe	com	2	0			40	40	n	n	*IV*	3b	**3b**	WE
		24	120	C	mod	10YR5/1	Fe	many	0	0	poor		83	60	y	y				
												Total	**123**	**100**		Subsoil plastic				
												MB	18	3						
												Droughtiness grade (DR)	2	2						
133	T	0	25	SCL	mod	10YR4/2			0	30			33	33	n	n	*I*	1	**3b**	DR
		25	120	LmS	very	10YR5/6			0	50			48	29	n	n				
												Total	**80**	**62**						
												MB	-25	-35						
												Droughtiness grade (DR)	3b	3b						
134	T	0	26	C	trace	10YR4/2			10	0			40	40	n	n	*II*	3b	**3b**	WE
		26	60	SC	v.sli	10YR5/3	Femn	v.many	10	0			42	46	y	n				

		60	92	SC	v.sli	10YR5/8	Femn	few	15	0		27	13	n	n				
		92	120	C	n	N5/1	Fe	com	0	0	poor	20	0	y	y				
											Total	**129**	**99**						
											MB	24	2						
											Droughtiness grade (DR)	2	2						
135	T	0	25	C	n	10YR4/2			10	0		39	39	n	n	*II*	3b	**3b**	WE
		25	50	C	n	10YR5/4	Fe	com	5	0		38	38	n	n				
		50	96	C	n	2.5Y5/2	Femn	v.many	2	0	poor	32	26	y	y				
		96	120	C	n	10YR5/1	Fe	com	0	0	poor	17	0	y	y				
											Total	**125**	**102**						
											MB	20	5						
											Droughtiness grade (DR)	2	2						
136	T	0	24	hCL	n	10YR3/3			5	3		40	40	n	n	*II*	3a	**3a**	WE
		24	43	C	n	10YR5/3	Femn	com	2	3		29	29	y	n				
		43	120	hCL	n	10YR5/2, 10YR4/4	Femn	many	2	0		80	42	y	n				
											Total	**149**	**112**						
											MB	44	15						
											Droughtiness grade (DR)	1	1						
137	T	0	24	C	sli	10YR4/2			7	2		37	37	n	n	*IV*	3b	**3b**	WE
		24	36	C	sli	2.5Y5/3	Fe	few	0	0		19	19	n	n				
		36	120	C	v.sli	10YR6/1	Fe	many	0	0	poor	67	44	y	y				
											Total	**124**	**101**						
											MB	19	4						
											Droughtiness grade (DR)	2	2						
138	T	0	23	C	mod	10YR3/3			5	3		36	36	n	n	*I*	2	**2**	WE DR
		23	120	C	v.sli	10YR4/6			10	0		90	68	n	n				
											Total	**126**	**105**						
											MB	21	8						
											Droughtiness grade (DR)	2	2						
139	T	0	25	hCL	mod	10YR3/3			3	7		41	41	n	n	*I*	2	**2**	WE DR
		25	55	hCL	mod	10YR4/4			0	10		42	44	n	n				
		55	90	SCL	very	10YR5/8			0	30		28	18	n	n				

		90	120	mSL	very	10YR5/8			0	30		26	0	n	n					
											Total	**136**	**103**							
											MB	31	6							
											Droughtiness grade (DR)	1	2							
140	T	0	23	hCL	mod	10YR3/3			5	15		35	35	n	n	*I*	2	**3b**	DR	
Pit 8		23	40	LmS	very	10YR4/6			0	50		11	11	n	n					
rong		40	120	LmS	very	10YR4/6			0	50		38	20	n	n					
											Total	**84**	**65**							
											MB	-21	-32							
											Droughtiness grade (DR)	3b	3b							
140a	T	0	22	SCL	mod	10YR3/3			5	25		28	28	n	n	*I*	1	**3b**	DR	
		22	30	LmS	very	10YR4/6			0	50		5	5	n	n					
		30	120	LmS	very	10YR4/6			0	50		45	26	n	n					
											Total	**78**	**60**							
											MB	-27	-37							
											Droughtiness grade (DR)	3b	3b							
141	T	0	25	hCL	mod	10YR3/3			5	0		43	43	n	n	*I*	2	**2**	WE	
		25	45	C	sli	10YR4/3			5	0		31	31	n	n					
		45	120	C	n	10YR4/6	Fe	com	3	2		61	38	n	n					
											Total	**135**	**112**							
											MB	30	15							
											Droughtiness grade (DR)	1	1							
142	T	0	27	C	n	10YR4/2			3	0		45	45	n	n	*IV*	3b	**3b**	WE	
		27	120	C	sli	10YR6/1	Fe	many	0	0	poor	79	56	y	y					
											Total	**124**	**101**							
											MB	19	4							
											Droughtiness grade (DR)	2	2							
143	T	0	24	C	trace	10YR4/2			5	2		38	38	n	n	*II*	3b	**3b**	WE	
		24	45	C	mod	2.5Y5/3	Fe	few	3	2		32	32	n	n					
		45	70	C	sli	10YR5/2	Fe	many	0	2		24	39	y	n					
		70	120	C	n	N5/1	Fe	many	0	2	poor	35	0	y	y					
											Total	**129**	**110**							

											MB	24	13						
										Droughtiness grade (DR)		2	1						
144	T	0	25	C	trace	10YR4/2			10	3		38	38	n	n	*III*	3b	**3b**	WE	
		25	36	C	v.sli	10YR4/3			12	0		16	16	n	n					
		36	55	C	n	2.5Y5/3	Fe	com	12	0		23	27	y	n					
		55	70	C	n	10YR5/2	Femn	v.many	15	0	poor	9	17	y	y					
		70	120	C	n	10YR5/1	Fe	many	15	0	poor	30	0	y	y					
											Total	**116**	**97**							
											MB	11	0							
										Droughtiness grade (DR)		2	2							
145	T	0	25	C	sli	10YR4/2			7	2		39	39	n	n	*II*	3a	**3a**	WE	
		25	60	C	mod	2.5Y5/3			0	2		47	55	n	n					
		60	120	C	mod	10YR6/1	Femn	many	0	2	poor	42	13	y	y					
											Total	**128**	**107**							
											MB	23	10							
										Droughtiness grade (DR)		2	1							
146	T	0	30	hCL	mod	10YR4/2			0	7		51	51	n	n	*I-II*	2	**3b**	GR	
		30	57	hCL	mod	10YR4/2			0	10		36	40	n	n					
		57	75	hCL	mod	10YR4/2			0	20		15	18	n	n					
		75	120	C	mod	N5/	Fe	com	0	10	poor	30	0	y	y					
											Total	**132**	**109**							
											MB	27	12							
										Droughtiness grade (DR)		2	1							
147	T	0	22	C	n	10YR3/3			1	2		36	36	n	n	*IV*	3b	**3b**	WE FL	
		22	120	C	mod	10YR6/1	Femn	many	0	0	poor	85	62	y	y					
											Total	**122**	**99**							
											MB	17	2							
										Droughtiness grade (DR)		2	2							
148	T	0	24	C	trace	10YR3/3			2	2		39	39	n	n	*III*	3b	**3b**	WE GR	
		24	50	C	sli	2.5Y5/3	Femn	com	0	2		41	41	y	n					
		50	120	C	mod	10YR5/1	Fe	many	0	2	poor	48	26	y	y					
											Total	**129**	**106**							

Top of 8-10de slope- 3b (GR)

Subsoil plastic

EAZFZ3-3b

											MB	24	9		8-9de slope- 3b (GR)					
										Droughtiness grade (DR)		2	2							
149	T	0	26	SCL	very	10YR3/3			0	30		34	34	n	n	*I*	1	**3b**	DR	
		26	120	LmS	very	10YR5/4			0	50		47	29	n	n					
											Total	**81**	**63**							
											MB	-24	-34							
										Droughtiness grade (DR)		3b	3b							
150	T	0	25	hCL	n	10YR3/3			7	0		42	42	n	n	*I*	2	**2**	WE	
		25	60	hCL	n	10YR5/4			5	0		48	53	n	n					
		60	120	hCL	v.sli	10YR5/4	Femn	com	5	0		57	15	n	n					
											Total	**147**	**111**							
											MB	42	14							
										Droughtiness grade (DR)		1	1							
151	T	0	25	C	sli	10YR4/2			5	3		40	40	n	n	*II*	3a	**3a**	WE	
		25	50	C	sli	10YR5/3	Femn	com	5	3		37	37	y	n					
		50	73	C	n	10YR4/4	Femn	com	5	0		18	31	n	n					
		73	120	hCL	n	10YR4/4	Femn	com	5	0		45	0	n	n					
											Total	**139**	**107**							
											MB	34	10							
										Droughtiness grade (DR)		1	1							
152	T	0	23	C	n	10YR4/2			5	0		37	37	n	n	*IV*	3b	**3b**	WE	
		23	120	C	n	10YR6/1	Fe	many	0	0	poor	84	61	y	y					
											Total	**121**	**98**							
											MB	16	1							
										Droughtiness grade (DR)		2	2							
153	T	0	23	C	n	10YR4/2			10	2		35	35	n	n	*IV*	3b	**3b**	WE	
		23	36	C	sli	2.5Y5/3	Fe	few	5	2		20	20	n	n					
		36	120	C	n	10YR6/1	Fe	many	0	0	poor	67	44	y	y					
											Total	**122**	**99**							
											MB	17	2							
										Droughtiness grade (DR)		2	2							
154	T	0	27	C	n	10YR4/2			10	0		42	42	n	n	*I*	3a	**3a**	WE	

		27	120	C	n	10YR4/4			7	0		87	64	n	n						
											Total	**128**	**106**								
											MB	23	9								
											Droughtiness grade (DR)	2	2								
155	T	0	20	SCL	very	10YR3/3			0	30		26	26	n	n	*I*	1	**3b**	DR		
Pit 9		20	40	LmS	very	10YR4/4			0	50		13	13	n	n						
		40	120	LmS	very	10YR4/6			0	50		38	20	n	n						
											Total	**77**	**59**								
											MB	-28	-38								
											Droughtiness grade (DR)	3b	3b								
156	T	0	25	C	mod	10YR4/2			3	2		41	41	n	n	*III*	3a	**3a**	WE		
		25	46	C	mod	2.5Y5/4			0	5		32	32	n	n						
		46	120	C	mod	10YR6/1	Fe	many	0	3	poor	53	31	y	y						
											Total	**126**	**104**								
											MB	21	7								
											Droughtiness grade (DR)	2	2								
157	T	0	23	C	n	10YR4/2			5	2		37	37	n	n	*IV*	3b	**3b**	WE		
		23	52	C	mod	2.5Y5/2	Femn	many	0	5	poor	35	36	y	y						
		52	120	C	mod	10YR6/1	Femn	many	0	2	poor	47	23	y	y						
											Total	**119**	**96**								
											MB	14	-1								
											Droughtiness grade (DR)	2	2								
158	T	0	25	C	trace	10YR4/2			10	1		38	38	n	n	*III*	3b	**3b**	WE		
		25	45	C	mod	2.5Y5/3			5	2		30	30	n	n						
		45	120	C	mod	10YR6/1	Fe	many	0	2	poor	55	32	y	y						
											Total	**123**	**100**								
											MB	18	3								
											Droughtiness grade (DR)	2	2								
159	T	0	24	C	n	10YR4/2			10	0		37	37	n	n	*III*	3b	**3b**	WE		
		24	45	C	sli	10YR5/3			5	5		31	31	n	n						
		45	50	C	n	10YR6/1	Femn	many	15	0	poor	6	6	y	y						
		50	120	C	n	10YR6/1	Femn	many	20	0	poor	40	21	y	y						

											Total	**113**	**95**							
											MB	8	-2							
										Droughtiness grade (DR)		2	2							
160	T	0	27	hCL	mod	10YR4/2			5	2		46	46	n	n	*III*	3a	**3b**	GR	
		27	50	C	very	10YR5/4	Fe	few	0	15		33	33	n	n					
		50	120	C	very	10YR5/1	Fe	many	0	2	poor	48	26	y	y					
											Total	**127**	**104**							
											MB	22	7							
										Droughtiness grade (DR)		2	2							
161	T	0	30	C	n	10YR3/3			1	0		51	51	n	n	*III*	3b	**3b**	WE	
		30	57	C	n	2.5Y5/3	Femn	many	0	0		38	43	y	n					
		57	120	C	sli	10YR5/1	Fe	many	0	0	poor	44	17	y	y					
											Total	**132**	**111**							
											MB	27	14							
										Droughtiness grade (DR)		2	1							
162	T	0	25	C	n	10YR3/3			2	0		42	42	n	n	*II*	3b	**3b**	WE	
		25	60	C	n	10YR5/3	Femn	com	2	0		47	55	y	n					
		60	82	C	n	10YR5/4	mn	many	2	0		17	16	n	n					
		82	120	SCL	n	10YR5/8	Femn	com	5	0		36	0	n	n					
											Total	**142**	**112**							
											MB	37	15							
										Droughtiness grade (DR)		1	1							
163	T	0	23	SCL	mod	10YR3/3			3	17		33	33	n	n	*I*	1	**3a**	DR	
		23	50	mSL	very	10YR5/4			0	15		36	36	n	n					
		50	62	LmS	very	10YR5/6			0	15		7	10	n	n					
		62	83	LmS	very	10YR5/6			0	30		11	6	n	n					
		83	120	SC	mod	10YR4/6			0	15		33	0	n	n					
											Total	**119**	**85**							
											MB	14	-12							
										Droughtiness grade (DR)		2	3a							
164	T	0	24	C	sli	10YR4/2			3	2		39	39	n	n	*I-II*	3a	**3a**	WE	
		24	65	C	mod	10YR4/3			3	2		51	63	n	n					

Top of 7-9de slope- 3b (GR)

Edge of 7-9de slope- 3b (GR)

		65	75	C	mod	10YR5/3	Femn	com	3	2		8	8	y	n				
		75	120	C	very	N5/1	Fe	com	0	3	poor	31	0	y	y				
											Total	**129**	**109**						
											MB	24	12						
											Droughtiness grade (DR)	2	1						
165	T	0	24	C	n	10YR4/2			3	0		40	40	n	n	*IV*	3b	**3b**	WE
		24	60	C	mod	10YR5/2	Fe	com	0	0	poor	41	47	y	y				
		60	120	C	mod	10YR5/2	Fe	com	0	0	poor	42	13	y	y				
											Total	**122**	**99**						
											MB	17	2						
											Droughtiness grade (DR)	2	2						
166	T	0	25	C	trace	10YR4/2			15	2		36	36	n	n	*IV*	3b	**3b**	WE
		25	50	C	n	10YR6/1	Fe	many	10	0	poor	30	30	y	y				
		50	120	C	n	N5/	Fe	many	0	0	poor	49	26	y	y				
											Total	**114**	**91**						
											MB	9	-6						
											Droughtiness grade (DR)	2	2						
167	T	0	26	C	n	10YR4/2			10	0		40	40	n	n	*IV*	3b	**3b**	WE
		26	38	C	v.sli	2.5Y5/3			5	0		18	18	n	n				
		38	120	C	n	10YR6/1	Fe	many	0	0	poor	65	42	y	y				
											Total	**123**	**100**						
											MB	18	3						
											Droughtiness grade (DR)	2	2						
168	T	0	30	C	n	10YR4/2			12	2		44	44	n	n	*II*	3b	**3b**	WE
		30	80	C	n	10YR5/3, 10YR4/6	Femn	many	15	0		48	55	y	n				
		80	120	C	n	10YR5/3, 10YR4/6	Femn	many	20	0		26	0	y	n				
											Total	**119**	**99**						
											MB	14	2						
											Droughtiness grade (DR)	2	2						
169	T	0	25	C	n	10YR4/2			10	2		38	38	n	n	*IV*	3b	**3b**	WE
		25	36	C	n	10YR5/3	Femn	com	0	0		18	18	y	n				

		36	120	C	n	10YR6/1	Fe	many	0	0	poor	67	44	y	y					
											Total	**123**	**100**							
											MB	18	3							
											Droughtiness grade (DR)	2	2							
170	T	0	25	C	n	10YR4/2			10	2		38	38	n	n	*IV*	3b	**3b**	WE	
		25	35	C	sli	2.5Y5/3			5	5		15	15	n	n					
		35	120	C	n	10YR6/1	Fe	many	0	0	poor	69	46	y	y					
											Total	**121**	**98**							
											MB	16	1							
											Droughtiness grade (DR)	2	2							
171	T	0	26	C	trace	10YR4/2			20	2		35	35	n	n	*IV*	3b	**3b**	WE	
		26	55	C	sli	2.5Y5/2	Fe	com	0	0	poor	35	38	y	y					
		55	120	C	sli	N5/	Fe	many	0	0	poor	46	20	y	y					
											Total	**115**	**92**							
											MB	10	-5							
											Droughtiness grade (DR)	2	2							
172	T	0	25	SCL	very	10YR3/3			5	25		32	32	n	n	*III*	2	**3a**	DR	
		25	40	LmS	very	10YR4/6			0	30		11	11	n	n					
		40	55	C	n	N6/1	Femn	many	3	0	poor	16	19	y	y					
		55	120	C	n	2.5YR5/2	Fe	few	0	0	poor	46	20	n	y					
											Total	**105**	**82**							
											MB	0	-15							
											Droughtiness grade (DR)	3a	3a							
173	T	0	23	C	sli	10YR3/3			3	5		46	46	n	n	*III*	3a	**3b**	GR	
		23	46	C	sli	2.5Y5/3			2	0		29	31	n	n					
		46	120	C	n	10YR6/1	Fe	many	0	0	poor	33	19	y	y					
											Total	**117**	**95**							
											MB	12	-2		Edge of 7-8de slope- 3b (GR)					
											Droughtiness grade (DR)	2	2							
174	T	0	17	C	mod	10YR4/2			3	0		28	28	n	n	*IV*	3b	**3b**	WE FL	
		17	120	C	sli	N5/	Fe	many	0	0	poor	92	69	y	y					
											Total	**120**	**97**		EAZFZ3-3b					

											MB	15	0							
											Droughtiness grade (DR)	2	2							
175	T	0	26	C	n	10YR4/2			3	0		43	43	n	n	*I*	3a	**3a**	WE	
		26	63	C	n	10YR4/4			5	0		47	56	n	n					
		63	72	C	n	10YR4/4	Mn	com	5	0		7	11	n	n					
		72	120	C	n	10YR4/4	Mn	com	15	0		33	0	n	n					
											Total	**129**	**110**							
											MB	24	13							
											Droughtiness grade (DR)	2	1							
176	T	0	26	SCL	calc	10YR3/3			5	25		34	34	n	n	*I*	1	**3a**	DR	
		26	35	mSL	very	10YR4/4			0	40		10	10	n	n					
		35	120	LmS	very	10YR4/4			0	40		44	25	n	n					
											Total	**87**	**68**							
											MB	-18	-29							
											Droughtiness grade (DR)	3a	3a							
177	T	0	23	C	mod	10YR4/2			10	2		35	35	n	n	*III*	3a	**3a**	WE	
		23	45	C	v.sli	2.5Y5/2	Fe	com	0	0		35	35	y	n					
		45	120	C	n	10YR6/1	Fe	many	0	0	poor	56	33	y	y					
											Total	**126**	**103**							
											MB	21	6							
											Droughtiness grade (DR)	2	2							
178	T	0	30	SCL	n	10YR4/2			20	0		41	41	n	n	*I*	1	**2**	DR	
		30	62	hCL	n	10YR4/6	Fe	few	20	0		36	42	n	n					
		62	120	hCL	n	10YR5/6	Femn	com	7	0		54	12	n	n					
											Total	**131**	**95**							
											MB	26	-2							
											Droughtiness grade (DR)	2	2							
179	T	0	22	hCL	n	10YR4/2			20	0		32	32	n	n	*I*	2	**2**	WE DR	
		22	45	hCL	n	10YR4/6	mn	com	15	0		32	32	n	n					
		45	120	hCL	n	10YR4/6	Femn	com	20	0		63	33	n	n					
											Total	**127**	**96**							
											MB	22	-1							

										Droughtiness grade (DR)		2	2						
180	T	0	30	hCL	very	10YR4/2			0	20		46	46	n	n	*I*	2	**2**	WE DR
		30	55	hCL	very	10YR4/3			0	30		29	31	n	n				
		55	105	C	very	10YR4/3			0	30		33	19	n	n				
		105	120	C	very	N5/1	Fe	many	0	0	poor	11	0	y	y				
											Total	**117**	**95**						
											MB	12	-2						
										Droughtiness grade (DR)		2	2						
181	T	0	20	C	sli	10YR4/2			2	5		32	32	n	n	*II*	3a	**3a**	WE
		20	45	C	mod	2.5Y5/3			0	5		39	39	n	n				
		45	63	C	mod	2.5Y5/3	Fe	com	0	5		18	28	y	n				
		63	120	C	v.sli	10YR6/1	Fe	many	0	0	poor	40	9	y	y				
											Total	**128**	**107**						
											MB	23	10						
										Droughtiness grade (DR)		2	1						
182	T	0	26	C	mod	10YR4/2			2	0		43	43	n	n	*III*	3a	**3b**	FL
		26	46	C	v.sli	2.5Y5/3	Fe	com	0	0	m/poor	29	29	y	n				
		46	60	C	v.sli	2.5Y5/3, 10YR6/1	Fe	many	0	0	poor	12	18	y	y				
		60	120	C	mod	10YR5/1	Fe	many	0	0	poor	42	13	y	y				
											Total	**127**	**104**		EAZFZ3-3b				
											MB	22	7						
										Droughtiness grade (DR)		2	2						
183	T	0	23	SCL	calc	10YR4/2			0	30		30	30	n	n	*I*	1	**3b**	DR
		23	80	LmS	very	10YR4/6			0	40		33	33	n	n				
		80	120	LmS	very	10YR4/6			0	40		19	0	n	n				
											Total	**83**	**63**						
											MB	-22	-34						
										Droughtiness grade (DR)		3b	3b						
184	T	0	24	hCL	very	10YR3/3			0	30		33	33	n	n	*I*	2	**3a**	DR
		24	54	C	very	10YR5/3			0	20		38	41	n	n				
		54	120	LmS	very	10YR4/6			0	40		32	11	n	n				
											Total	**103**	**85**						

											MB	-2	-12							
										Droughtiness grade (DR)		3a	3a							
185	T	0	25	C	sli	10YR4/2			3	5		40	40	n	n	*III*	3a	**3a**	WE	
		25	43	C	sli	2.5Y5/3	Fe	com	0	3		28	28	y	n					
		43	120	C	sli	10YR6/1	Fe	many	0	0	poor	58	35	y	y					
											Total	**126**	**103**							
											MB	21	6							
										Droughtiness grade (DR)		2	2							
186	T	0	28	C	n	10YR4/2			5	0		45	45	n	n	*I*	3a	**3a**	WE	
		28	70	C	n	10YR5/4			12	0		45	60	n	n					
		70	120	C	n	10YR5/6	mn	com	5	0		38	0	n	n					
											Total	**129**	**105**							
											MB	24	8							
										Droughtiness grade (DR)		2	2							
187	T	0	15	C	mod	10YR4/2			2	0		25	25	n	n	*IV*	3b	**3b**	WE FL	
		15	35	C	mod	2.5Y5/3	Fe	com	0	0	m/poor	29	29	y	n					
		35	60	C	mod	2.5Y5/2	Fe	many	0	0	poor	27	33	y	y					
		60	120	C	calc	10YR6/1	Fe	many	0	0	poor	42	13	y	y					
											Total	**123**	**100**		EAZFZ3-3b					
											MB	18	3							
										Droughtiness grade (DR)		2	2							
188	T	0	26	C	mod	10YR4/2			2	0		43	43	n	n	*IV*	3b	**3b**	WE FL	
		26	55	C	mod	2.5Y5/2	Femn	com	0	0	poor	35	38	y	y					
		55	120	C	calc	10YR6/1	Fe	many	0	3	poor	45	19	y	y					
											Total	**123**	**100**		EAZFZ3-3b					
											MB	18	3							
										Droughtiness grade (DR)		2	2							
189	T	0	30	C	n	10YR4/2			3	0		50	50	n	n	*I*	3a	**3a**	WE	
		30	62	C	n	10YR5/4			5	0		40	49	n	n					
		62	120	C	n	10YR5/6			15	0		40	11	n	n					
											Total	**129**	**109**							
											MB	24	12							

											Droughtiness grade (DR)	2	1						
190	T	0	25	C	n	10YR4/2			5	0		41	41	n	n	*IV*	3b	**3b**	WE
		25	38	C	n	2.5Y5/3			0	0		21	21	n	n				
		38	60	C	n	10YR5/1	Fe	many	0	0	poor	23	29	y	y				
		60	120	C	n	10YR5/1	Fe	com	0	0	poor	42	13	y	y				
											Total	**126**	**103**						
											MB	21	6						
											Droughtiness grade (DR)	2	2						
191	T	0	23	C	mod	10YR3/3			3	7		36	36	n	n	*I*	2	**2**	WE DR
		23	60	C	n	10YR5/6	mn	com	7	0		48	55	n	n				
		60	120	C	n	10YR5/6	mn	many	7	0		45	15	n	n				
											Total	**129**	**106**						
											MB	24	9						
											Droughtiness grade (DR)	2	2						
192	T	0	28	hCL	mod	10YR3/3			5	10		44	44	n	n	*II*	2	**2**	WE DR
		28	83	C	calc	10YR5/3	Fe	com	0	30		49	52	y	n				
		83	120	hCL	calc	10YR4/6	Fe	com	0	20		32	0	n	n				
											Total	**125**	**96**						
											MB	20	-1						
											Droughtiness grade (DR)	2	2						
193	T	0	25	C	n	10YR4/2			5	0		41	41	n	n	*II*	3b	**3b**	WE
		25	50	C	n	10YR5/3	Fe	many	5	0		38	38	y	n				
		50	120	C	n	10YR5/2	Femn	many	5	0		53	31	y	n				
											Total	**132**	**109**						
											MB	27	12						
											Droughtiness grade (DR)	2	1						
194	T	0	24	C	trace	10YR3/3			5	0		39	39	n	n	*II*	3b	**3b**	WE
		24	57	C	sli	2.5Y5/3	mn	com	0	0		47	53	n	n				
		57	120	C	calc	10YR5/1	Femn	com	0	5	poor	43	16	y	y				
											Total	**129**	**108**						
											MB	24	11						
											Droughtiness grade (DR)	2	1						

195	T	0	26	C	mod	10YR4/2			3	2		42	42	n	n	*II*	3a	**3b**	GR	
		26	50	C	mod	2.5Y5/3			2	0		38	38	n	n					
		50	120	C	calc	10YR5/1	Fe	many	2	0	poor	48	26	y	y					
											Total	**128**	**105**		7-8de slope in NW corner of field					
											MB	23	8							
											Droughtiness grade (DR)	2	2							
196	T	0	26	C	n	10YR4/2			3	3		42	42	n	n	*II*	3b	**3b**	WE GR	
		26	62	C	n	2.5Y4/3			5	0		46	55	n	n					
		62	120	C	n	10YR5/3	Fe	v.many	15	0	poor	35	9	y	y					
											Total	**123**	**106**		Edge of 7-9 de slope- 3b (GR)					
											MB	18	9							
											Droughtiness grade (DR)	2	2							
197	T	0	26	C	n	10YR4/2			5	0		42	42	n	n	*IV*	3b	**3b**	WE	
Pit 10		26	120	C	n	10YR6/1	Fe	many	0	0	poor	80	57	y	y					
											Total	**122**	**99**							
											MB	17	2							
											Droughtiness grade (DR)	2	2							
198	T	0	32	C	trace	10YR4/2			3	3		52	52	n	n	*III*	3b	**3b**	WE	
		32	49	C	sli	2.5Y5/3	Fe	few	0	5		26	26	n	n					
		49	60	C	n	2.5Y5/3	Fe	many	0	0	poor	8	14	y	y					
		60	120	C	sli	10YR6/1	Fe	many	0	0	poor	42	13	y	y					
											Total	**128**	**105**		EAZFZ3-3b					
											MB	23	8							
											Droughtiness grade (DR)	2	2							
199	T	0	23	C	mod	10YR4/2			2	5		37	37	n	n	*IV*	3b	**3b**	WE FL	
		23	62	C	mod	2.5Y5/2	Femn	many	0	0	poor	44	51	y	y					
		62	120	C	calc	10YR6/1	Fe	many	0	0	poor	41	10	y	y					
											Total	**121**	**98**		EAZFZ3-3b					
											MB	16	1							
											Droughtiness grade (DR)	2	2							
200	T	0	23	C	mod	10YR4/2			2	2		38	38	n	n	*III*	3a	**3b**	FL	
		23	57	C	mod	2.5Y5/3	Fe	com	0	2		48	54	y	n					

		57	120	C	calc	10YR6/1	Fe	many	0	0	poor	44	17	y	y					
											Total	**130**	**108**		EAZFZ3-3b					
											MB	25	11							
											Droughtiness grade (DR)	2	1							
201	T	0	27	C	n	10YR4/2			5	3		43	43	n	n	*III*	3b	**3b**	WE FL	
		27	48	C	n	10YR5/2	Fe	com	0	2	m/poor	30	30	y	n					
		48	120	C	n	10YR6/1	Fe	many	0	0	poor	52	29	y	y					
											Total	**124**	**101**		EAZFZ3-3b					
											MB	19	4							
											Droughtiness grade (DR)	2	2							
202	T	0	27	hCL	n	10YR4/2			3	0		47	47	n	n	*II*	3a	**3a**	WE	
		27	60	hCL	n	10YR4/3			0	0		47	53	n	n					
		60	120	C	v.sli	N5/	Fe	com	0	0	poor	42	13	y	y					
											Total	**136**	**113**							
											MB	31	16							
											Droughtiness grade (DR)	1	1							
203	T	0	28	C	n	10YR4/2			3	0		46	46	n	n	*II*	3b	**3b**	WE	
		28	45	C	n	10YR5/2	Femn	com	0	0		27	27	y	n					
		45	70	C	n	10YR5/2	Femn	many	0	0		24	40	y	n					
		70	120	C	n	10YR6/1	Fe	many	0	0	poor	35	0	y	y					
											Total	**132**	**113**		3b slope to south-east of point					
											MB	27	16							
											Droughtiness grade (DR)	2	1							
204	T	0	23	C	n	10YR4/2			3	0		38	38	n	n	*III*	3b	**3b**	WE GR	
		23	55	C	n	2.5Y5/3	Femn	com	0	0	poor	39	42	y	n					
		55	120	C	sli	10YR5/1	Femn	com	0	0	poor	46	20	y	y					
											Total	**122**	**99**		Corner on edge of 3b slope GR 3a/3b					
											MB	17	2							
											Droughtiness grade (DR)	2	2							
205	T	0	25	C	n	10YR4/2			10	0		39	39	n	n	*IV*	3b	**3b**	WE	
		25	67	C	n	10YR5/1	Femn	many	20	0	poor	36	45	y	y					
		67	120	C	n	10YR6/1	Fe	many	0	0	poor	37	4	y	y					

											Total	**112**	**87**						
											MB	7	-10						
										Droughtiness grade (DR)		2	3a						
206	T	0	23	C	n	10YR4/2			3	0		38	38	n	n	*IV*	3b	**3b**	WE
		23	120	C	sli	N5/	Fe	many	0	0	poor	84	61	y	y				
											Total	**122**	**99**						
											MB	17	2						
										Droughtiness grade (DR)		2	2						
207	T	0	24	C	n	10YR4/2			7	0		38	38	n	n	*IV*	3b	**3b**	WE
		24	50	C	n	10YR5/2	Femn	com	5	0	poor	32	32	y	y				
		50	120	C	sli	10YR5/2	Femn	com	5	0	poor	47	25	y	y				
											Total	**117**	**95**						
											MB	12	-2						
										Droughtiness grade (DR)		2	2						
208	T	0	18	C	v.sli	10YR4/2			1	2		30	30	n	n	*IV*	3b	**3b**	WE
		18	120	C	calc	N5/	Fe	many	0	3	poor	89	66	y	y				
											Total	**119**	**96**						
											MB	14	-1						
										Droughtiness grade (DR)		2	2						
209	T	0	26	C	n	10YR4/2			5	0		42	42	n	n	*III*	3b	**3b**	WE
		26	35	C	n	2.5Y5/3			5	0		14	14	n	n				
		35	43	C	n	2.5Y5/3	Femn	com	5	0		12	12	y	n				
		43	70	C	mod	10YR6/1	Fe	many	5	0	poor	22	33	y	y				
		70	120	C	mod	10YR6/1	Fe	many	0	0	poor	35	0	y	y				
											Total	**125**	**102**						
											MB	20	5						
										Droughtiness grade (DR)		2	2						
210	T	0	23	C	mod	10YR4/2	Fe	few	3	0		38	38	n	n	*IV*	3b	**3b**	WE FL
		23	50	C	mod	10YR5/2	Femn	many	0	0	poor	35	35	y	y				
		50	120	C	sli	10YR6/1	Fe	many	0	0	poor	49	26	y	y				
											Total	**122**	**99**		EAZFZ3-3b				
											MB	17	2						

											Droughtiness grade (DR)	2	2						
211	T	0	26	C	n	10YR4/2			3	0		43	43	n	n	*IV*	3b	**3b**	WE	
		26	82	C	n	10YR6/1	Fe	many	0	0	poor	54	57	y	y					
		82	120	C	v.sli	N5/	Fe	com	0	0	poor	27	0	y	y					
											Total	**123**	**100**							
											MB	18	3							
											Droughtiness grade (DR)	2	2						
212	T	0	25	C	n	10YR4/2			7	0		40	40	n	n	*II-III*	3b	**3b**	WE	
		25	49	C	mod	10YR5/3	Fe	few	0	3	m/poor	34	34	n	n					
		49	120	C	sli	10YR6/1	Femn	many	0	0	poor	50	27	y	y					
											Total	**124**	**101**							
											MB	19	4							
											Droughtiness grade (DR)	2	2						
213	T	0	25	C	n	10YR4/2			3	0		41	41	n	n	*IV*	3b	**3b**	WE	
		25	44	C	n	10YR5/2	Femn	com	3	0	poor	24	24	y	y					
		44	120	C	sli	10YR5/1	Fe	many	0	0	poor	57	34	y	y					
											Total	**122**	**99**							
											MB	17	2							
											Droughtiness grade (DR)	2	2						
214	T	0	24	C	mod	10YR4/2			3	5		38	38	n	n	*IV*	3b	**3b**	WE	
		24	38	C	calc	2.5Y5/3	Fe	com	0	5		22	22	y	n					
		38	120	C	calc	10YR5/1	Fe	many	0	10	poor	61	39	y	y					
											Total	**120**	**98**							
											MB	15	1							
											Droughtiness grade (DR)	2	2						
215	T	0	25	C	n	10YR3/2			5	0		41	41	n	n	*II*	3b	**3b**	WE	
		25	37	C	n	10YR4/2	mixed	com	5	0		18	18	y	n					
		37	120	C	n	10YR5/3	mixed	com	5	0		73	50	y	n					
											Total	**132**	**109**		Potential disturbed ground- varied SS					
											MB	27	12							
											Droughtiness grade (DR)	2	1						
216	T	0	23	hCL	sli	10YR3/2			2	0		41	41	n	n	*IV*	3b	**3b**	WE FL	

		23	40	C	mod	10YR5/3	Femn	com	0	0	poor	22	22	y	y						
		40	120	C	calc	10YR6/1	Fe	many	0	0	poor	62	39	y	y						
											Total	**125**	**102**		EAZFZ3-3b						
											MB	20	5								
											Droughtiness grade (DR)	2	2								
217	T	0	20	hCL	n	10YR3/2			2	0		35	35	n	n	*IV*	3b	**3b**	WE FL		
		20	120	C	calc	10YR5/1	Fe	many	0	0	poor	88	65	y	y						
											Total	**123**	**100**		EAZFZ3-3b						
											MB	18	3								
											Droughtiness grade (DR)	2	2								

Stone types		
%	TAv	Eav
hard	1	0.5
Lstone	4	3
hard	flint & pebble	

Climate Data	
MDwheat	107
MDpotato	100
FCD	145
AAR	664

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>67cm	39-67cm	<39cm	
SPL within 80cm, gleying at 40-70cm	>50cm	<50cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1,438
Limitation
Grade 1

Elevation: 65m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lstone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
218	T	0	22	C	mod	10YR3/3			1	0		37	37	n	n	*IV*	3b	**3b**	WE FL
		22	57	C	very	10YR5/1	Fe	v.many	0	0	poor	41	46	y	y				
		57	120	C	mod	10YR4/1	Fe	many	0	0	poor	44	17	y	y				
											Total	**122**	**99**		EAFZ3			3b	
											MB	15	-1						
									Droughtiness grade (DR)			2	2						
219	T	0	30	C	mod	10YR3/3			0	0		51	51	n	n	*IV*	3b	**3b**	WE FL
		30	52	C	mod	10YR5/1	Fe	many	0	0	poor	27	29	y	y				
		52	120	C	mod	10YR6/1	Fe	many	0	0	poor	48	23	y	y				
											Total	**126**	**103**		EAFZ3			3b	
											MB	19	3						
									Droughtiness grade (DR)			2	2						
220	T	0	35	C	mod	10YR3/3			0	0		60	60	n	n	*IV*	3b	**3b**	WE FL
		35	60	C	very	N5/1	Fe	v.many	0	0	poor	27	33	y	y				
		60	120	C	mod	10YR5/1	Fe	many	0	0	poor	42	13	y	y				
											Total	**128**	**105**		EAFZ3			3b	
											MB	21	5						
									Droughtiness grade (DR)			2	2						
221	T	0	32	C	mod	10YR3/3			0	0		54	54	n	n	*IV*	3b	**3b**	WE FL
		32	40	C	mod	10YR5/2	Fe	v.many	0	0	poor	13	13	y	y				
		40	60	C	mod	10YR5/1	Fe	many	0	0	poor	20	26	y	y				
		60	120	C	n	10YR5/1	Fe	many	0	0	poor	42	13	y	y				
											Total	**129**	**106**		EAFZ3			3b	
											MB	22	6						
									Droughtiness grade (DR)			2	2						

222	T	0	30	C	sli	10YR3/3			0	0		51	51	n	n	*IV*	3b	**3b**	WE FL
		30	68	C	mod	10YR5/1	Fe	v.many	0	0	poor	39	49	y	y				
		68	120	C	n	10YR5/1	Fe	many	0	0	m/poor	42	3	y	y				
											Total	**131**	**104**		EAFZ3			3b	
											MB	24	4						
											Droughtiness grade (DR)	2	2						
223	T	0	27	C	sli	10YR3/3			0	0		46	46	n	n	*IV*	3b	**3b**	WE FL
		27	38	C	mod	10YR5/2	Fe	com	0	0		21	21	y	n				
		38	120	C	mod	10YR6/1	Fe	many	2	0	poor	61	38	y	y				
											Total	**128**	**105**		EAFZ3			3b	
											MB	21	5						
											Droughtiness grade (DR)	2	2						
224	T	0	27	C	very	10YR3/3			2	5		43	43	n	n	*III*	3a	**3b**	FL
		27	50	C	mod	10YR5/3	Femn	few	5	0		35	35	n	n				
		50	120	C	mod	10YR5/2	Femn	many	5	0	m/poor	50	28	y	y				
											Total	**128**	**106**		EAFZ3			3b	
											MB	21	6						
											Droughtiness grade (DR)	2	2						

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3

hard pebbles & flints

Climate Data	
MDwheat	106
MDpotato	99
FCD	146
AAR	668

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>67cm	39-67cm	<39cm	
SPL within 80cm, gleying at 40-70cm	>50cm	<50cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1434 D°
Limitation
Grade 1
68 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
225	T	0	22	ZC	v.slight	10YR5/4			0	8		35	35	n	n	I	3a	**3a**	WE DR DP
		22	35	ZC	mod	7.5YR6/6			5	10	good	24	24	n	n				
		35	120	Lst								27	14						
											Total	**86**	**73**						
											MB	-20	-26						
											Droughtiness grade (DR)	3a	3a		Grass ley				
226	T	0	24	ZC	mod	10YR5/4			5	10		36	36	n	n	I	2	**3b**	DR
		24	37	hCL	very	10YR7/4	Mn		10	20	good	20	20	n	n				
		37	120	Lst								26	13						
											Total	**82**	**69**						
											MB	-24	-30						
											Droughtiness grade (DR)	3b	3a		Grass ley				
227	T	0	25	hCL	mod	10YR4/3			10	5		39	39	n	n	I	2	**3a**	DR ST
		25	41	hCL	very	10YR7/4	Mn		10	20	good	25	25	n	n				
		41	120	Lst								25	12						
											Total	**89**	**76**						
											MB	-17	-23						
											Droughtiness grade (DR)	3a	3a		Grass ley				
228	T	0	24	hCL	mod	10YR5/4			10	5		37	37	n	n	I	2	**3a**	DR
		24	50	hCL	very	10YR7/4			10	20	good	41	41	n	n				
		50	120	Lst								21	8						
											Total	**99**	**86**		GR.gradient			1o	E
											MB	-7	-13						
											Droughtiness grade (DR)	3a	3a		Grass ley				
229	T	0	25	hCL	mod	10YR5/4			10	5		39	39	n	n	I	2	**3a**	DR ST DP

		25	41	hCL	very	10YR7/4	Mn	10	20	good	25	25	n	n							
		41	120	Lst							25	12									
						Some				Total	**89**	**76**									
						large				MB	-17	-23					ST.stone>2cm		>10%	3a	
						brash				**Droughtiness grade (DR)**	3a	3a					Grass ley				
230	T	0	23	mCL	mod	10YR4/3		8	4		37	37	n	n	/	2	**3a**	DR			
		23	60	hCL	mod	10YR5/4		15	10	good	55	60	n	n							
		60	120	Lst							18	4									
										Total	**110**	**101**									
										MB	4	2									
										Droughtiness grade (DR)	3a	2					Grass ley				
231	T	0	30	hCL		10YR5/4		6	0		51	51	n	n	/	2	**3a**	DR			
		30	55	hZCL	slight	7.5YR4/4	Mn	6	0		37	40	n	n							
		55	120	Lst							20	6									
										Total	**107**	**97**									
						Motttled				MB	1	-2									
						above Lst				**Droughtiness grade (DR)**	3a	2					Grass ley (ditch to north)				
232	T	0	25	LC	very	10YR4/3		10	10		35	35	n	n	/	2	**3b**	DR			
		25	38	hCL	very	10YR7/4		0	25	good	22	22	n	n							
		38	120	Lst							26	13									
										Total	**83**	**70**					GR.gradient		2o	E	
										MB	-23	-29					ST.stone>2cm		>5%	2	
										Droughtiness grade (DR)	3b	3a					W Wheat				
233	T	0	25	hCL	mod	10YR4/3		10	10		37	37	n	n	/	2	**3a**	DR DP			
		25	42	hCL	very	10YR7/4		0	30	good	27	27	n	n							
		42	120	Lst							24	11									
										Total	**88**	**75**									
										MB	-18	-24					ST.stone>2cm		>5%	2	
										Droughtiness grade (DR)	3a	3a					W Wheat				

234	T	0	29	hCL	very	10YR5/4			6	6		47	47	n	n	*I*	2	**3b**	DR DP		
		29	120	Lst								29	16								
											Total	**76**	**63**								
											MB	-30	-36								
											Droughtiness grade (DR)	3b	3b								
235	T	0	30	hZCL		10YR4/4			4			55	55	n	n	*I*	2	**2**	DR WE		
		30	45	hZCL		10YR6/6	Mn	com				26	26	n	n						
		45	57	ZC	mod		Fe	com		20		11	13	y	n						
		57	120	Lst								19	6								
											Total	**111**	**99**								
											MB	5	0								
											Droughtiness grade (DR)	2	2								
235a	T	0	25	mCL	slight	10YR4/4			2	2		43	43	n	n	*I*	1	**1**			
		25	65	mCL		10YR4/6			5	0		52	61	n	n						
		65	120	hZCL		7.5YR5/4	Fe	com f	0	0	m/poor	44	7	y	n						
											Total	**140**	**112**								
											MB	34	13								
											Droughtiness grade (DR)	1	1								
236	T	0	30	hZCL		10YR4/6			6	0		54	54	n	n	*I*	2	**2**	WK		
		30	42	hZCL		10YR5/6			5	0		19	19	n	n						
		42	55	ZC		7.5YR5/4			0	0	m/poor	15	18	n	n						
		55	120	hZCL		7.5YR5/4			0	0	m/poor	52	22	n	n						
											Total	**140**	**113**								
											MB	34	14								
											Droughtiness grade (DR)	1	1								
237	T	0	22	ZC	n	2.5Y5/3						37	37	n	n	*II*	3b	**3b**	WE FL		
		22	42	C		2.5Y5/4	Fe	com f	0		m/poor	29	29	n	n						
		42	80	ZC	slight	7.5YR6/4	Mn	com	10		m/poor	30	34	y	n						
		80	100	SCL	slight				25			15	0	y	n						
		100	120	SL					40			14	0	y	n						
						Fine					Total	**125**	**101**								
						hard					MB	19	2								

W Wheat			
Winter wheat (tall crop)			
GR.gradient		2o	N
Winter wheat (tall crop)			
Winter wheat (tall crop)			
GW.Groundwater		80cm	
FL.Flood Risk		EAFz3	3b

					stones				**Droughtiness grade (DR)**			2	2		W Wheat							
238	T	0	30	mZCL		10YR4/6			4	0		55	55	n	n	*I*	1	**1**				
		30	42	mZCL		10YR6/6			5	0		19	19	n	n							
		42	65	hZCL		7.5YR4/6			0	0		29	39	n	n							
		65	80	ZC		7.5YR5/6			0	0	m/poor	11	7	n	n							
		80	120	C	n	10YR5/4	Fe	com f	0	0	poor	28	0	n	n							
											Total	**142**	**120**									
											MB	36	21									
									Droughtiness grade (DR)			1	1		Winter wheat (tall crop)							
239	T	0	24	ZC	mod	10YR4/3			0	15		36	36	n	n	*I*	2	**3b**	DR			
		24	32	hCL	very	10YR7/4			0	25	good	13	13	n	n							
		32	120	Lst								28	15									
											Total	**78**	**65**		GR.gradient			2o	E			
											MB	-28	-34									
									Droughtiness grade (DR)			3b	3b		W Wheat							
240	T	0	24	C	n	2.5Y4/4			0	0		41	41	n	n	*IV*	3b	**3b**	WE FL			
		24	40	C		5Y6/3	FeMn	many	0	0	m/poor	23	23	y	y							
		40	60	C	n	7.5Y6/2	Fe	com	0	0	poor	20	26	y	y							
		60	120	SL/LS	very	10YR7/3	Fe	many	25	25		31	7	y	n							
											Total	**115**	**97**		GW.Groundwater			60 cm				
						Dense					MB	9	-2		FL.Flood Risk			EAFz3	3b			
						30cm			**Droughtiness grade (DR)**			2	2		Sprayed off							
241	T	0	28	CL	n	10YR4/4			2	2		49	49	n	n	*I*	2	**3a**	FL			
		28	45	CL	slight	10YR6/6			5	5	good	33	33	n	n							
		45	65	CL	slight	10YR4/4	Mn	many	20	0		19	26	n	n							
		65	120	SL/LS	mod				25	25		28	4	n	n							
											Total	**128**	**111**									
											MB	22	12		FL.Flood Risk			Edge of EA Fz3	3a			
									Droughtiness grade (DR)			2	1		Winter wheat (some rutting of tramlines)							
242	T	0	30	hZCL		10YR4/6			0	0		57	57	n	n	*I*	2	**2**	DR WE			
		30	45	hZCL		10YR5/6			0	0		26	26	n	n							
		45	80	hZCL		7.5YR5/4	Mn	com	0	0		39	43	n	n							

		80	120	Lst								12	0							
											Total	**133**	**125**							
											MB	27	26							
									Droughtiness grade (DR)			2	1							
Pit 11	T	0	30	hZCL		10YR4/6			0	0		57	57	n	n	*I*	2	**2**	DR WE	
		30	45	hZCL		10YR5/6			0	0		26	26	n	n					
		45	80	hZCL		7.5YR5/4	Mn	com	0	0		39	43	n	n					
		100	120	Lst								12	0							
											Total	**133**	**125**							
											MB	27	26							
									Droughtiness grade (DR)			2	1							
243	T	0	20	C+	n	2.5Y4/3			0	0		34	34	n	n	*IV*	3b	**3b**	WE FL	
		20	30	C		2.5Y5/4	OM		0	0		16	16	n	n					
		30	60	C	n	2.5Y6/4	Fe	com f	0	0	poor	33	39	y	y					
		60	90	C		2.5Y6/2	FeMn	many	0	0	poor	21	13	y	y					
		90	100	SL	very	10YR7/3		many	15	15		8	0	y	n					
		100	120	SL/LS					25	25		10	0	y	n					
											Total	**122**	**102**							
											MB	16	3							
									Droughtiness grade (DR)			2	2							
244	T	0	28	ZC	slight	2.5Y4/4			0	4		46	46	n	n	*I*	2	**3b**	FL	
		28	45	hZCL		10YR5/6			0	0		29	29	n	n					
		45	50	hZCL		10YR4/4	Mn	com	0	0		9	9	n	n					
		50	66	SL	mod	10YR7/2			25	0		13	18	n	n					
		66	120	SL/LS	mod	10YR7/2			25	25		28	3	n	n					
											Total	**125**	**105**							
						or hCL					MB	19	6							
									Droughtiness grade (DR)			2	2							
245	T	0	28	hCL	n	10YR4/4			6	2		47	47	n	n	*II*	3a	**3a**	WE	
		28	45	CL		10YR4/6			6	2		25	25	n	n					
		45	75	ZC	mod	10YR5/4			6	2	m/poor	24	31	n	n					
		75	100	LC	mod	5Y7/3	Mn	many	10	0	poor	16	0	y	y					

Winter wheat (tall crop)			
Winter wheat (tall crop)			
GW.Groundwater		60 cm	
FL.Flood Risk		EAFz3	3b
Sprayed off			
GW.Groundwater		50 cm	
FL.Flood Risk		EAFz3	3b
W Wheat			

		100	120	LC	mod	5Y7/3	Mn	many	10	0		16	0	y	y							
											Total	**128**	**103**		GW.Groundwater		100 cm				
											MB	22	4									
											Droughtiness grade (DR)	2	2		W Wheat							
246	T	0	23	hZCL		10YR5/4			6	0		41	41	n	n	*I*	2	**2**	DR WK			
		23	35	hZCL		10YR5/4			10	0		18	18	n	n							
		35	55	ZC		10YR5/6			0	0		27	30	n	n							
		55	80	mCL	very				0	20		22	20	n	n							
		80	120	Lst								12	0									
											Total	**120**	**110**									
											MB	14	11									
											Droughtiness grade (DR)	2	1		Winter wheat (tall crop)							
247	T	0	20	oC	n	2.5Y4/3			0	0		46	46	n	n	*II*	3a	**3b**	FL			
		20	32	C		2.5Y5/4	OM		0	0		19	19	n	n							
		32	43	C	n	5Y6/2	Fe	com	0	0	poor	14	14	y	n							
		43	80	ZC		N7/1	FeMn	many	0	0	m/poor	32	36	y	n							
		80	90	SL	very	10YR7/3		many	15	15		8	0	y	n							
		90	120	SL/LS					25	25		15	0	y	n							
											Total	**135**	**116**		GW.Groundwater		80 cm				
						Fine stone					MB	29	17		FL.Flood Risk		EAFz3	3b			
						in gravel					**Droughtiness grade (DR)**	2	1		Grass (tall)							
248	T	0	30	hZCL	n	2.5Y5/3			0	2		56	56	n	n	*II*	3a	**3b**	FL			
		30	45	C		10YR5/3	Fe	com f	5	0	m/poor	21	21	y	n							
		45	62	SL	very	10YR7/2			10	10		17	21	n	n							
		62	120	SL/LS		10YR7/2			25	25		30	6	n	n							
											Total	**124**	**104**		GW.Groundwater		50 cm				
						Mn at					MB	18	5		FL.Flood Risk		EAFz3	3b			
						40cm					**Droughtiness grade (DR)**	2	2		W Wheat							
249	T	0	30	ZC	slight	2.5Y4/4			0	6		49	49	n	n	*I*	3a	**3a**	WE DR			
		30	35	LC	slight	10YR5/4			0	10	good	10	10	n	n							
		35	50	hCL	mod	10YR6/4	Mn	com	10	10	poor	15	15	n	n							
		50	120	Lst								21	8									

												Total	**94**	**81**		GW.Groundwater		>50cm				
						or hCL						MB	-12	-18								
						FM Lst					**Droughtiness grade (DR)**		3a	3a		W Wheat						
250	T	0	25	hCL	n	10YR5/4			6	0			42	42	n	n	*I*	2	**2**	WK DR		
		25	40	hCL		10YR5/6	grey	com f	10	0			22	22	n	n						
		40	80	ZC	n	7.5YR5/6	grey	com f	0	0	m/poor		36	41	n	n						
		80	120	C		10YR6/6	Mngrey	many	20	0	m/poor		24	0	n	(y)						
												Total	**125**	**105**								
												MB	19	6								
											Droughtiness grade (DR)		2	2		Winter wheat (tall crop)						
251	T	0	20	oC	n	2.5Y4/3			0	0			34	34	n	n	*I*	2	**3b**	GW FL		
		20	35	C	n	2.5Y5/4			0	0			24	24	n	n						
		35	49	C	n	2.5Y6/4			0	0	poor		18	18	n	n						
		49	70	SL		10YR7/3	FeMn	many	10	10			20	26	y	n						
		70	120	SL/LS					25	25			26	0	y	n						
												Total	**121**	**102**		GW.Groundwater		50 cm		3b		
												MB	15	3		FL.Flood Risk		EAFz3		3b		
											Droughtiness grade (DR)		2	2		Grass (uneven height). Drains OK but high GW						
252	T	0	20	hZCL	n	2.5Y4/3				4			37	37	n	n	*I*	2	**3a**	FL		
		20	32	hZCL		2.5Y4/3			5	5			19	19	n	n						
		32	45	ZC		2.5Y5/3			5	5	m/poor		16	16	n	n						
		45	120	SL/LS		10YR7/2			25	25			40	18	n	n						
												Total	**111**	**90**								
												MB	5	-9		FL.Flood Risk		Edge of EAFz3		3a		
											Droughtiness grade (DR)		2	2		W Wheat						
253	T	0	25	hCL	slight	10YR4/3			8	4			40	40	n	n	*I*	2	**3a**	DR		
		25	48	hCL	mod	10YR5/6			10	5	good		42	42	n	n						
		48	120	Lst									22	9								
						or						Total	**104**	**91**								
						gravel						MB	-2	-8								
											Droughtiness grade (DR)		3a	2		W Wheat						
254	T	0	28	oC	trace	10YR4/3			0	0			64	64	n	n	*III*	3a	**3b**	FL		

Pit 12		28	45	C	slight	2.5Y5/3	Fe	com	0	0		27	27	y	n							
		45	80	C	mod	5Y7/2	Fe	many	0	0	poor	28	33	y	y							
		80	120	C	slight	10GY7/1	FeMn	many	0	0	poor	28	0	y	y							
											Total	**147**	**124**		GW.Groundwater			80 cm				
											MB	41	25		FL.Flood Risk			EAFz3	3b			
											Droughtiness grade (DR)	1	1		Grass (tall)							
255	T	0	26	hZCL	n	7.5YR4/4			0	0		38	38	n	n	*II*	3a	**3a**	WE			
		26	50	hZCL	n	7.5YR6/6			0	0		25	25	n	n							
		50	85	mCL	mod	10YR5/3	Fe	com	5	5		22	31	y	n							
		85	120	C	mod	7.5GY7/1	Fe	com	0	0	poor	28	0	y	y							
											Total	**124**	**100**		GR.Gradient			1o	N			
											MB	18	1									
											Droughtiness grade (DR)	2	2		Spring beans (bare). Tested for acidity (pH 6.4)							
255a	T	0	20	hZCL	n	2.5Y4/3			0	4		37	37	n	n	*I*	2	**3b**	FL GW			
		20	32	hZCL		2.5Y4/3			5	5		19	19	n	n							
		45	50	ZC		2.5Y5/3			10	10		16	16	n	n							
		50	120	SL/LS		10YR7/2			25	25		40	18	n	n							
											Total	**111**	**90**		GW.Groundwater			valley	3b			
											MB	5	-9		FL.Flood Risk			EAFz3	3b			
											Droughtiness grade (DR)	2	2		Grass set aside in long depression							
256	T	0	26	hCL		10YR4/4			2	2		45	45	n	n	*I*	2	**3a**	DR			
		26	50	LC		10YR5/4	Fe	com f	2	2	m/poor	34	34	n	n							
		50	60	C	slight	10YR5/4	Fe	com	0	0	poor	7	13	n	n							
		60	120	Lst								18	4									
											Total	**104**	**96**									
						FM Lst					MB	-2	-3									
											Droughtiness grade (DR)	3a	2		Spring beans (poor establishment)							
257	T	0	35	mCL	slight	10YR5/4			10	5		55	55	n	n	*II*	2	**2**	WE DR			
		35	60	hCL	slight	10YR6/6			10	5		30	35	n	n							
		60	120	C	mod	10Y7/2	Fe	com	0	0	poor	42	13	y	y							
											Total	**126**	**102**		GR.gradient			1o	NE			
											MB	20	3									

								Droughtiness grade (DR)			2	2		Spring beans (stonier patches nearby)							
258	T	0	28	oC	slight	2.5Y4/3			0	2		63	63	n	n	*II*	3a	**3b**	FL		
		28	35	C	n	2.5Y5/3	Fe	com f	0	0		11	11	y	n						
		35	65	C	slight	2.5Y6/3	Fe	com	0	0	m/poor	33	44	y	n						
		65	80	ZC	n	10Y7/1	FeMn	many	0	0	m/poor	11	7	y	n						
		80	120	ZC		7.5GY7/1	FeMn	many	0	0	poor	28	0	y	y						
											Total	**147**	**125**	GW.Groundwater			100cm				
											MB	41	26	FL.Flood Risk			EAFz3	3b			
								Droughtiness grade (DR)			1	1		Grass (tall)							
259	T	0	24	ZC	slight	10YR4/4			4	4		38	38	n	n	*II*	3a	**3a**	WE		
		24	42	ZC	slight	10YR6/6	OM		4	4		25	25	n	n						
		42	65	ZC	slight	10YR5/4	Fe	com	0	0	m/poor	22	31	n	n						
		65	80	ZC	mod	2.5Y6/3	Fe	com	0	0	poor	11	6	y	y						
		80	120	C	n	10Y7/1	redMn	many	0	0	poor	28	0	y	y						
											Total	**124**	**100**	GR.Gradient			1o	S			
						FM Lst					MB	18	1								
								Droughtiness grade (DR)			2	2		Spring beans (poor establishment)							
260	T	0	25	mCL	slight	10YR4/3			6	4		41	41	n	n	*I*	1	**3a**	DR		
		25	35	mCL	slight	10YR5/4			6	4		15	15	n	n						
		35	55	ZC/ZCL	mod	7.5YR4/6			0	4		28	31	n	n						
		55	68	mCL	very				5	10		11	18	n	n						
		68	120	Lst								16	1								
											Total	**110**	**106**	GR.gradient			1o	E			
											MB	4	7	ST.stone>2cm							
								Droughtiness grade (DR)			3a	2		Sp beans							
261	T	0	28	oC	mod	10YR4/3			2	2		62	62	n	n	*III*	3a	**3b**	3b		
		28	35	C	mod	10YR6/6	OM		2	2		11	11	n	n						
		35	45	C	slight	2.5Y5/3	Fe	com	0	0	m/poor	15	15	y	n						
		45	80	C	mod	2.5Y6/4	Fe	com	0	0	poor	28	33	y	y						
		80	120	C	n	10Y7/1	redMn	many	0	0	poor	28	0	y	y						
											Total	**143**	**120**								
											MB	37	21	FL.Flood Risk			EA Fz3	3b			

								Droughtiness grade (DR)			1	1		Grass (tall)							
262	T	0	24	hCL	slight	2.5Y4/4			10	10		36	36	n	n	*III*	3a	**3a**	WE			
		24	32	hCL	slight				10	10	good	14	14	n	n							
		32	50	ZC	slight	7.5YR4/6	grey	com	0	0		27	27	n	n							
		50	95	C	slight	N6/1	Fe	com	0	0	poor	32	26	y	y							
		95	100	mCL	very				0	0	poor	4	0	y	y							
		100	120	mCL	Zst				0	0	poor	14	0	y	y							
											Total	**126**	**103**									
						very					MB	20	4		ST.stone>2cm			>5%	2			
						dense					**Droughtiness grade (DR)**	2	2		Spring beans, a few stonier patches							
263	T	0	25	hCL		2.5Y4/4			10	0		41	41	n	n	*I*	2	**2**	WE DR			
		25	40	ZC		7.5YR4/6	grey	com	0	0		23	23	n	n							
		40	65	C		7.5YR6/4	Fe	few	10	0	m/poor	23	33	n	n							
		65	90	C	mod	7.5YR5/6	Mn	com	10	0	poor	16	6	n	y							
		90	120	Lst								9	0									
						fine					Total	**111**	**102**		GR.gradient			1o	E			
						stony					MB	5	3									
											Droughtiness grade (DR)	2	2		Sp beans							
264	T	0	25	hCL	slight	10YR4/6			6	4		41	41	n	n	*I*	2	**3a**	DR			
		25	50	ZC	mod	7.5YR5/6	grey	com	0	4		36	36	n	n							
		50	120	Lst								21	8									
						mottled					Total	**98**	**85**									
						45cm					MB	-8	-14									
											Droughtiness grade (DR)	3a	3a		Sp beans							
264a	T	0	28	hCL	very	10YR4/3			0	25		41	41	n	n	*I*	2	**3b**	DR DP ST			
		28	120	Lst								30	17									
											Total	**70**	**57**									
											MB	-36	-42		ST.stone>6cm			>10%	3b			
											Droughtiness grade (DR)	3b	3b		Spring beans (poor)							

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3

hard pebbles & flints

Climate Data	
MDwheat	105
MDpotato	98
FCD	147
AAR	674

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>67cm	40-67cm	<40cm	
SPL within 80cm, gleying at 40-70cm	>51cm	<51cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1430 D^o
Limitation
Grade 1
72 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
265	T	0	25	ZC	mod.	10YR4/4			5	15		36	36	n	n	I	2	**3b**	DR DP
		25	30	ZC	mod				0	50	good	6	6	n	n				
		30	120	Lst								29	16						
											Total	**71**	**58**		GR.gradient			2o	N
											MB	-34	-40		ST.stone>2cm			>5%	2
									Droughtiness grade (DR)			3b	3b		Beans				
265a	T	0	26	hCL	slight	10YR4/4			5	5		43	43	n	n	II	2	**2**	WE DR
		26	45	hCL	slight	7.5YR5/4			5	0		29	29	n	n				
		45	70	ZC		7.5YR5/4	Fe	com f	5	0	m/poor	21	32	n	n				
		70	120	C		10YR7/8	FeMn	com	0	0	poor	35	0	y	y				
											Total	**127**	**104**		GR.gradient			footslope	
											MB	22	6						
									Droughtiness grade (DR)			2	2		Beans				
266	T	0	24	hZCL	n	7.5YR4/3			3	3		43	43	n	n	II	3a	**3a**	WE
		24	60	hZCL		7.5YR6/4	Fe	com	5	0		52	58	y	n				
		60	74	ZC		7.5YR5/4	Fe	com	5	0	m/poor	10	13	n	n				
		74	120	Lst								14	0						
											Total	**119**	**114**						
											MB	14	16						
									Droughtiness grade (DR)			2	1		Beans				
267	T	0	27	hZCL	n	10YR5/4			4	0		49	49	n	n	II	3a	**3a**	WE
		27	45	hZCL		7.5YR5/3	Fe	com f	5	0		29	29	y	n				
		45	60	ZC		7.5YR4/6	grey	com	0	0	m/poor	14	20	n	n				
		60	78	hZCL	n	7.5YR5/4	Fe	com	5	0		17	16	n	n				
		78	120	Lst								13	0						

											Total	**123**	**115**								
											MB	18	17								
										Droughtiness grade (DR)		2	1		Beans						
Pit 13	T	0	27	hCL	mod	10YR4/3			10	10		40	40	n	n	*I*	2	**3a**	DR		
		27	40	CL	v.slight	7.5YR6/6	grey	com f	0	5		20	20	n	n						
		40	55	mCL		7.5YR5/3	Fe	few f	0	0		21	24	n	n						
		55	70	SC	very	7.5YR5/2	FeMn	com	10	10		13	19	y	n						
		70	120	Lst								15	0								
											Total	**109**	**103**								
											MB	4	5		ST.stone>2cm			6%	2		
										Droughtiness grade (DR)		3a	2		Beans						
268	T	0	26	hCL	mod	10YR4/3			8	8		40	40	n	n	*I*	2	**3a**	DR		
		26	46	hCL	mod	10YR6/6			10	10	good	35	35	n	n						
		46	120	Lst								23	10								
											Total	**98**	**85**		Or gravel						
											MB	-7	-13		ST.stone>2cm			>5%	2		
										Droughtiness grade (DR)		3a	3a		Beans						
269	T	0	25	hCL	mod	10YR4/3			15	10		35	35	n	n	*I*	2	**3a**	DR		
		25	45	hCL	mod	7.5YR5/4			15	10	good	33	33	n	n						
		45	120	Lst								23	10								
											Total	**91**	**78**								
											MB	-14	-20		ST.stone>2cm			>10%	3a		
										Droughtiness grade (DR)		3a	3a		Beans (thinner patch)						
270a	T	0	27	mCL	n	7.5YR5/4			6	0		46	46	n	n	*III*	3a	**3a**	WE		
		27	35	mCL		7.5YR5/6			5	0		12	12	n	n						
		35	60	ZC/ZCL		7.5YR6/4	Fe	com	0	0	m/poor	30	35	y	n						
		60	105	C		7.5YR5/3	brown	many	0	0	poor	32	13	y	y						
		105	120	MSt					0	0	poor	8	0	y	y						
											Total	**127**	**106**								
											MB	22	8								
										Droughtiness grade (DR)		2	2		Beans						
270	T	0	30	hZCL	n	7.5YR5/3	Fe	few	4	0		55	55	n	n	*IV*	3b	**3b**	WE		

		30	50	C		7.5YR6/4	Fe	com	0	0	poor	26	26	y	y					
		50	80	hZCL		7.5YR6/3	Fe	com	0	0	m/poor	24	29	y	(y)					
		80	90	C		7.5GY7/1	FeMn	many	0	50		6	0	y	n					
		90	120	Lst								9	0							
											Total	**119**	**110**							
											MB	14	12							
										Droughtiness grade (DR)		2	1							
271	T	0	24	hZCL	n	10YR5/3			4	0		44	44	n	n	*III*	3b	**3b**	WE	
		24	42	ZC		10YR6/3	Fe	com	5	0		26	26	y	n					
		42	78	C		10YR5/3	Fe	com	0	0	poor	30	36	y	y					
		78	90	C		7.5GY7/1	FeMn	many	0	50		7	0	y	n					
		90	120	Lst								9	0							
											Total	**115**	**106**							
											MB	10	8							
										Droughtiness grade (DR)		2	2							
272	T	0	26	hCL	slight	10YR4/4			5	5		43	43	n	n	*II*	2	**2**	WE	DR
		26	45	hCL	slight	10YR5/4			8	8		26	26	n	n					
		45	55	CL	very			com f	0	25		11	13	n	n					
		55	66	C	mod	2.5Y7/6	Fe	com f	0	5	m/poor	8	15	n	n					
		66	95	C	mod	2.5Y7/3	Fe	com	0	5	poor	20	5	y	y					
		95	120	Lst								8	0							
											Total	**115**	**102**							
											MB	10	4							
										Droughtiness grade (DR)		2	2							
273	T	0	25	hCL	mod	10YR4/4			8	8		39	39	n	n	*III*	2	**3a**	DR	
		25	35	hCL	slight	7.5YR5/4			8	8		14	14	n	n					
		35	50	ZC		7.5YR5/3	Fe	com f	5	5		21	21	y	n					
		50	65	C	mod	2.5Y7/6	FeMn	com	0	10	m/poor	11	20	n	(y)					
		65	85	C	mod	2.5Y7/6	Fe	com	0	10	poor	13	6	n	y					
		85	120	Lst								11	0							
											Total	**108**	**99**							
											MB	3	1							

Bare (wet spot)

Beans, thin crop

Beans (tall)

Droughtiness grade (DR)	3a	2	Beans

Stone types		
%	TAv	EAv
hard	1	0.5

Climate Data	
MDwheat	106
MDpotato	98
FCD	147
AAR	672

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>67cm	40-67cm	<40cm	
SPL within 80cm, gleying at 40-70cm	>51cm	<51cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1431 D°
Limitation
Grade 1
70 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone%	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
274	T	0	25	oC	slight	2.5Y4/3			0	0		58	58	n	n	III	3a	**3b**	FL
		25	45	C	slight	2.5Y6/6	OM		0	0		32	32	n	n				
		45	75	C	slight	2.5Y6/4	FeMn	com f	0	0	poor	24	33	y	(y)				
		75	120	C	mod	2.5Y6/4	FeMn	com	0	0	poor	32	0	y	y				
											Total	**145**	**122**		GW.Groundwater			100cm	
											MB	39	24		FL.Flood Risk			EAFz3	3b
									Droughtiness grade (DR)			1	1		Grass (tall)				
275	T	0	24	oC	slight	2.5Y4/3			0	0		55	55	n	n	III	3a	**3b**	FL
		24	50	C	slight	2.5Y6/6	OM	com f	0	0		42	42	n	n				
		50	80	C	slight	2.57/4	FeMn	com f	0	0	poor	21	26	y	y				
		80	120	C	mod	N7/1	FeMn	com	0	0	poor	28	0	y	y				
											Total	**146**	**123**		GW.Groundwater			80 cm	
											MB	40	25		FL.Flood Risk			EA Fz3	3b
									Droughtiness grade (DR)			1	1		Grass (tall)				
276	T	0	22	oC	n	2.5Y4/3			0	0		51	51	n	n	IV	3b	**3b**	WE FL
		22	33	C		2.5Y5/2	Fe	com	0	0	m/poor	16	16	y	n				
		33	100	C	n	10Y6/1	red	many	0	0	poor	57	48	y	y				
		100	120	C		10Y7/1	Fe	many	0	0	poor	14	0	y	y				
											Total	**138**	**115**		GW.Groundwater			100cm	
											MB	32	17		FL.Flood Risk			EAFz3	3b
									Droughtiness grade (DR)			1	1		Grass				
277	T	0	22	oC	mod	2.5Y5/3			0	0		51	51	n	n	III	3a	**3b**	FL
		22	41	C	mod	2.5Y6/4	OMFe	com	0	0		30	30	y	n				
		41	50	C	n	10Y6/1	red	com	0	0	poor	12	12	y	(y)				

		50	80	ZC	mod	2.5Y6/2	OMFe	com	0	0	m/poor	23	27	y	n					
		80	105	ZC	n	2.5Y6/2	FeMn	many	0	0	poor	18	0	y	y					
		105	120	ZC	n				0	0	poor	11	0	y	y					
											Total	**143**	**120**							
											MB	37	22			FL.Flood Risk		EAFz3	3b	
											Droughtiness grade (DR)	1	1			Grass, on levee nearer river				
Pit 14	T	0	20	oC	n	2.5Y4/2			0	0		46	46	n	n	*IV*	3b	**3b**	WE FL	
		20	38	C	n	2.5Y5/2	Fe	com	0	0	good	38	38	y	n					
		38	50	C	n	2.5Y6/3	Fe	com	0	0	poor	16	16	y	y					
		50	80	C		2.5Y6/2	red	many	0	0	m/poor	23	29	y	(y)					
		80	120	C	slight		Fe	com f	0	0	poor	28	0	y	y					
											Total	**150**	**128**							
						20-38					MB	44	30			FL.Flood Risk		EAFz3	3b	
						TS+SS					**Droughtiness grade (DR)**	1	1			Grass				
278	T	0	28	oC	mod	2.5Y4/3			0	0		64	64	n	n	*IV*	3b	**3b**	WE FL	
		28	35	C	mod	2.5Y5/3	Fe	com	0	0		11	11	y	n					
		35	77	C	mod	2.5Y6/2	FeMn	many	0	0	poor	38	46	y	y					
		77	100	ZC	mod	10Y7/1	FeMn	com	0	0	m/poor	17	0	y	n					
		100	120	C	mod	10Y7/1	Fe	com	0	0	poor	14	0	y	y					
											Total	**145**	**121**			GW.Groundwater		77 cm		
											MB	39	23			FL.Flood Risk		EAFz3	3b	
											Droughtiness grade (DR)	1	1			Grass, on levee nearer river				
279	T	0	22	ZC	very	10YR5/4			0	0		37	37	n	n	*II*	3a	**3a**	WE	
		22	35	C	very	2.5Y5/6	Fe	com f	0	0		21	21	n	n					
		35	55	ZC	very	2.5Y7/4	Fe	com	0	0	m/poor	24	27	y	n					
		55	110	ZC	mod	2.5Y6/2	FeMn	many	0	0	poor	39	18	y	y					
		110	120	C					0	0	poor	7	0	y	y					
											Total	**128**	**103**							
											MB	22	5							
											Droughtiness grade (DR)	2	2							
280	T	0	22	oC	slight	2.5Y4/3			0	0		51	51	n	n	*II*	3a	**3b**	FL	
		22	40	C	slight	2.5Y6/6	OM		0	0	m/poor	26	26	n	n					

40	75	ZC/C	slight	2.5Y6/4	Fe	com f	0	0	m/poor	33	42	y	n	
75	120	hZCL	slight	2.5Y6/6	Fe	com f	0	0	m/poor	36	0	n	n	
									Total	**145**	**119**		GW.Groundwater	100cm
									MB	39	21		FL.Flood Risk	EAFz3 3b
								Droughtiness grade (DR)		1	1		Grass near river	

Stone types		
%	TAv	EAv
hard	1	0.5
Lst	4	3
hard	flint & pebble	

Climate Data	
MDwheat	105
MDpotato	96
FCD	147
AAR	678

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>67cm	40-67cm	<40cm	
SPL within 80cm, gleying at 40-70cm	>51cm	<51cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1422 D^o
Limitation
Grade 1

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lst	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
281	T	0	28	oC	mod.	10YR3/3			0	0		64	64	n	n	II-III	3a	**3b**	FL
		28	51	C	mod.	10YR5/3	Fe	few	0	0		36	37	n	n				
		51	120	C	mod.	10YR5/1	Fe	many	0	0	poor	48	25	y	y				
											Total	**149**	**126**		Field in EAFZ3- Subgrade 3b				
											MB	44	30						
											Droughtiness grade (DR)	1	1						
282	T	0	23	C	mod.	10YR4/2			3	0		38	38	n	n	IV	3b	**3b**	WE
		23	120	C	n	10YR6/1	Fe	com	0	0	poor	84	61	y	y				
											Total	**122**	**99**						
											MB	17	3						
											Droughtiness grade (DR)	2	2						
283	T	0	28	C	very	10YR4/2			0	30		37	37	n	n	II	3a	**3b**	ST
		28	64	C	mod.	10YR5/3	Fe	few	0	20		40	49	n	n				
		64	120	C	very	10YR5/1	Fe	com	0	10	poor	37	7	y	y				
											Total	**113**	**93**		TS stone 20-25%>2cm Lots of large stone				
											MB	8	-3						
											Droughtiness grade (DR)	2	2						
284	T	0	26	C	n	10YR4/2			10	0		40	40	n	n	IV	3b	**3b**	WE
		26	50	C	v.sli	10YR5/3	Fe	many	3	0	poor	30	30	y	y				
		50	120	C	n	10YR6/1	Fe	many	5	0	poor	47	25	y	y				
											Total	**117**	**95**						
											MB	12	-1						
											Droughtiness grade (DR)	2	2						
285	T	0	25	C	trace	10YR4/2			5	0		41	41	n	n	II	3b	**3b**	WE

		25	120	C	n	10YR5/2, 10YR5/3	Femn	many	0	0		96	72	y	n					
											Total	**136**	**113**							
											MB	31	17							
											Droughtiness grade (DR)	1	1							
286	T	0	30	oC	mod.	10YR4/2			0	0		69	69	n	n	*III*	3a	**3b**	FL	
		30	60	C	mod.	10YR5/3	Fe	com	0	0		40	48	y	n					
		60	102	C	mod.	10YR5/3	Fe	com	0	0	poor	29	13	y	y					
		102	120	C	mod.	10YR5/2	Femn	many	0	0	poor	13	0	y	y					
											Total	**151**	**130**		Field in EAFZ3- Subgrade 3b					
											MB	46	34							
											Droughtiness grade (DR)	1	1							
287	T	0	28	C	n	10YR4/2			5	0		45	45	n	n	*IV*	3b	**3b**	WE	
		28	83	C	n	2.5Y5/2	Fe	many	3	0	poor	50	53	y	y					
		83	120	C	n	10YR6/1	Fe	many	0	0	poor	26	0	y	y					
											Total	**122**	**98**							
											MB	17	2							
											Droughtiness grade (DR)	2	2							
288	T	0	26	C	very	10YR4/2			0	30		34	34	n	n	*II*	3a	**3b**	ST	
		26	64	C	mod.	10YR5/3	Fe	few	0	20		42	52	n	n					
		64	120	C	very	10YR5/1	Fe	com	0	10	poor	37	7	y	y					
											Total	**113**	**93**		TS stone 20-25%>2cm Lots of large stone					
											MB	8	-3							
											Droughtiness grade (DR)	2	2							
289	T	0	29	hCL	n	10YR4/2	Fe	com	3	0		51	51	y	n	*IV*	3b	**3b**	WE	
		29	70	C	n	10YR5/2	Fe	many	3	0	poor	40	52	y	y					
		70	120	C	n	10YR5/1	Fe	v.many	0	0	poor	35	0	y	y					
											Total	**126**	**103**							
											MB	21	7							
											Droughtiness grade (DR)	2	2							
290	T	0	27	C	n	10YR4/2	Fe	few	5	0		44	44	n	n	*IV*	3b	**3b**	WE	
		27	63	C	n	10YR6/1	Fe	many	3	0	poor	38	46	y	y					

		63	120	C	n	10YR6/1	Fe	many	5	0	poor	38	9	y	y				
											Total	**120**	**98**						
											MB	15	2						
											Droughtiness grade (DR)	2	2						
291	T	0	28	C	n	10YR4/2			15	0		41	41	n	n	*IV*	3b	**3b**	WE
		28	68	C	n	10YR5/2	Fe/red	many	7	0	poor	39	49	y	y				
		68	120	C	n	10YR5/1	Fe	many	15	0	poor	31	2	y	y				
											Total	**111**	**92**						
											MB	6	-4						
											Droughtiness grade (DR)	2	2						
292	T	0	27	hCL	n	10YR4/2			15	2		41	41	n	n	*II*	3a	**3a**	WE
		27	60	C	n	10YR5/3	Femn	com	10	0		41	48	y	n				
		60	120	C	n	10YR5/8	Femn	com	0	0		48	16	n	n				
											Total	**130**	**105**						
											MB	25	9						
											Droughtiness grade (DR)	2	2						
293	T	0	28	hCL	n	10YR4/2			12	0		45	45	n	n	*III*	3b	**3b**	WE
		28	40	C	n	10YR5/3	Fe	com	3	0		19	19	y	n				
		40	65	C	n	10YR5/2	Femn	many	0	0	poor	24	33	y	y				
		65	120	C	n	10YR6/1	Fe	many	0	0	poor	39	7	y	y				
											Total	**125**	**102**						
											MB	20	6						
											Droughtiness grade (DR)	2	2						
294	T	0	25	C	n	10YR4/2	Fe	com	5	0		41	41	y	n	*IV*	3b	**3b**	WE
		25	120	C	n	10YR6/1	Fe	many	0	0	poor	82	59	y	y				
											Total	**122**	**99**						
											MB	17	3						
											Droughtiness grade (DR)	2	2						
295	T	0	25	C	mod.	10YR4/2			5	10		37	37	n	n	*I-II*	3a	**3a**	DR WE
		25	45	mSL	very	10YR4/6			0	40		21	21	n	n				
		45	70	mSL	very	10YR4/6			0	40		21	27	n	n				
		70	120	C	very	10YR6/1	Fe	com	0	0	poor	35	0	y	y				

											Total	**114**	**85**						
											MB	9	-11						
										Droughtiness grade (DR)		2	3a						
296	T	0	26	hCL	n	10YR4/2			12	0		41	41	n	n	*IV*	3b	**3b**	WE
		26	35	C	n	10YR5/3	Fe	com	3	0		14	14	y	n				
		35	120	C	n	10YR6/1	Fe	many	0	0	poor	69	46	y	y				
											Total	**124**	**101**						
											MB	19	5						
										Droughtiness grade (DR)		2	2						
297	T	0	29	hCL	n	10YR4/2	Fe	com	7	0		49	49	y	n	*III*	3b	**3b**	WE
		29	46	C	n	10YR5/2	Femn	com	5	0		26	26	y	n				
		46	120	C	n	10YR6/1	Femn	many	0	0	poor	54	31	y	y				
											Total	**129**	**106**						
											MB	24	10						
										Droughtiness grade (DR)		2	2						
298	T	0	20	C	sli	10YR4/2			2	3		33	33	n	n	*IV*	3b	**3b**	WE
Pit 15		20	120	C	mod.	10YR6/1	Fe	many	0	0	poor	88	65	y	y				
											Total	**121**	**98**						
											MB	16	2						
										Droughtiness grade (DR)		2	2						
299	T	0	25	C	sli	10YR4/2			1	2		41	41	n	n	*I*	2	**2**	WE
		25	106	C	v.sli	10YR5/8	mn	many	3	0		82	70	n	n				
		106	120	hCL	n	10YR5/6	Femn	com	3	0		14	0	n	n				
											Total	**137**	**111**						
											MB	32	15						
										Droughtiness grade (DR)		1	1						
300	T	0	27	C	n	10YR4/2	Fe	few	7	0		43	43	n	n	*IV*	3b	**3b**	WE
		27	70	C	n	10YR5/1	Fe	many	0	0	poor	53	69	y	y				
		70	120	C	v.sli	10YR6/1	Fe	many	0	0	poor	35	0	y	y				
											Total	**131**	**112**						
											MB	26	16						
										Droughtiness grade (DR)		2	1						

301	T	0	28	C	n	10YR4/2	Fe	com	5	0		45	45	y	n	*IV*	3b	**3b**	WE	
		28	120	C	n	10YR6/1	Fe	many	0	0	poor	78	55	y	y					
											Total	**123**	**100**							
											MB	18	4							
											Droughtiness grade (DR)	2	2							
302	T	0	20	C	mod.	10YR4/2			0	20		29	29	n	n	*I*	2	**3a**	ST	
		20	52	C	v.sli	10YR5/8	mn	com	0	0		50	51	n	n					
		52	110	C	mod.	10YR5/8			0	7		44	27	n	n					
		110	120	C	n	10YR6/1	Fe	many	0	0	poor	7	0	y	y					
											Total	**130**	**107**	TS stone 7/10/3- around ob						
											MB	25	11	TS stone variable across ha frequent patches of 3a						
											Droughtiness grade (DR)	2	1							
303	T	0	22	C	mod.	10YR4/2			0	9		35	35	n	n	*I*	2	**2**	WE DR	
		22	70	C	v.sli	7.5YR5/8	mn	com	0	0		61	77	n	n					
		70	120	C	mod.	7.5YR5/8	mn	com	0	10		38	0	n	n					
											Total	**133**	**112**	TS stone 5/3/1						
											MB	28	16							
											Droughtiness grade (DR)	2	1							
304	T	0	28	C	mod.	10YR4/2			0	26		38	38	n	n	*II*	3a	**3a**	WE ST	
		28	50	C	very	10YR5/2	Fe	com	0	30		27	27	y	n					
		50	120	C	very	10YR5/2	Fe	com	0	30		46	25	y	n					
											Total	**111**	**90**	TS stone 10/12/4- around ob						
											MB	6	-6	TS stone variable across ha frequent patches of 3a						
											Droughtiness grade (DR)	2	2	Profile potentially over limestone at depth						
305	T	0	24	C	sli	10YR4/2			2	5		38	38	n	n	*IV*	3b	**3b**	WE	
		24	32	C	sli	10YR5/3			2	0		13	13	n	n					
		32	120	C	n	10YR6/1	Fe	com	0	0	poor	72	49	y	y					
											Total	**123**	**100**							
											MB	18	4							
											Droughtiness grade (DR)	2	2							

Stone types		
%	TAv	EAv
hard	1	0.5
chalk	10	7
hard	flint & pebble	

Climate Data	
MDwheat	104
MDpotato	95
FCD	148
AAR	682

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>68cm	40-68cm	<40cm	
SPL within 80cm, gleying at 40-70cm	>51cm	<51cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Climate
1414 D°
Limitation
Grade 1

Maximum depth of auger penetration is underlined

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% chalk	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
306	T	0	18	C		10YR3/3	Fe	few	0	0		31	31	n	n	*III*	3b	**3b**	WE
		18	40	C		10YR4/2	Fe	com	0	0		35	35	y	n				
		40	85	C		10YR5/3	Fe	many	2	0	poor	37	38	y	y				
		85	120	C		10Y5/1	Fe	com	0	0	poor	25	0	y	y				
											Total	**127**	**104**						
											MB	23	9						
									Droughtiness grade (DR)			2	2						
307	T	0	32	C		10YR4/2			0	0		54	54	n	n	*IV*	3b	**3b**	WE
		32	45	C		10YR5/2	Fe	com	0	0	poor	17	17	y	y				
		45	120	C		10Y5/1	Fe	com	0	0	poor	56	33	y	y				
											Total	**127**	**104**						
											MB	23	9						
									Droughtiness grade (DR)			2	2						
308	T	0	15	hCL		10YR4/2			0	0		27	27	n	n	*III*	3b	**3b**	WE
		15	48	C		2.5Y4/3	Fe	com	0	0		53	53	n	n				
		48	80	C		2.5Y5/3	Fe	com	0	0	poor	24	29	y	y				
		80	120	C		10Y5/1	Fe	com	0	0	poor	28	0	y	y				
											Total	**131**	**108**						
											MB	27	13						
									Droughtiness grade (DR)			2	1						
309	T	0	25	C		10YR4/2			0	0		43	43	n	n	*IV*	3b	**3b**	WE
		25	50	C		2.5Y5/2	FeMn	com	0	0	poor	33	33	y	y				
		50	80	C		2.5Y5/2	FeMn	com	10	0	poor	19	24	y	y				
		80	120	C		10Y5/1	Fe	com	0	0	poor	28	0	y	y				
											Total	**122**	**99**						

										MB	18	4							
										Droughtiness grade (DR)	2	2							
310	T	0	10	C		10YR3/3			0	0		17	17	n	n	*III*	3b	**3b**	WE
		10	45	C		10YR5/2	FeMn	com	0	0		56	56	y	n				
		45	120	C		2.5Y5/3	FeMn	many	0	0	poor	56	33	y	y				
											Total	**128**	**106**						
											MB	24	11						
										Droughtiness grade (DR)	2	1							
311	T	0	30	hCL		10YR4/2			0	0		54	54	n	n	*IV*	3b	**3b**	WE
		30	80	C	trace	10YR5/3	Fe	com	10	0	poor	43	47	y	y				
		80	120	C	mod	2.5Y5/3	Fe	many	0	0	poor	28	0	y	y				
											Total	**125**	**101**						
											MB	21	6						
										Droughtiness grade (DR)	2	2							
312	T	0	35	hCL		10YR4/2	Fe	few	0	0		63	63	n	n	*II*	3a	**3a**	WE
		35	70	C		10YR5/3	FeMn	com	0	0		40	56	y	n				
		70	120	C		10YR5/3	Fe	com	0	0	poor	35	0	y	y				
											Total	**138**	**119**						
											MB	34	24						
										Droughtiness grade (DR)	1	1							
313	T	0	20	hCL		10YR3/3			25	0		28	28	n	n	*III-IV*	3b	**3b**	WE
		20	40	hCL		10YR3/3			25	0		25	18	n	n				
		40	120	C			Fe	com	10	0	poor	56	41	y	y				
											Total	**108**	**87**		Very stony topsoil - impen to gouge auger				
											MB	4	-8						
										Droughtiness grade (DR)	3a	2							
314	T	0	24	C		10YR4/2			0	0		41	41	n	n	*IV*	3b	**3b**	WE
		24	120	C		2.5Y5/3	Fe	com	0	0	poor	83	60	y	y				
											Total	**124**	**101**						
											MB	20	6						
										Droughtiness grade (DR)	2	2							
315	T	0	26	C		10YR4/1	Fe	com	0	0		44	44	y	n	*IV*	3b	**3b**	WE

		26	60	C		2.5Y5/2	Fe	com	0	0	poor	38	44	y	y				
		60	120	C		10YR5/2	Fe	com	0	0	poor	42	13	y	y				
											Total	**124**	**101**						
											MB	20	6						
											Droughtiness grade (DR)	2	2						
316	T	0	34	hCL		10YR4/2			0	0		61	61	n	n	*IV*	3b	**3b**	WE
		34	80	C		10YR5/3-5/4	Fe	com	1	0	poor	41	46	(y)	y				
		80	120	C	very	10YR6/6	Fe	com	10	0	poor	25	0	(y)	y				
											Total	**128**	**108**						
											MB	24	13						
											Droughtiness grade (DR)	2	1						
317	T	0	10	SCL		10YR4/3			18	0		61	61	n	n	*IV*	3b	**3b**	WE
	T	10	30	SCL		10YR4/3			18	0		41	46	n	n				
		30	120	C		10YR6/6	Fe	com	10	0	poor	25	0	(y)	y				
											Total	**128**	**108**		Very dry8% st >2cm				
											MB	24	13						
											Droughtiness grade (DR)	2	1						
318	T	0	24	C		10YR4/2			1	0		40	40	n	n	*III*	3b	**3b**	WE
		24	65	C		10YR5/4	FeMn	com	1	0	poor	44	53	n	y				
		65	120	SC	very	10YR5/4	Fe	com	10	0		50	7	n	n				
											Total	**134**	**100**		Sand and stone at 65cm				
											MB	30	5						
											Droughtiness grade (DR)	1	2						
319	T	0	28	C		10YR4/2			5	0		45	45	n	n	*IV*	3b	**3b**	WE
		28	55	C		10YR5/2	Fe	com	0	0	poor	32	35	y	y				
		55	120	C		10YR5/1	Fe	com	10	0	poor	41	18	y	y				
											Total	**119**	**98**						
											MB	15	3						
											Droughtiness grade (DR)	2	2						
320	T	0	35	hCL		10YR4/3			5	0		60	60	n	n	*II*	3a	**3a**	WE
		35	90	hCL		10YR5/3	Fe	com	20	0		52	46	y	n				
		90	120	hCL		10YR5/3	Fe	com	20	0		24	0	y	n				

										Total	**136**	**106**							
										MB	32	11							
									Droughtiness grade (DR)		1	1							
321	T	0	30	hCL	10YR4/2			5	0		51	51	n	n	*IV*	3b	**3b**	WE	
		30	45	C	10YR5/3	Fe	com	5	0	poor	19	19	y	y					
		45	80	ZC	5GY5/1	Fe	few	0	0	poor	27	30	y	y					
		80	120	ZC	5GY5/1	Fe	few	5	0	poor	27	0	y	y					
										Total	**124**	**100**							
										MB	20	5							
									Droughtiness grade (DR)		2	2							
322	T	0	25	C	10YR4/2			2	0		42	42	n	n	*IV*	3b	**3b**	WE	
		25	60	C	10YR5/3	Fe	com	10	0	poor	36	41	y	y					
		60	120	C	2.5Y5/3	Fe	com	0	0	poor	42	13	y	y					
										Total	**120**	**96**							
										MB	16	1							
									Droughtiness grade (DR)		2	2							
323	T	0	22	C	10YR4/2			1	0		37	37	n	n	*IV*	3b	**3b**	WE	
		22	80	C	10YR5/2	Fe	com	0	0	poor	57	62	y	y					
		80	120	C	10YR5/1	Fe	com	0	0	poor	28	0	y	y					
										Total	**122**	**99**							
										MB	18	4							
									Droughtiness grade (DR)		2	2							
324	T	0	28	C	10YR4/2			8	0		44	44	n	n	*IV*	3b	**3b**	WE	
		28	75	C	2.5Y5/3	FeMn	com	0	0	poor	46	55	y	y					
		75	120	C	10YR5/1	Fe	com	0	0	poor	32	0	y	y					
										Total	**122**	**99**							
										MB	18	4							
									Droughtiness grade (DR)		2	2							
325	T	0	27	C		10YR4/2			2	0		45	45	n	n	*IV*	3b	**3b**	WE	
Pit 16		27	40	C		10YR5/3	Fe	com	10	0	poor	15	15	y	y					
		40	120	C	slight	10Y4/1	Fe	com	0	0	poor	62	39	y	y					
										Total	**122**	**99**							

										MB	18	4								
										Droughtiness grade (DR)	2	2								
326	T	0	35	hCL		10YR4/2			1	0		62	62	n	n	*IV*	3b	**3b**	WE	
		35	50	C		10YR5/2	Fe	com	0	0	poor	20	20	y	y					
		50	120	C		10YR5/1	Fe	com	0	0	poor	49	26	y	y					
											Total	**131**	**108**							
											MB	27	13							
										Droughtiness grade (DR)	2	1								
327	T	0	32	C		10YR4/2			12	0		48	48	n	n	*IV*	3b	**3b**	WE	
		32	120	C		2.5Y5/3	Fe	com	0	0	poor	72	49	y	y					
											Total	**121**	**98**							
											MB	17	3							
										Droughtiness grade (DR)	2	2								
328	T	0	25	C		10YR4/2			0	0		43	43	n	n	*IV*	3b	**3b**	WE	
		25	75	C		2.5Y5/3	Fe	com	1	0	poor	50	58	y	y					
		75	120	C	mod	10YR5/1	Fe	com	0	0	poor	32	0	y	y					
											Total	**124**	**100**							
											MB	20	5							
										Droughtiness grade (DR)	2	2								
329	T	0	26	C		10YR4/2			5	0		42	42	n	n	*IV*	3b	**3b**	WE	
		26	80	C		10YR5/3	Fe	com	1	0	poor	52	57	y	y					
		80	120	C	very	10YR5/1	Fe	com	0	0	poor	28	0	y	y					
											Total	**122**	**99**							
											MB	18	4							
										Droughtiness grade (DR)	2	2								
330	T	0	20	C		10YR4/2			5	0		32	32	n	n	*IV*	3b	**3b**	WE	
		20	50	C		10YR5/3	Fe	com	0	0	poor	39	39	y	y					
		50	120	C		2.5Y5/2	Fe	com	0	0	poor	49	26	y	y					
											Total	**120**	**97**		dry					
											MB	16	2							
										Droughtiness grade (DR)	2	2								
331	T	0	22	C		10YR4/2			5	0		36	36	n	n	*IV*	3b	**3b**	WE	

		22	40	C		10YR5/3	Fe	many	0	0	poor	23	23	y	y				
		40	80	C		2.5Y5/2	Fe	com	0	0	poor	34	39	y	y				
		80	120	C	very	10Y5/1	Fe	com	0	0	poor	28	0	y	y				
											Total	**121**	**98**						
											MB	17	3						
											Droughtiness grade (DR)	2	2						
332	T	0	28	C		10YR4/2			5	0		45	45	n	n	*IV*	3b	**3b**	WE
		28	78	C		10YR5/3	Fe	com	0	0	poor	48	55	y	y				
		78	120	C		10YR5/2	FeMn	com	0	0	poor	29	0	y	y				
											Total	**123**	**100**						
											MB	19	5						
											Droughtiness grade (DR)	2	2						
333	T	0	22	C		10YR4/2			1	0		37	37	n	n	*IV*	3b	**3b**	WE
		22	50	C		10YR5/3	Fe	com	0	0	poor	36	36	y	y				
		50	80	C		10YR5/3	Fe	com	0	0	poor	21	26	y	y				
		80	120	C		2.5Y5/2	Fe	com	0	0	poor	28	0	y	y				
											Total	**122**	**99**						
											MB	18	4						
											Droughtiness grade (DR)	2	2						

Stone types		
%	TAv	EAv
hard	1	0.5
chalk	10	7
hard	flint & pebble	

Climate Data	
MDwheat	107
MDpotato	100
FCD	143
AAR	665

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>66cm	39-66cm	<39cm	
SPL within 80cm, gleying at 40-70cm	>49cm	<49cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1414 D°
Limitation
Grade 1

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% chalk	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
360	T	0	25	hCL		10YR4/2			10			41	41	n	n	*III*	3b	**3b**	WE
		25	52	C		10YR4/3	Fe	com	25		poor	26	27	n	y				
		52	80	C		10YR4/3	Fe	com	25		poor	15	18	n	y				
		80	120	C					10		poor	25	0	y	y				
											Total	**107**	**86**						
											MB	0	-14						
									Droughtiness grade (DR)			3a	3a						
361	T	0	26	hCL		10YR4/2			5			45	45	n	n	*IV*	3b	**3b**	WE
		26	30	C		2.5Y5/3	FeMn	com	30		poor	4	4	y	y				
		30	50	C		2.5Y5/3	FeMn	com	25		poor	20	20	y	y				
		50	120	C		2.5Y5/2	Fe	com	10		poor	44	24	y	y				
											Total	**113**	**92**						
											MB	6	-8						
									Droughtiness grade (DR)			2	2						
362	T	0	35	hCL		10YR3/2			5			60	60	n	n	*IV*	3b	**3b**	WE
		35	62	C		2.5Y5/3	FeMn	com	5		poor	27	33	y	y				
		62	120	C		2.5Y5/2	Fe	com	0		poor	41	10	y	y				
											Total	**127**	**104**						
											MB	20	4						
									Droughtiness grade (DR)			2	2						
363	T	0	36	hZCL		10YR3/2			10			62	62	n	n	*IV*	3b	**3b**	WE
		36	85	C		2.5Y5/2	FeMn	com	1		poor	42	44	y	y				
		85	120	C		2.5Y5/2	Fe	com	1		poor	24	0	y	y				
											Total	**128**	**106**						
											MB	21	6						

								Droughtiness grade (DR)		2	2							
364	T	0	35	C	10YR4/2			10		54	54	n	n	*IV*	3b	**3b**	WE	
		35	60	C	10YR5/2	Fe	com	2	poor	26	32	y	y					
		60	120	C	10YR5/2	Fe	com	1	poor	42	13	y	y					
									Total	**122**	**99**							
									MB	15	-1							
								Droughtiness grade (DR)		2	2							
365	T	0	22	C	10YR4/2			10		34	34	n	n	*IV*	3b	**3b**	WE	
		22	35	C	10YR5/3	Fe	com	25	poor	13	13	y	y					
		35	50	C	10YR5/3	Fe	com	30	poor	14	14	y	y					
		50	120	C	10YR5/2	Fe	com	5	poor	47	25	y	y					
									Total	**108**	**86**		Impenetrable to gouge auger					
									MB	1	-14							
								Droughtiness grade (DR)		3a	3a							
366	T	0	32	hCL	5YR4/2			12		51	51	n	n	*IV*	3b	**3b**	WE	
		32	70	SC	7.5YR5/3	FeMn	com	20	poor	32	40	y	y					
		70	120	SC	7.5YR5/3	FeMn	com	20	poor	33	0	y	y					
									Total	**116**	**91**							
									MB	9	-9							
								Droughtiness grade (DR)		2	2							
367	T	0	32	hCL	7.5YR3/2			15		49	49	n	n	*II*	3a	**3a**	WE	
		32	60	SCL	7.5YR4/2	Fe	com	25		28	32	y	n					
		60	80	SCL	7.5YR4/2	Fe	com	25		15	12	y	n					
		80	120	C				10	poor	29	0	y	y					
									Total	**122**	**93**							
									MB	15	-7							
								Droughtiness grade (DR)		2	2							
368	T	0	35	hCL	10YR4/2			10		57	57	n	n	*IV*	3b	**3b**	WE	
		35	40	C	10YR5/2	Fe	com	10	poor	6	6	y	y					
		40	82	C	mod 10YR5/3	Fe	com	2	poor	35	38	y	y					
		82	120	C	very 10YR6/2	Fe	com	2	poor	26	0	y	y					
									Total	**124**	**101**							

										MB	17	1							
									Droughtiness grade (DR)		2	2							
369	T	0	30	C	v.sli	10YR4/2			5		49	49	n	n	*IV*	3b	**3b**	WE	
		30	60	C	slight	10YR5/3	Fe	com	10	poor	30	35	y	y					
		60	90	C	mod	2.5Y5/3	Fe	com	1	poor	21	13	y	y					
		90	120	C	mod	2.5Y5/3	Fe	com	1	poor	21	0	y	y					
										Total	**120**	**97**							
										MB	13	-3							
									Droughtiness grade (DR)		2	2							
370	T	0	35	hCL		2.5Y4/3			5		60	60	n	n	*IV*	3b	**3b**	WE	
		35	70	C		2.5Y5/3	Fe	com	2	poor	33	45	y	y					
		70	120	C		2.5Y5/1	Fe	com	0	poor	35	0	y	y					
										Total	**128**	**105**							
										MB	21	5							
									Droughtiness grade (DR)		2	2							
371	T	0	35	hCL		2.5Y4/3			5		60	60	n	n	*IV*	3b	**3b**	WE	
		35	70	C		2.5Y5/3	Fe	com	2	poor	33	45	y	y					
		70	120	C		2.5Y5/1	Fe	com	0	poor	35	0	y	y					
										Total	**128**	**105**		Groundwater at 20cm					
										MB	21	5							
									Droughtiness grade (DR)		2	2							
372	T	0	28	C		10YR4/2			8		44	44	n	n	*IV*	3b	**3b**	WE	
		28	80	C		2.5Y5/3	Fe	com	5	poor	47	52	y	y					
		80	120	C	v.sli	2.5Y5/2	Fe	com	0	poor	28	0	y	y					
										Total	**119**	**96**							
										MB	12	-4							
									Droughtiness grade (DR)		2	2							
373	T	0	30	C		10YR4/2			8		47	47	n	n	*IV*	3b	**3b**	WE	
		30	120	C		2.5Y5/3	Fe	com	0	poor	75	52	y	y					
										Total	**122**	**99**							
										MB	15	-1							
									Droughtiness grade (DR)		2	2							

374	T	0	25	C		10YR4/2			1		47	47	n	n	*IV*	3b	**3b**	WE	
		25	75	C		10YR5/3	Fe	com	1	poor	75	52	y	y					
		75	120	C		10YR5/3	Fe	com	1	poor	75	52	y	y					
										Total	**122**	**99**			Groundwater in lower subsoil				
										MB	15	-1							
									Droughtiness grade (DR)		2	2							
375	T	0	20	C		2.5Y4/2			2		33	33	n	n	*IV*	3b	**3b**	WE	
		20	55	C	slight	2.5Y5/3	Fe	com	1	poor	42	45	y	y					
		55	120	C	mod	2.5Y6/3	Fe	com	1	poor	45	19	y	y					
										Total	**121**	**98**							
										MB	14	-2							
									Droughtiness grade (DR)		2	2							
376	T	0	24	hCL		10YR4/2			1		43	43	n	n	*IV*	3b	**3b**	WE	
		24	85	C		2.5Y5/2	Fe	com	0	poor	58	60	y	y					
		85	120	C		10YR5/1	Fe	com	0	poor	25	0	y	y					
										Total	**126**	**103**							
										MB	19	3							
									Droughtiness grade (DR)		2	2							
377	T	0	20	hCL		10YR4/2	Fe	few	1		36	36	n	n	*IV*	3b	**3b**	WE	
		20	120	C		10YR5/2	Fe	com	0	poor	88	65	y	y					
										Total	**124**	**101**							
										MB	17	1							
									Droughtiness grade (DR)		2	2							
378	T	0	35	hCL		10YR4/2	Fe	few	1		62	62	n	n	*IV*	3b	**3b**	WE	
		35	78	C		2.5Y5/3	Fe	com	0	poor	39	46	y	y					
		78	120	C		2.5Y6/2	Fe	com	0	poor	29	0	y	y					
										Total	**131**	**108**							
										MB	24	8							
									Droughtiness grade (DR)		2	2							
379	T	0	25	hCL		10YR4/2			1		45	45	n	n	*IV*	3b	**3b**	WE	
		25	85	C		10YR5/3	Fe	com	0	poor	57	59	y	y					
		85	120	C		10YR5/1	Fe	com	0	poor	25	0	y	y					

									Total	**126**	**103**							
									MB	19	3							
								Droughtiness grade (DR)		2	2							
380	T	0	34	hCL	10YR4/2			1		61	61	n	n	*IV*	3b	**3b**	WE	
		34	65	C	2.5Y5/3	Fe	com	0	poor	31	40	y	y					
		65	120	C	2.5Y5/2	Fe	com	0	poor	39	7	y	y					
									Total	**130**	**107**							
									MB	23	7							
								Droughtiness grade (DR)		2	2							
381	T	0	34	C	2.5Y4/3			1		57	57	n	n	*IV*	3b	**3b**	WE	
		34	120	C	2.5Y5/3	Fe	com	0	poor	70	47	y	y					
									Total	**127**	**104**		Wet at surface					
									MB	20	4							
								Droughtiness grade (DR)		2	2							
382	T	0	22	C	10YR4/2			2		37	37	n	n	*IV*	3b	**3b**	WE	
		22	120	C	10YR5/3	Fe	com	2	poor	84	61	y	y					
									Total	**121**	**98**							
									MB	14	-2							
								Droughtiness grade (DR)		2	2							
383	T	0	34	hZCL	2.5Y4/2			1		64	64	n	n	*IV*	3b	**3b**	WE	
		34	65	C	10YR5/2	Fe	com	0	poor	31	40	y	y					
		65	120	C	10YR5/2	Fe	com	0	poor	39	7	y	y					
									Total	**134**	**111**							
									MB	27	11							
								Droughtiness grade (DR)		2	1							
384	T	0	30	C	2.5Y4/3			1		51	51	n	n	*IV*	3b	**3b**	WE	
		30	120	C	2.5Y5/3	Fe	com	0	poor	75	52	y	y					
									Total	**126**	**103**							
									MB	19	3							
								Droughtiness grade (DR)		2	2							
385	T	0	28	C	10YR4/2			1		47	47	n	n	*IV*	3b	**3b**	WE	
		28	90	C	10YR5/3	Fe	com	0	poor	57	55	y	y					

		90	120	C	10YR5/1	Fe	com	0	poor	21	0	y	y					
									Total	**125**	**102**							
									MB	18	2							
								Droughtiness grade (DR)		2	2							
386	T	0	22	C	2.5Y4/3			2		37	37	n	n	*IV*	3b	**3b**	WE	
Pit 17		22	80	C	2.5Y5/3	Fe	com	0	poor	57	62	y	y					
		80	120	C	2.5Y5/3	Fe	com	0	poor	28	0	y	y					
									Total	**122**	**99**							
									MB	15	-1							
								Droughtiness grade (DR)		2	2							
387	T	0	36	hCL	10YR4/2			2		64	64	n	n	*IV*	3b	**3b**	WE	
		36	90	C	2.5Y5/3	Fe	com	0	poor	46	44	y	y					
		90	120	C	10YR5/3	Fe	com	0	poor	21	0	y	y					
									Total	**131**	**108**							
									MB	24	8							
								Droughtiness grade (DR)		2	2							

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3

hard pebbles etc

Climate Data	
MDwheat	104
MDpotato	96
FCD	147
AAR	681

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>67cm	40-67cm	<40cm	
SPL within 80cm, gleying at 40-70cm	>51cm	<51cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1411 D^o
Limitation
Grade 1
85 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
388	T	0	24	hCL	n	10YR4/2			4	0		42	42	n	n	*IV*	3b	**3b**	WE
		24	33	C		10YR5/2	MnFe	many	4	0	m/poor	13	13	y	n				
		33	85	C	slight	2.5Y6/3	Fe	com	0	0	poor	47	48	y	y				
		85	120	Mst					0	0	poor	18	0	y	y				
											Total	**118**	**102**		GR.gradient			3o	E
											MB	14	6						
									Droughtiness grade (DR)			2	2		Set aside scrub				
389	T	0	23	LC	n	10YR4/3			4	0		38	38	n	n	*III*	3b	**3b**	WE
		23	42	LC	n	2.5Y6/3	Fe	many	10	0	m/poor	25	25	y	n				
		42	70	C		2.5Y7/2	Fe	com	0	0	poor	24	36	y	y				
		70	100	C		N7/1	Fe	many	0	0	poor	21	0	y	y				
		100	120	Mst	n				0	0	poor	10	0	y	y				
											Total	**118**	**99**		GR.gradient			1o	E
											MB	14	3						
									Droughtiness grade (DR)			2	2		Grass-clover ley				
390	T	0	27	hCL	n	2.5Y5/3	Fe	few	6	0		46	46	n	n	*IV*	3b	**3b**	WE
		27	39	C	n	2.5Y6/3	red	com	8	0	m/poor	16	16	y	n				
		39	100	C	n	7.5GY7/1	Fe	pred	0	0	poor	49	40	y	y				
		100	120	Mst					0	0	poor	10	0	y	y				
											Total	**121**	**102**						
											MB	17	6						
									Droughtiness grade (DR)			2	2		Grass-clover ley				
391	T	0	24	CL	n	2.5Y4/3	Fe	few	8	0		40	40	n	n	*IV*	3b	**3b**	WE
		24	33	C	n	2.5Y6/3	red	com	10	0		13	13	y	n				
		33	105	C	n	N7/1	Fe	red	0	0	poor	61	48	y	y				

		105	120	Mst					0	0	poor	8	0	y	y							
											Total	**121**	**101**									
											MB	17	5									
									Droughtiness grade (DR)			2	2		Grass-clover ley							
392	T	0	25	mCL	n	10YR4/4			12			40	40	n	n	*I*	1	**3a**	DR			
		25	35	mCL	n	10YR6/6			35			11	11	n	n							
		35	80	SCL					60			23	23	n	n							
		80	120	Mst					0		poor	20	0	y	y							
											Total	**93**	**74**									
											MB	-11	-22									
									Droughtiness grade (DR)			3a	3a		Grass-clover ley, not stunted							
393	T	0	25	hCL	n	10YR3/3			15	0		39	39	n	n	*II*	3a	**3a**	WE			
		25	40	CL					25	0	good	24	24	n	n							
		40	75	hCL		10YR6/3	Fe	com	12	0		36	43	y	n							
		75	100	hCL		10YR6/3, 7.5YR6/8	grey	pred	12	0	poor	16	0	y	y							
		100	120	C	n	N7/1	Fe	com	0	0	poor	14	0	y	y							
						Darker					Total	**129**	**105**		GR.gradient			1o	E			
						topsoil					MB	25	9		ST.stone>2cm							
									Droughtiness grade (DR)			2	2		Disced (after WOSR)							
394	T	0	30	mCL	n	10YR4/2			15	0		46	46	n	n	*II*	2	**3a**	DR			
		30	48	mCL	n	10YR5/3	Fe	com	30	0		21	21	y	n							
		48	70	SCL					50	0		12	18	y	n							
		70	120	SC					15	0	poor	34	0	y	y							
											Total	**114**	**85**		GR.gradient			1o	NE			
											MB	10	-11		ST.stone>2cm			>5%	2			
									Droughtiness grade (DR)			2	3a		Disced (after WOSR)							
394a	T	0	27	CL	n	10YR4/2			10	0		44	44	n	n	*III*	3a	**3a**	WE			
		27	40	CL	n	7.5YR6/4	Fe	com f	12	0		18	18	y	n							
		40	48	hCL			Fe	com	12	0		11	11	y	n							
		48	80	LC		5YR5/3, 5YR4/8	grey	pred	12	0	poor	21	24	y	y							
		80	120	SL					30	0		23	0	y	n							

											Total	**118**	**98**		GR.gradient				1o	NE	
											MB	14	2		ST.stone>2cm						
										Droughtiness grade (DR)		2	2		Disced (after WOSR)						
395	T	0	27	CL	n	10YR4/2			15	0		42	42	n	n	//	3a	**3a**	WE			
		27	50	CL	n	7.5YR5/2, 7.5YR6/8	greyOM	com f	35	0	good	32	32	y	n							
		50	65	hCL			Fe	com	15	0		13	21	y	n							
		65	80	LC		5YR5/3, 5YR6/8	grey	pred	10	0	m/poor	10	6	y	n							
		80	100	SC		2.5Y7/8			20	0		13	0	n	n							
		100	120	SCL					30	0		12	0	n	n							
											Total	**121**	**100**		GR.gradient				1o	NE	
											MB	17	4		ST.stone>2cm						
										Droughtiness grade (DR)		2	2		Disced (after WOSR)						
396	T	0	27	mCL	n	10YR4/3			4	0		47	47	n	n	//	2	**2**	WE	DR		
		27	45	mCL		2.5Y6/4	Fe	com f	10	0		26	26	y	n							
		45	55	hSCL		2.5Y6/3	Fe	com	5	0	poor	10	12	y	n							
		55	100	fSCL		2.5Y5/2, 2.5Y7/8	grey	com	5	0		43	23	y	n							
		100	120	fSst					0	0		6	0	n	n							
											Total	**132**	**108**		GR.gradient				1o	SW	
											MB	28	12		ST.stone>2cm						
										Droughtiness grade (DR)		2	1		Disced (after WOSR)						
397	T	0	27	C	n	2.5Y5/3	Fe	few	4			44	44	n	n	///	3b	**3b**	WE			
		27	33	C	n	2.5Y5/2	Fe	com	5			9	9	y	n							
		33	41	C	n	7.5GY7/1	red	many	5		m/poor	11	11	y	n							
		41	80	C	n	N7/1	Fe	many	0		poor	33	38	y	y							
		80	120	C	n				0		poor	28	0	y	y							
											Total	**125**	**102**		GR.gradient						
											MB	21	6		ST.stone>2cm						
										Droughtiness grade (DR)		2	2		Grass-clover ley						
398	T	0	25	hCL	n	10YR4/4	Fe	few	4			43	43	n	n	///	3b	**3b**	WE			
		25	43	C	n	2.5Y5/3	Fe	many	0		m/poor	26	26	y	n							
		43	100	C	n	7.5GY7/1	Fe	pred	0		poor	44	35	y	y							

		100	120	Mst					0		poor	10	0	y	y						
											Total	**124**	**105**		GR.gradient						
											MB	20	9		ST.stone>2cm						
									Droughtiness grade (DR)			2	2		Grass-clover ley (taller)						
399	T	0	27	hCL	n	7.5YR4/4			10	0		44	44	n	n	///	3b	**3b**	WE		
		27	50	hCL	n	7.5YR5/2, 7.5YR6/8	greyOM	com	12	0		33	33	y	n						
		50	65	LC		5YR5/3, 5YR6/8	grey	pred	12	0	poor	9	17	y	y						
		65	90	hCL					12	0	m/poor	19	6	y	n						
		90	120	SCL					30	0	poor	17	0	y	y						
											Total	**122**	**100**		GR.gradient						
											MB	18	4		ST.stone>2cm						
									Droughtiness grade (DR)			2	2		Disced (after WOSR)						
P37	T	0	27	hCL	n	7.5YR4/4			6	0		46	46	n	n	///	3b	**3b**	WE		
		27	45	hCL	n	2.5Y6/4	FeMn	com	12	0		26	26	y	n						
		45	70	LC		10YR6/3	RedMn	many	12	0	m/poor	22	32	y	y						
		70	90	SC		5YR5/3, 5YR5/6	grey	pred	15	0	poor	14	0	y	y						
		90	120	SCL					30	0	poor	17	0	y	y						
											Total	**124**	**104**		GR.gradient						
											MB	20	8		ST.stone>2cm						
									Droughtiness grade (DR)			2	2		Disced (after WOSR)						
400	T	0	27	mCL	n	10YR4/3			2	0		48	48	n	n	//	2	**2**	WE		
		27	50	mCL		2.5Y6/4	FeOM	many	2	0		36	36	y	n						
		50	68	fSCL		7.5YR6/6	grey	com	0	0		18	29	y	n						
		68	80	mCL		7.5GY7/2	Fe	com	0	0		12	3	y	n						
		80	120	C	n	N7/1	Fe	com	0	0	poor	28	0	y	y						
											Total	**142**	**116**		GR.gradient				1o	SW	
											MB	38	20		ST.stone>2cm						
									Droughtiness grade (DR)			1	1		Disced (after WOSR)						
401	T	0	25	mCL	n	10YR4/2			3	0		44	44	n	n	//	2	**2**	WE		
		25	50	mCL		10YR5/3	Fe	com	5	0		38	38	y	n						
		50	120	SCL		10YR6/4	Fe	few	5	0		67	29	n	n						

											Total	**149**	**110**								
											MB	45	14								
										Droughtiness grade (DR)		1	1								
402	T	0	27	mCL	v.sli	10YR4/2			3	0		47	47	n	n	*III*	3a	**3a**	WE		
		27	43	hCL	mod	10YR5/3	Femn	few	0	0		26	26	n	n						
		43	120	C	calc	10YR5/1	Femn	many	0	0	poor	58	35	y	y						
											Total	**131**	**108**								
											MB	27	12								
										Droughtiness grade (DR)		2	1								
403	T	0	24	C	n	2.5Y5/3			4			39	39	n	n	*III*	3b	**3b**	WE		
		24	40	C	n	2.5Y6/3	red	com	10		m/poor	21	21	y	n						
		40	55	C	n	2.5Y6/3	Fe	many	20			16	20	y	n						
		55	100	C	n	N7/1	Fe	many	0		poor	32	20	y	y						
		100	120	Mst	n				0		poor	10	0	y	y						
											Total	**118**	**99**								
											MB	14	3								
										Droughtiness grade (DR)		2	2								
404	T	0	24	C	n	2.5Y4/3			4			39	39	n	n	*III-IV*	3b	**3b**	WE		
		24	40	C	n	2.5Y5/2	Fe	com	4			25	25	y	n						
		40	55	C	n	7.5GY7/1	Fe	many	0		poor	17	20	y	y						
		55	70	mCL	n	7.5YR6/8	grey	many	10			14	22	n	n						
		70	120	C	n	7.5GY8/1	Fe	pred	0		poor	35	0	y	y						
											Total	**129**	**105**								
											MB	25	9								
										Droughtiness grade (DR)		2	2								
405	T	0	27	mCL	n	10YR4/2			25	0		37	37	n	n	*I*	1	**3a**	DR		
		27	45	mCL	n	10YR6/6			35	0		19	19	n	n						
		45	80	SCL					60	0		16	17	n	n						
		80	120	Mst					0	0	poor	20	0	y	y						
											Total	**93**	**73**								
											MB	-11	-23								

GR.gradient	1o	NE
ST.stone>2cm	>10%	3a

								Droughtiness grade (DR)			3a	3a		Grass-clover ley, stunted							
406	T	0	27	hCL	n	10YR5/3			12	0		43	43	n	n	///	3b	**3b**	WE		
		27	38	hCL	n	7.5YR5/6	grey	faint	12	0		16	16	n	n						
		38	50	hCL		2.5Y5/3	red	com	12	0		17	17	y	n						
		50	75	SC		10YR6/3	red	many	12	0	m/poor	20	25	y	y						
		75	120	C		7.5YR5/2, 7.5YR6/8	grey	pred	5	0	poor	30	0	y	y						
											Total	**126**	**101**		GR.gradient			1o	E		
											MB	22	5		ST.stone>2cm						
								Droughtiness grade (DR)				2	2		Disced (after WOSR)						
407	T	0	27	hCL	n	10YR4/3			6	0		46	46	n	n	//	3a	**3a**	WE DR		
		27	35	hCL	n	2.5Y5/3	Fe	com	10	0		12	12	y	n						
		35	45	C	n	2.5Y5/2	Fe	many	5	0	poor	12	12	y	n						
		45	63	hCL	n	2.5Y5/3	red	many	20	0		17	23	y	n						
		63	120	Lst								17	3	n	n						
											Total	**104**	**96**		GR.gradient						
						Cornbrash					MB	0	0		ST.stone>2cm						
								Droughtiness grade (DR)				3a	2		Disced (after WOSR)						
408	T	0	28	hCL	n	10YR4/2			6	0		48	48	n	n	///	3b	**3b**	WE		
		28	48	hCL	n	2.5Y6/4	Fe	com	10	0		29	29	y	n						
		48	65	C		2.5Y5/2	Fe	com	0	0		15	27	y	n						
		65	100	C	n	7.5GY7/1	Fe	com	0	0	poor	25	7	y	y						
		100	120	MSt					0	0	poor	10	0	y	y						
											Total	**126**	**110**		GR.gradient			1o	N		
						Kellaways					MB	22	14		ST.stone>2cm						
						Clay		**Droughtiness grade (DR)**				2	1		Disced (after WOSR)						
409	T	0	26	mCL	n	10YR4/2			5	2		44	44	n	n	/	1	**3a**	DR		
		26	50	hCL	n	10YR4/6	mn	com	7	0		36	36	n	n						
		50	60	hCL	very	10YR4/6			0	10		9	15	n	n						
		60	120	Lst								18	4								
											Total	**107**	**99**								
											MB	3	3								
								Droughtiness grade (DR)				3a	2								

410	T	0	24	C	n	2.5Y5/3			4	0		39	39	n	n	*IV*	3b	**3b**	WE	
		24	35	C	n	2.5Y6/3	Fe	com	4	0	m/poor	15	15	y	n					
		35	100	C	n	7.5GY7/1	Fe	pred	0	0	poor	55	46	y	y					
		100	120	Mst	n				0	0	poor	10	0	y	y					
											Total	**119**	**100**							
											MB	15	4							
											Droughtiness grade (DR)	2	2		Scrub					
411	T	0	25	hCL	n	2.5Y5/3			8	0		42	42	n	n	*III*	3b	**3b**	WE	
		25	50	hCL	n	2.5Y6/3	Fe	com	15	0		34	34	y	n					
		50	70	C	n	7.5GY7/1	Fe	pred	10	0	poor	13	24	y	y					
		70	100	C	n	N7/1	Fe	many	0	0	poor	21	0	y	y					
		100	120	Mst	n				0	0	poor	10	0	y	y					
											Total	**120**	**100**							
											MB	16	4							
											Droughtiness grade (DR)	2	2		Grass-clover ley					
412	T	0	28	CL	n	2.5Y4/4			8	0		47	47	n	n	*III*	3b	**3b**	WE	
		28	41	C	n	2.5Y6/3	Fe	many	10	0	m/poor	17	17	y	n					
		41	100	C	n	10YR5/1	red	many	10	0	poor	42	34	y	y					
		100	120	Mst	n	7.5GY8/1			0	0	poor	10	0	y	y					
											Total	**116**	**98**							
											MB	12	2							
											Droughtiness grade (DR)	2	2		Grass-clover ley					
413	T	0	27	mCL	n	10YR4/6			6			46	46	n	n	*II*	2	**2**	WE	DR
		27	43	CL	n	10YR5/2	Fe	com f	10			23	23	y	n					
		43	50	C	n	10Y6/1	Fe	many	0		poor	9	9	y	(y)					
		50	90	SCL	n	7.5YR5/3	Fe	com	15			34	26	y	n					
		90	120	C	n	7.5GY6/1	Fe	many	0		poor	21	0	y	y					
											Total	**133**	**104**		GR.gradient			2o	S	
											MB	29	8							
											Droughtiness grade (DR)	2	2		Winter wheat.					
414	T	0	27	hZCL	n	10YR5/4			8	0		47	47	n	n	*I*	2	**3a**	DR	DP

		27	40	ZC		7.5YR5/6	grey	few	8	0	m/poor	16	16	n	n					
		40	120	Lst								25	12							
											Total	**89**	**76**							
											MB	-15	-20							
											Droughtiness grade (DR)	3a	3a		Winter wheat. Mossy topsoil.					
415	T	0	26	C	n	10YR4/2			3	0		43	43	n	n	*IV*	3b	**3b**	WE	
		26	60	C	n	10YR6/1	Fe	many	0	0	poor	38	44	y	y					
		60	120	C	n	10YR6/1	Fe	com	0	0	poor	42	13	y	y					
											Total	**123**	**100**							
											MB	19	4							
											Droughtiness grade (DR)	2	2							
416	T	0	28	hCL	n	10YR4/2			2	0		49	49	n	n	*III*	3b	**3b**	WE	
		28	55	C	n	10YR5/1	Fe	many	7	0		37	40	y	n					
		55	70	C	n	10YR6/1	Fe	many	3	2	poor	10	19	y	y					
		70	120	C	n	10YR6/1	Fe	many	10	0	poor	32	0	y	y					
											Total	**128**	**109**							
											MB	24	13							
											Droughtiness grade (DR)	2	1							
417	T	0	26	hCL	n	2.5Y4/3			8	0		43	43	n	n	*III*	3b	**3b**	WE	
		26	40	C	n	2.5Y6/3	Fe	com	8	0	m/poor	19	19	y	n					
		40	50	C	n	2.5Y5/2	red	many	20	0		13	13	y	n					
		50	120	C	n	7.5GY8/1	red	pred	0	0	poor	49	26	y	y					
											Total	**124**	**101**		GR.gradient			1o	S	
											MB	20	5							
											Droughtiness grade (DR)	2	2		Winter wheat.					
418	T	0	27	CL	n	10YR5/4	Fe	few	6	0		46	46	n	n	*II*	3a	**3a**	WE	DR
		27	35	C	n	7.5YR5/3	Fe	com f	6	0	m/poor	11	11	y	n					
		35	63	C	mod	7.5YR5/4	OMFe	com	0	10		32	41	y	n					
		63	120	Lst								17	3							
											Total	**106**	**101**							
											MB	2	5							
											Droughtiness grade (DR)	3a	2		Winter wheat.					

419	T	0	28	hZCL	slight	10YR4/6			4	4		50	50	n	n	*I*	2	**3a**	DR
		28	55	hCL	very	10YR6/8			0	15		36	38	n	n				
		55	120	Lst								20	6						
											Total	**105**	**94**						
											MB	1	-2						
											Droughtiness grade (DR)	3a	2		Winter wheat				
420	T	0	25	hCL	n	2.5Y5/3			4	0		43	43	n	n	*IV*	3b	**3b**	WE
		25	32	hCL	n	2.5Y5/3	Fe	com	10	0		10	10	y	n				
		32	50	C	n	2.5Y6/4	Fe	many f	0	0	poor	23	23	y	y				
		50	120	C	n	7.5GY7/1	red	many	0	0	poor	49	26	y	y				
											Total	**126**	**103**		GR.gradient			2o	NE
											MB	22	7						
											Droughtiness grade (DR)	2	2		Ley (cut)				
421	T	0	29	hCL	n	10YR4/2			7	0		49	49	n	n	*III*	3b	**3b**	WE
		29	48	hCL	n	10YR5/3	Fe	com	15	0		26	26	y	n				
		48	70	C	n	10YR6/1	Fe	many	0	0	poor	17	29	y	y				
		70	120	C	n	10YR6/1	Fe	com	0	0	poor	35	0	y	y				
											Total	**126**	**103**						
											MB	22	7						
											Droughtiness grade (DR)	2	2						
422	T	0	30	mCL	n	10YR4/2			7	0		50	50	n	n	*II*	2	**2**	WE DR
		30	60	mCL	n	10YR5/3			12	0		37	43	n	n				
		60	120	C	n	10YR6/1	Fe	com	20	0	poor	34	11	y	y				
											Total	**122**	**104**						
											MB	18	8						
											Droughtiness grade (DR)	2	2						
423	T	0	23	mCL	n	10YR4/4			6	0		39	39	n	n	*II*	2	**2**	DR WE
		23	46	hCL	n	10YR5/6			10	0		33	33	n	n				
		46	65	SCL	very				20	20		14	19	n	n				
		65	120	C					0	0	poor	39	7	(y)	y				
											Total	**125**	**98**		GR.gradient			1o	E
											MB	21	2						

									Droughtiness grade (DR)			2	2		Winter wheat						
424	T	0	23	CL	n	10YR4/4			6	0		39	39	n	n	*II*	3a	**3a**	DR		
		23	50	CL	n	10YR6/6			15	0		37	37	n	n						
		50	65	SCL					50	0		8	12	n	n						
		65	120	C					0	0	poor	39	7	(y)	y						
											Total	**123**	**95**								
											MB	19	-1								
									Droughtiness grade (DR)			2	2		Winter wheat						
425	T	0	25	mCL		10YR4/4			6	2		42	42	n	n	*I*	1	**3a**	DR DP		
		25	37	CL	slight	10YR5/6			5	5		18	18	n	n						
		37	120	Lst								26	13								
											Total	**86**	**73**		GR.gradient			1o	E		
											MB	-18	-23								
									Droughtiness grade (DR)			3a	3a		Winter wheat (mossy topsoil)						
426	T	0	23	mCL	n	2.5Y5/2			6	0		39	39	n	n	*IV*	3b	**3b**	WE		
		23	32	C	n	2.5Y5/3	Fe	com	10	0		13	13	y	n						
		32	50	C	n	10Y7/1	FeMn	many	0	0	poor	23	23	y	y						
		50	120	C	n	7.5GY7/1	red	many	0	0	poor	49	26	y	y						
											Total	**125**	**102**		GR.gradient			1o	N		
											MB	21	6								
									Droughtiness grade (DR)			2	2		Ley (cut)						
427	T	0	25	hCL	n	2.5Y4/3			12	0		40	40	n	n	*II*	3a	**3a**	WE		
		25	50	hCL	n	2.5Y6/6			25	0		31	31	n	n						
		50	70	SCL	n				40	0		12	19	n	n						
		70	120	C	n	7.5GY7/1			0	0	poor	35	0	(y)	y						
											Total	**118**	**89**		GR.gradient			1-2o	NE		
											MB	14	-7								
									Droughtiness grade (DR)			2	2		Ley (cut)						
428	T	0	25	hCL	n	10YR4/2			3	0		44	44	n	n	*IV*	3b	**3b**	WE		
		25	120	C	n	10YR6/1	Fe	many	0	0	poor	82	59	y	y						
											Total	**125**	**102**								
											MB	21	6								

											Droughtiness grade (DR)	2	2								
429	T	0	23	hCL	n	10YR5/4			6	0		39	39	n	n	///	3b	**3b**	WE		
		23	48	hCL	n	10YR6/4	Fe	few f	8	0		37	37	n	n						
		48	120	C	n	10Y7/1	Fe	many	0	0	poor	52	29	y	y						
											Total	**128**	**105**		GR.gradient			1o	E		
											MB	24	9								
											Droughtiness grade (DR)	2	2		Winter wheat						
430	T	0	25	CL	n	10YR4/4			8	0		42	42	n	n	/	2	**2**	DR WE		
		25	45	mCL	n	7.5YR5/6			10	0		29	29	n	n						
		45	65	ZC		7.5YR6/6	Mn	com	20	0		16	24	n	n						
		65	80	SCL					40	0		9	5	n	n						
		80	120	C					0	0	poor	28	0	(y)	y						
											Total	**124**	**100**		GR.gradient			1o	E		
											MB	20	4								
											Droughtiness grade (DR)	2	2		Winter wheat						
431	T	0	25	ZC	slight	10YR4/4			6	6		38	38	n	n	/	2	**3b**	DR DP		
		25	29	ZC	very	10YR5/4			0	25	good	7	7	n	n						
		29	120	Lst								29	16								
											Total	**74**	**61**								
											MB	-30	-35								
											Droughtiness grade (DR)	3b	3b		Winter wheat						
432	T	0	27	LC	n	10YR4/4			4	0		44	44	n	n	//	3b	**3b**	WE		
		27	40	ZC	n	2.5Y5/3	Fe	com f	5	0		19	19	y	n						
		40	50	ZC	n	2.5Y5/3	FeMn	many	10	0		14	14	y	n						
		50	65	LC	very	2.5Y8/3			0	20		12	20	n	n						
		65	120	Lst								17	2								
											Total	**105**	**99**								
											MB	1	3								
											Droughtiness grade (DR)	3a	2		Ley (cut)						
433	T	0	25	hCL	n	2.5Y4/3			4	0		43	43	n	n	///	3b	**3b**	WE		
		25	41	hCL	n	2.5Y5/4	Fe	com f	4	0		25	25	y	n						

		41	80	LC	n	2.5Y6/4	FeMn	many	0	0	poor	32	36	y	y						
		80	120	mCL					0	0	poor	28	0	y	y						
											Total	**128**	**104**		80cm+ very dense						
											MB	24	8								
									Droughtiness grade (DR)			2	2		Ley (cut)						
434	T	0	30	hCL	n	10YR4/2			3	0		52	52	n	n	*II*	3a	**3a**	WE		
		30	72	C	n	7.5YR6/4	Femn	com	0	0		50	64	y	n						
		72	120	C	sli	10YR5/6	mn	com	0	0		38	0	n	n						
											Total	**140**	**116**		Upper subsoil mottling patchy						
											MB	36	20								
									Droughtiness grade (DR)			1	1								
435	T	0	25	hCL	n	10YR4/4			8			42	42	n	n	*II*	3a	**3a**	WE		
		25	40	hCL	n	7.5YR5/6			10			22	22	n	n						
		40	60	SCL	n	7.5YR6/6			25			19	23	n	n						
		60	120	C		7.5YR6/6	Mn	many	0		poor	42	13	(y)	y						
											Total	**124**	**99**		GR.gradient			1o	NE		
											MB	20	3								
									Droughtiness grade (DR)			2	2		Winter wheat						
436	T	0	24	ZC	slight	10YR4/4			4	4		38	38	n	n	*I*	2	**3b**	DR		
		24	38	ZC	mod	10YR5/4			8	8		18	18	n	n						
		38	120	Lst								26	13								
											Total	**82**	**69**								
											MB	-22	-27								
									Droughtiness grade (DR)			3b	3a		Winter wheat						
437	T	0	28	hZCL	very	10YR4/3			0	12		48	48	n	n	*I*	2	**3b**	DR DP		
		28	33	hCL					0	50	good	6	6	n	n						
		33	120	Lst								28	15								
											Total	**82**	**69**								
											MB	-22	-27		ST.stone>2cm			>10%	3a		
									Droughtiness grade (DR)			3b	3a		Spring barley						
438	T	0	25	C	mod	10YR4/3			0	12		39	39	n	n	*I*	2	**3b**	DR		
		25	31	hCL	very	10YR6/6			0	25	good	10	10	n	n						

		31	120	Lst								29	16							
											Total	**77**	**64**							
											MB	-27	-32							
									Droughtiness grade (DR)			3b	3b	Spring barley						
439	T	0	24	hCL	slight	10YR5/4			4	4		40	40	n	n	//	2	**3a**	DR	
		24	58	hCL	mod	10YR5/4	Fe	few f	4	4		46	51	n	n					
		58	120	Lst								19	5							
											Total	**105**	**96**	valley						
											MB	1	0							
									Droughtiness grade (DR)			3a	2	Winter wheat						
440	T	0	25	hCL	mod	10YR4/2			2	10		41	41	n	n	/	2	**3b**	DR	
		25	33	hCL	very	10YR5/6			0	25	good	13	13	n	n					
		33	120	Lst								28	15							
											Total	**82**	**69**							
											MB	-22	-27							
									Droughtiness grade (DR)			3b	3a	Spring barley (uneven crop)						
441	T	0	29	ZC	mod	7.5YR4/3			0	20		42	42	n	n	/	2	**3b**	DR	DP
		29	34	ZC	very				0	50		5	5	n	n					
		34	120	Lst								27	14							
						Larger					Total	**74**	**61**							
						limestone					MB	-30	-35	ST.stone>2cm			>10%	3a		
									Droughtiness grade (DR)			3b	3b	Spring barley (uneven crop)						
442	T	0	28	ZC	mod	10YR4/4			0	12		43	43	n	n	/	2	**3a**	DR	DP
		28	40	hCL	very	10YR6/6			0	25	good	20	20	n	n					
		40	120	Lst								25	12							
											Total	**88**	**75**							
											MB	-16	-21							
									Droughtiness grade (DR)			3a	3a	Spring barley						
Pit 18	T	0	28	ZC	mod	7.5YR4/2			2	13		42	42	n	n	/	2	**3b**	DR	DP
		28	33	ZC	very				0	75		3	3	n	n					
		33	120	Lst								28	15							
											Total	**73**	**60**							

										MB	-31	-36									
							Droughtiness grade (DR)				3b	3b	Spring barley								
443	T	0	27	ZC	mod	7.5YR4/3	0	20		39	39				*I*	2	**3b**	DR DP			
		27	32	ZC			0	50		5	5										
		32	120	Lst						28	15										
									Total	**72**	**59**										
									MB	-32	-37		ST.stone>2cm			>10%	3a			
							Droughtiness grade (DR)			3b	3b		Spring barley								
444	T	0	25	hZCL	very	10YR4/4	0	12		43	43		n	n	*I*	2	**3a**	DR			
		25	40	hCL	very	10YR5/6	0	25	good	25	25		n	n							
		40	120	Lst						25	12										
									Total	**93**	**80**										
									MB	-11	-16										
							Droughtiness grade (DR)			3a	3a		Spring barley (tall and even)								
445	T	0	28	ZC	mod	7.5YR4/3	0	15		42	42		n	n	*I*	2	**3a**	DR DP			
		28	40	mCL	extr.		0	25	good	20	20		n	n							
		40	120	Lst						25	12										
									Total	**87**	**74**										
									MB	-17	-22		ST.stone>2cm			>5%	2			
							Droughtiness grade (DR)			3a	3a		Spring barley								
446	T	0	28	ZC	mod	7.5YR4/6	0	10		44	44		n	n	*I*	2	**3b**	DR DP			
		28	33	ZC			0	50		5	5		n	n							
		33	120	Lst						28	15										
									Total	**77**	**64**										
									MB	-27	-32		ST.stone>2cm			>10%	3a			
							Droughtiness grade (DR)			3b	3b		Spring barley								
447	T	0	28	ZC	mod	7.5YR4/3	0	12		43	43		n	n	*I*	2	**3b**	DR DP			
		28	33	ZC	very		0	50		5	5		n	n							
		33	120	Lst						28	15										
									Total	**76**	**63**										
									MB	-28	-33		ST.stone>2cm			>5%	2			
							Droughtiness grade (DR)			3b	3b		Spring barley								

448	T	0	26	hCL	very	7.5YR4/3	0	25		38	38	n	n	/	2	**3b**	DR	DP			
		26	31	hCL	very		0	50		5	5	n	n								
		31	120	Lst						29	16										
									Total	**71**	**58**										
									MB	-33	-38										
									Droughtiness grade (DR)	3b	3b										
449	T	0	24	hZCL	mod	7.5YR4/3	0	12		41	41	n	n	/	2	**3b**	DR	DP			
		24	29	hCL	very		0	25	good	8	8	n	n								
		29	120	Lst						29	16										
									Total	**79**	**66**										
									MB	-25	-30										
									Droughtiness grade (DR)	3b	3a										
450	T	0	25	hCL	very	10YR4/3	4	10		40	40	n	n	/	2	**3a**	DR	DP			
		25	35	hCL	very	10YR4/6	4	10	good	19	19	n	n								
		35	120	Lst						27	14										
									Total	**85**	**72**										
									MB	-19	-24										
									Droughtiness grade (DR)	3a	3a										
451	T	0	25	hCL	very	10YR4/3	4	10		40	40			/	2	**3a**	DR	DP			
		25	40	hCL	very	10YR4/6	4	25	good	24	24										
		40	120	Lst						25	12										
									Total	**89**	**76**										
									MB	-15	-20										
									Droughtiness grade (DR)	3a	3a										

ST.stone>2cm	>10%	3a	Spring barley
ST.stone>2cm	>5%	2	Spring barley
ST.stone>2cm	>5%	2	Winter wheat (even crop)
ST.stone>2cm	>5%	2	Winter wheat (even crop)

Stone types		
%	TAv	EAv
hard	1	0.5
chalk	10	7
hard	flint & pebble	

Climate Data	
MDwheat	108
MDpotato	98
FCD	146
AAR	671

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>67cm	39-67cm	<39cm	
SPL within 80cm, gleying at 40-70cm	>50cm	<50cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1,422
Limitation
Grade 1

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% chalk	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
452	T	0	25	hCL	extra	10YR4/2			0	15		42	42	n	n	I	1	**3b**	DR DP
		25	30	hCL	extra	10YR5/4			0	30		7	7	n	n				
		30	120	Lst								29	16	n	n				
											Total	**78**	**65**						
											MB	-30	-33						
											Droughtiness grade (DR)	3b	3b						
453	T	0	24	hCL	very	10YR4/2			0	15		40	40	n	n	I	2	**3b**	DR DP
		24	120	Lst								31	18	n	n				
											Total	**72**	**59**		ST.stone>2cm			>5%	2
											MB	-36	-39						
											Droughtiness grade (DR)	3b	3b						
454	T	0	25	hCL	n	10YR4/2			5	2		42	42	n	n	I	1	**3a**	DR
		25	45	hCL	n	7.5YR4/6			15	0		28	28	n	n				
		45	60	hCL	mod	7.5YR4/6			15	10		15	20	n	n				
		60	120	Lst								18	4	n	n				
											Total	**103**	**94**						
											MB	-5	-4						
											Droughtiness grade (DR)	3a	2						
455	T	0	24	hCL	very	10YR4/2			0	11		41	41	n	n	I	2	**3b**	DR DP
		24	30	hCL	very	7.5YR5/6			0	20		9	9	n	n				
		30	120	Lst								29	16	n	n				
											Total	**79**	**66**						
											MB	-29	-32						
											Droughtiness grade (DR)	3b	3b						
456	T	0	25	hCL	very	10YR4/3			5	19		39	39	n	n	I	1	**3b**	DR DP

		25	120	Lst								31	18	n	n						
											Total	**70**	**57**		ST.stone>2cm			>10%	3a		
											MB	-38	-41								
										Droughtiness grade (DR)		3b	3b								
457	T	0	25	hCL	trace	10YR4/2			3	0		44	44	n	n	*I-II*	3a	**3a**	WE		
		25	60	C	sli	7.5YR5/6			0	0		48	56	n	n						
		60	70	C	mod	7.5YR5/8	Mn	com	0	0		8	16	n	n						
		70	120	C	very	N5/1	Fe	com	0	0	poor	35	0	y	y						
											Total	**135**	**116**								
											MB	27	18								
										Droughtiness grade (DR)		2	1								
458	T	0	24	C	mod	10YR4/3			0	13		39	39	n	n	*I*	2	**3b**	DR DP		
		24	30	C	very	7.5YR5/4			0	20		9	9	n	n						
		30	120	Lst								29	16	n	n						
											Total	**76**	**63**		ST.stone>2cm			>5%	2		
											MB	-32	-35								
										Droughtiness grade (DR)		3b	3b								
459	T	0	23	hCL	mod	10YR4/3			0	13		39	39	n	n	*I*	2	**3b**	DR DP		
		23	26	C	very	7.5YR5/6			0	30		4	4	n	n						
		26	120	Lst								31	18	n	n						
											Total	**74**	**61**		ST.stone>2cm			>5%	2		
											MB	-34	-37								
										Droughtiness grade (DR)		3b	3b								
460	T	0	25	C	mod	10YR4/3			5	13		38	38	n	n	*I*	2	**3b**	DR DP		
		25	30	C	very	7.5YR5/4			0	20		7	7	n	n						
		30	120	Lst								29	16	n	n						
											Total	**75**	**62**		ST.stone>2cm			>5%	2		
											MB	-33	-36								
										Droughtiness grade (DR)		3b	3b								
461	T	0	25	hCL	sli	10YR4/3			10	0		41	41	n	n	*I*	2	**3b**	DR		
		25	35	C	very	7.5YR5/4			0	30		14	14	n	n						
		35	120	Lst								27	14	n	n						

										Total	**82**	**69**								
										MB	-26	-29								
										Droughtiness grade (DR)	3b	3a								
462	T	0	25	hCL	n	10YR4/3	8	0			42	42	n	n	*I*	2	**3a**	DR DP		
		25	35	C	n	7.5YR5/8	3	0			16	16	n	n						
		35	40	C	sli	7.5YR5/8	0	5			8	8	n	n						
		40	120	Lst							25	12	n	n						
										Total	**90**	**77**								
										MB	-18	-21								
										Droughtiness grade (DR)	3a	3a								

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3

hard pebbles etc

Climate Data	
MDwheat	107
MDpotato	100
FCD	144
AAR	666

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>66cm	39-66cm	<39cm	
SPL within 80cm, gleying at 40-70cm	>49cm	<49cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1422 D°
Limitation
Grade 1
71 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
463	T	0	32	hCL	slight	10YR4/3			2	4		55	55	n	n	II	2	**2**	WE DR
		32	60	mCL	mod	10YR6/3	FeMn	com	10	10		32	37	y	n				
		60	80	SCL/SL		7.5YR6/8	grey	com	8	0		19	15	n	n				
		80	120	SCL/SL		7.5YR6/8	grey	com	8	0	poor	30	0	n	n				
											Total	**136**	**107**						
											MB	29	7						
											Droughtiness grade (DR)	2	2		Spring barley				
464	T	0	30	hCL	n	10YR4/3			4			52	52	n	n	I-II	3a	**3a**	WE
		30	42	ZC	n	2.5Y5/4	Fe	com f	8			17	17	n	n				
		42	55	C	n	2.5Y6/2	Mn	com	8		poor	13	16	y	n				
		55	120	SC	n	10YR6/4	Fe	com	8		m/poor	54	19	y	n				
											Total	**136**	**104**						
											MB	29	4						
											Droughtiness grade (DR)	2	2		Spring barley				
465	T	0	25	hCL	mod	10YR4/6			4	8		41	41	n	n	I	2	**3a**	DR
		25	60	LC	very	7.5YR6/6	OMgrey	com	4	10	m/poor	40	45	n	n				
		60	120	Lst								18	4						
											Total	**98**	**90**						
											MB	-9	-10						
											Droughtiness grade (DR)	3a	3a		Spring barley				
466	T	0	27	hCL	n	10YR4/3			5	0		46	46	n	n	I	2	**3a**	DR
Pit 19		27	37	hCL		10YR6/6			5	0	good	20	20	n	n				
		37	52	LC		10YR6/3	Mn	com	5	0	m/poor	20	21	n	n				
		52	65	LC	mod	10YR6/4			0	30	m/poor	9	15	n	n				
		65	120	Lst								17	2						

											Total	**111**	**104**								
											MB	4	4								
										Droughtiness grade (DR)		3a	2								Spring barley
467	T	0	25	LC	mod	10YR4/6			0	6		41	41	n	n	*I*	2	**3a**	DR		
		25	45	C	mod	10YR6/6	grey	com	0	8	m/poor	27	27	n	n						
		45	52	C	very	10YR7/4			0	30		8	9	n	n						
		52	120	Lst								20	7								
											Total	**96**	**84**								
											MB	-11	-16								
										Droughtiness grade (DR)		3a	3a								Spring barley
468	T	0	24	C	n	2.5Y4/3			6	0		38	38	n	n	*IV*	3b	**3b**	WE		
		24	34	C	n	10Y7/8	grey	com	5	0		15	15	y	n						
		34	70	C	n	5Y7/2	Fe	com	0	0	poor	35	47	y	y						
		70	105	C	slight	N7/1	Fe	com	0	0	poor	25	0	y	y						
		105	120	Mst					0	0	poor	8	0	y	y						
											Total	**121**	**101**								
											MB	14	1								
										Droughtiness grade (DR)		2	2								Spring barley
469	T	0	26	hCL	n	10YR5/4			8	0		43	43			*I*	2	**3a**	DR		
		26	48	C		7.5YR4/6	Fe	few f	10	0	m/poor	29	29								
		48	120	Lst								22	9								
											Total	**94**	**81**								
											MB	-13	-19								
										Droughtiness grade (DR)		3a	3a								Spring barley

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3

Climate Data	
MDwheat	102
MDpotato	93
FCD	149
AAR	684

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>68cm	40-68cm	<40cm	
SPL within 80cm, gleying at 40-70cm	>51cm	<51cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1401 D°
Limitation
Grade 1
95 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
470	T	0	27	C	mod	2.5Y5/3			0	4		44	44	n	n	II	3a	**3a**	WE
		27	42	C	very	10YR6/6	OM	com	0	10		22	22	n	n				
		42	65	ZC	mod	10YR6/6	Fe	few f	0	0	m/poor	22	31	n	n				
		65	90	ZC	mod	2.5Y6/4	Fe	com	0	0	poor	18	6	y	y				
		90	120	Mst	very	5Y7/2			0	0	poor	15	0	y	y				
											Total	**121**	**104**		GR.gradient			1o	S
											MB	19	11						
									Droughtiness grade (DR)			2	1		Winter wheat in valley (Head)				
471	T	0	28	ZC	mod	2.5Y4/3			0	8		45	45	n	n	I	2	**3a**	DR DP
		28	40	mCL	extr.	10YR8/2			0	25	good	20	20	n	n				
		40	120	Lst								25	12						
											Total	**90**	**77**		GR.gradient			2o	SE
											MB	-12	-16						
									Droughtiness grade (DR)			3a	3a		Winter wheat on brow				
472	T	0	20	ZC	mod	10YR4/3			0	8		32	32	n	n	I	2	**3b**	DR
Pit 20	T	20	27	ZC	mod	10YR4/4			0	15		11	11	n	n				
		27	32	LC	very	10YR5/6			0	25	good	8	8	n	n				
		32	120	Lst								28	15						
											Total	**79**	**66**		GR.gradient			1o	SE
											MB	-23	-27						
									Droughtiness grade (DR)			3b	3a		Winter wheat				
473	T	0	27	ZC	mod	10YR4/3			0	4		44	44	n	n	II	3a	**3a**	WE DR
		27	35	C	mod	2.5Y5/4			0	4		12	12	n	n				
		35	60	C	mod	2.5Y6/4	Fe	com f	0	0	m/poor	29	36	y	n				
		60	120	Lst								18	4						

											Total	**104**	**97**		GR.gradient				1o	SE	
											MB	2	4								
										Droughtiness grade (DR)		3a	2		Winter wheat						
474	T	0	25	C+	very	2.5Y5/3			0	6		41	41	n	n	*IV*	3b	**3b**	WE		
		25	35	C	very	2.5Y5/3			0	5		15	15	n	n						
		35	60	C	very	5Y7/1	Fe	com	0	0	m/poor	29	36	y	(y)						
		60	90	C	very	N6/1	Fe	many	0	0	poor	21	13	y	y						
		90	120	Lst								9	0								
											Total	**115**	**105**		GR.gradient				1o	SE	
											MB	13	12		Topsoil >50%clay						
										Droughtiness grade (DR)		2	1		Winter wheat on brow						
475	T	0	20	C	mod	2.5Y4/3			0	4		33	33	n	n	*II*	3a	**3a**	WE DR		
	T	20	28	C	mod	2.5Y5/3			0	4	comp	13	13	n	n						
		28	42	C	mod	2.5Y6/4			0	5	m/poor	20	20	n	n						
		42	50	C	very	5Y6/2	Fe	com	0	0	poor	10	10	y	n						
		50	60	C	very	5Y6/2	Fe	com f	0	10	m/poor	7	13	y	n						
		60	120	Lst								18	4								
											Total	**101**	**94**		GR.gradient				2o	S	
											MB	-1	1								
										Droughtiness grade (DR)		3a	2		Winter wheat						
476	T	0	27	C	slight	2.5Y5/3			0	4		44	44	n	n	*III*	3a	**3a**	WE		
		27	44	C	slight	2.5Y5/4			0	0	m/poor	25	25	n	n						
		44	65	C	v.slight	5Y6/2	Fe	com f	0	0	poor	18	27	y	y						
		65	85	C	very	5Y5/2	Fe	many	0	0	m/poor	15	7	y	y						
		85	120	Mst					0	50	poor	14	0	y	y						
											Total	**116**	**104**		GR.gradient				2o	S	
											MB	14	11								
										Droughtiness grade (DR)		2	1		Winter beans						
477a	T	0	25	C	slight	2.5Y4/3			0	4		41	41	n	n	*II*	3a	**3a**	WE		
		25	32	C	slight	2.5Y5/3			0	4		11	11	n	n						
		32	45	C	very	2.5Y5/4	Fe	com f	0	0	m/poor	19	19	n	n						
		45	70	C	very	2.5Y6/3	Fe	com	0	0	poor	21	33	y	y						

		70	105	C	very	7.5GY7/1	Fe	many	0	0	poor	25	0	y	y							
		105	120	Mst					0	50	poor	6	0	y	y							
											Total	**122**	**103**		GR.gradient				2o		S	
											MB	20	10									
											Droughtiness grade (DR)	2	1		Winter beans							
477	T	0	27	ZC	slight	10YR4/3			0	20		39	39	n	n	*I*	2	**3b**	DR DP			
		27	120	Lst								30	17									
											Total	**69**	**56**		GR.gradient				1o		SE	
											MB	-33	-37		ST.stone>2cm				>5%		2	
											Droughtiness grade (DR)	3b	3b		Winter beans							
478	T	0	28	hZCL	slight	10YR4/3			0	12		48	48	n	n	*I*	2	**3b**	DR DP			
		28	120	Lst								30	17									
											Total	**78**	**65**									
											MB	-24	-28		ST.stone>2cm				>5%		2	
											Droughtiness grade (DR)	3b	3a		Winter wheat							
479	T	0	27	ZC	slight	10YR4/3			0	15		41	41	n	n	*I*	2	**3b**	DR			
		27	32	LC	very	10YR5/6			0	30	good	8	8	n	n							
		32	120	Lst								28	15									
											Total	**77**	**64**		GR.gradient				1o		SE	
											MB	-25	-29									
											Droughtiness grade (DR)	3b	3a		Winter wheat							
479a	T	0	25	ZC	slight	2.5Y4/3				4		41	41	n	n	*II*	3a	**3a**	WE			
		25	34	C	slight	2.5Y5/4	Fe	com f		4	m/poor	13	13	n	n							
		34	55	hCL	extr.	2.5Y7/8				10		28	31	n	n							
		55	80	hCL	extr.	2.5Y7/2	Fe	com		5	poor	17	17	y	y							
		80	120	Lst								12	0									
											Total	**111**	**102**		GR.gradient				brow			
											MB	9	9									
											Droughtiness grade (DR)	2	2		Winter wheat							
480	T	0	25	ZC	mod	10YR4/3			0	6		41	41	n	n	*III*	3a	**3a**	WE			
		25	45	C	mod	2.5Y6/4	Fe	few f	0	0	m/poor	29	29	n	n							
		45	70	C	very	5Y7/3	Fe	com	0	0	m/poor	22	36	y	(y)							

		70	100	C	very	10Y7/1	Fe	many	0	0	poor	21	0	y	y								
		100	120	Mst					0	0	poor	10	0	y	y								
											Total	**123**	**106**								1o	S	
											MB	21	13										
											Droughtiness grade (DR)	2	1		Winter wheat in valley (Head)								
481	T	0	27	hCL	slight	10YR4/3			0	8		46	46	n	n	*I*	2	**3a**	DR				
		27	50	mCL	very	10YR5/2	Fe	few	0	25		30	30	n	n								
		50	120	Lst								21	8										
											Total	**96**	**83**										
											MB	-6	-10										
											Droughtiness grade (DR)	3a	2		Winter wheat								
482	T	0	27	ZC	slight	10YR4/3			0	15		41	41	n	n	*I*	2	**3b**	DR				
		27	32	ZC	very	10YR4/6			0	30	good	8	8	n	n								
		32	120	Lst								28	15										
											Total	**77**	**64**										
											MB	-25	-29		ST.stone>2cm						>5%	2	
											Droughtiness grade (DR)	3b	3a		Winter beans								
483	T	0	27	hZCL	slight	10YR4/3			0	18		44	44	n	n	*I*	2	**3a**	DR				
		27	45	hCL	very	10YR4/4			0	30	good	29	29	n	n								
		45	120	Lst								23	10										
											Total	**96**	**83**		GR.gradient						1o	SE	
											MB	-6	-10										
											Droughtiness grade (DR)	3a	3a		Winter wheat								
484	T	0	27	ZC	slight	10YR4/3			0	12		42	42	n	n	*I*	2	**3b**	DR				
		27	32	ZC	very	10YR4/4			0	25	good	8	8	n	n								
		32	120	Lst								28	15										
											Total	**78**	**65**										
											MB	-24	-28										
											Droughtiness grade (DR)	3b	3a		Winter wheat								
485	T	0	25	ZC	slight	10YR4/3			0	18		37	37	n	n	*I*	2	**3b**	DR	DP			
		25	120	Lst								31	18										
											Total	**68**	**55**										

											MB	-34	-38		ST.stone>2cm			>5%	2		
										Droughtiness grade (DR)		3b	3b		Winter wheat						
486	T	0	27	hZCL	slight	10YR4/3			0	8		48	48	n	n	/	2	**3a**	DR			
		27	35	hZCL	mod	10YR4/6			0	25		11	11	n	n							
		35	50	CL	very	10YR5/2	Fe	few f	0	25	good	25	25	n	n							
		50	120	Lst								21	8									
											Total	**105**	**92**								
											MB	3	-1								
										Droughtiness grade (DR)		3a	2		Winter beans						
487	T	0	28	C	slight	10YR4/2			0	8		45	45	n	n	/	2	**3a**	DR			
		28	47	mCL	extr.	10YR7/8			0	25		25	25	n	n							
		47	120	Lst								22	9									
											Total	**92**	**79**		GR.gradient			1o	S		
											MB	-10	-14								
										Droughtiness grade (DR)		3a	3a		Winter beans						
488	T	0	27	ZC	slight	10YR4/4			0	25		37	37	n	n	/	2	**3b**	DR	DP		
		27	120	Lst								30	17									
											Total	**67**	**54**		GR.gradient						
											MB	-35	-39		ST.stone>2cm			>10%	3a		
										Droughtiness grade (DR)		3b	3b		Winter beans						
489a	T	0	27	hZCL	slight	10YR4/3			0	12		46	46	n	n	/	2	**3a**	DR	DP		
		27	40	hCL	mod	10YR6/8			0	25	good	22	22	n	n							
		40	120	Lst								25	12									
											Total	**93**	**80**								
											MB	-9	-13								
										Droughtiness grade (DR)		3a	3a		Winter wheat						
489	T	0	27	hCL	mod	10YR4/3			0	12		44	44	n	n	/	2	**3b**	DR			
		27	32	hCL	very	10YR4/4			0	30	good	8	8	n	n							
		32	120	Lst								28	15									
											Total	**80**	**67**								
											MB	-22	-26								
										Droughtiness grade (DR)		3b	3a		Winter wheat						

490	T	0	28	mCL	v.slight	7.5YR4/4		0	6		48	48	n	n	/	1	**3a**	DR	DP
		28	35	mCL	slight	7.5YR4/6		0	10	good	14	14	n	n					
		35	42	CL	very			0	30	good	11	11	n	n					
		42	120	Lst							24	11							
										Total	**97**	**84**							
										MB	-5	-9							
							Droughtiness grade (DR)				3a	2							
491	T	0	27	hCL	slight	10YR4/3		0	18		37	37	n	n	/	2	**3b**	DR	DP
		27	120	Lst							30	17							
										Total	**68**	**55**							
										MB	-34	-38							
							Droughtiness grade (DR)				3b	3b							
492	T	0	23	hZCL	slight	10YR4/3			18		37	37	n	n	/	2	**3b**	DR	DP
		23	120	Lst							32	19							
										Total	**69**	**56**							
										MB	-33	-37							
							Droughtiness grade (DR)				3b	3b							
493	T	0	27	CL	mod	10YR4/3		0	12		44	44	n	n	/	2	**3a**	DR	DP
		27	43	hCL	mod	10YR6/8		0	25	good	27	27	n	n					
		43	120	Lst							24	11							
										Total	**95**	**82**							
										MB	-7	-11							
							Droughtiness grade (DR)				3a	3a							
494	T	0	27	hZCL	n	10YR4/4		0	3		50	50	n	n	/	2	**3a**	DR	DP
		27	35	hCL	slight	7.5YR4/6		0	10		12	12	n	n					
		35	38	CL	very			0	30	good	5	5	n	n					
		38	120	Lst							26	13							
										Total	**92**	**79**							
										MB	-10	-14							
							Droughtiness grade (DR)				3a	3a							
495	T	0	28	hCL	slight	10YR4/3		0	15		45	45	n	n	/	2	**3b**	DR	DP
		28	120	Lst							30	17							

												Total	**74**	**61**						ST.stone>2cm	>5% 2
												MB	-28	-32							
											Droughtiness grade (DR)		3b	3b						Winter beans	
495a	T	0	26	hZCL	slight	10YR4/3			0	20			42	42	n	n	*I*	2	**3b**	DR	
		26	30	hCL	mod	10YR4/6			0	30	good		6	6	n	n					
		30	120	Lst									29	16							
												Total	**77**	**64**						ST.stone>2cm	>10% 3a
												MB	-25	-29							
											Droughtiness grade (DR)		3b	3a						Set Aside Grass	
496	T	0	25	ZC	v.slight	10YR4/3			0	6			41	41	n	n	*II*	3a	**3a**	WE DR	
		25	55	C	slight	10YR6/4	FeMn	com	0	5	m/poor		39	42	y	n					
		55	120	Lst									20	6							
												Total	**99**	**88**							
												MB	-3	-5							
											Droughtiness grade (DR)		3a	2						Winter beans	
496a	T	0	28	hZCL	slight	10YR4/3			0	12			48	48	n	n	*I*	2	**3a**	DR DP	
		28	35	hCL	mod	10YR4/6			0	30	good		11	11	n	n					
		35	120	Lst									27	14							
												Total	**86**	**73**							
												MB	-16	-20							
											Droughtiness grade (DR)		3a	3a						Set Aside Grass	
497	T	0	27	hZCL	n	7.5YR4/4			2	2			50	50	n	n	*I*	3a	**3a**	WE	
		27	45	ZC	slight	7.5YR6/6	OM		0	4			26	26	n	n					
		45	60	LC	very	7.5YR6/3	Fe	com f	0	25			14	20	y	n					
		60	120	Lst									18	4							
												Total	**108**	**99**						GR.gradient	1o NE
												MB	6	6							
											Droughtiness grade (DR)		2	2						Winter beans	
497a	T	0	30	hZCL	mod	10YR4/3			0	15			50	50	n	n	*I*	2	**3b**	DR DP	
		25	120	Lst									31	18							
												Total	**81**	**68**							
												MB	-21	-25						ST.stone>2cm	>5%

									Droughtiness grade (DR)			3b	3a		Winter beans						
498	T	0	21	hCL	mod	10YR4/3			0	20		32	32	n	n	/	2	**3b**	DR	DP		
		21	120	Lst								33	20									
											Total	**65**	**52**		ST.stone>2cm			>10%	3a			
											MB	-37	-41									
									Droughtiness grade (DR)			3b	3b		Winter beans						
499	T	0	27	hCL	mod	10YR4/4			0	10		45	45	n	n	//	2	**3a**	DR			
		27	35	LC	mod	10YR5/4			0	25	good	13	13	n	n							
		35	50	LC	very	10YR6/3	Fe	com	0	25		20	20	y	n							
		50	120	Lst								21	8									
											Total	**99**	**86**									
											MB	-3	-7									
									Droughtiness grade (DR)			3a	2		Winter beans						
500	T	0	30	ZC	slight	10YR4/3				12		46	46			/	2	**3b**	DR			
		30	120	Lst								29	16									
											Total	**75**	**62**		GR.gradient			1o	NE			
											MB	-27	-31		ST.stone>2cm			>5%	2			
									Droughtiness grade (DR)			3b	3b		Winter beans						
501	T	0	27	hCL	mod	10YR4/4			0	15		43	43	n	n	/	2	**3a**	DR			
Pit 21		27	45	LC	very	10YR5/4	OMFe	com f	0	25		23	23	n	n							
		45	55	LC	very	10YR6/3	Fe	com	0	25		10	13	y	n							
		55	120	Lst								20	6									
											Total	**96**	**85**									
											MB	-6	-8									
									Droughtiness grade (DR)			3a	2		Winter beans						
502	T	0	27	hZCL	n	7.5YR4/4			0	0		51	51	n	n	/	2	**2**	DR	WK		
		27	70	hZCL	n	7.5YR6/6			0	0		59	73	n	n							
		70	75	hCL			Fe	pred	0	10		5	0	y	n							
		75	120	Lst								14	0									
											Total	**129**	**124**		GR.gradient			1o	NE			
											MB	27	31									
									Droughtiness grade (DR)			2	1									

503	T	0	27	hZCL	n	10YR5/3			0	2		50	50	n	n	//	3a	**3a**	WE
		27	45	ZC	n	10YR5/4	Fe	few	0	0		27	27	n	n				
		45	60	C	n	2.5Y6/4	Fe	com	0	0	m/poor	15	22	y	n				
		60	100	C	slight	2.5Y6/4	Fe	com	0	0	poor	28	13	y	y				
		100	120	Mst					0	0	poor	10	0	y	y				
											Total	**130**	**112**		GR.gradient			1o	NE
											MB	28	19						
									Droughtiness grade (DR)			2	1		Winter beans				

Stone types		
%	TAv	EAv
hard	1	0.5
Lstone	4	3

hard flint & pebble

Climate Data	
MDwheat	101
MDpotato	91
FCD	151
AAR	694

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>68cm	41-68cm	<41cm	
SPL within 80cm, gleying at 40-70cm	>52cm	<52cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1,391
Limitation
Grade 1

Elevation: 103m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lstone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
504	T	0	25	C	very	10YR3/3			0	24		35	35	n	n	I	2	**3b**	ST
		25	35	C	very	7.5YR4/4			0	50		10	10	n	n				
		35	50	C	very	10YR6/3			0	50		15	15	n	n				
		50	120	Lst								21	8						
											Total	**81**	**68**		ST.stone>2cm			15%	3b
											MB	-20	-23						
											Droughtiness grade (DR)	3a	3a						
505	T	0	30	C	very	10YR3/3			0	23		42	42		n	I	2	**3b**	DR
		30	50	C	very	7.5YR4/4			10	50		17	17	n	n				
		50	120	Lst								21	8						
											Total	**80**	**67**		ST.stone>2cm			>10%	3a
											MB	-21	-24						
											Droughtiness grade (DR)	3b	3a						
506	T	0	28	hCL	very	10YR3/3			0	12		46	46	n	n	II	2	**3a**	DR
		28	50	C	very	10YR6/3	Fe	com	0	15		31	31	y	n				
		50	62	C	very	10YR6/3			0	20		8	16	n	n				
		62	120	Lst								17	3						
											Total	**103**	**96**		ST.stone>2cm			>5%	2
											MB	2	5		hCL/C				
											Droughtiness grade (DR)	3a	2						
507	T	0	26	C	very	10YR3/3			0	22		37	37	n	n	I	2	**3b**	DR ST
Pit 22		26	45	C	very	7.5YR4/4			0	50		19	19	n	n				
		45	120	Lst								23	10						
											Total	**79**	**66**		ST.stone>2cm			15%	3b
											MB	-22	-25						

									Droughtiness grade (DR)		3b	3a								
508	T	0	25	hCL	very	10YR3/3	0	24			37	37	n	n	/	2	**3b**	DR		
		25	35	C	very	7.5YR4/4	0	50			10	10	n	n						
		35	40	C	very	7.5YR4/4	0	50			5	5	n	n						
		40	120	Lst							25	12								
										Total	**77**	**64**		ST.stone>2cm			>10%	3a		
										MB	-24	-27								
									Droughtiness grade (DR)		3b	3a								
509	T	0	24	C	very	10YR3/3	0	26			33	33	n	n	/	2	**3b**	DR ST		
Pit 23		24	45	C	very	7.5YR4/4	0	60			18	18	n	n						
		45	120	Lst							23	10								
										Total	**74**	**61**		Field edge very stony						
										MB	-27	-30		ST.stone>2cm			>15%	3b		
									Droughtiness grade (DR)		3b	3a								
510	T	0	27	C	very	10YR3/3	0	13			41	41	n	n	/	2	**3a**	DR		
		27	52	C	very	7.5YR4/4	0	30			30	31	n	n						
		52	120	Lst							20	7								
										Total	**92**	**80**		ST.stone>2cm			>5%	2		
										MB	-9	-11								
									Droughtiness grade (DR)		3a	3a								
511	T	0	26	C	very	10YR3/3	0	11			40	40	n	n	/	2	**3a**	DR		
		26	70	C	very	10YR6/4	0	20			47	60	n	n						
		70	120	Lst							15	0								
										Total	**102**	**100**		ST.stone>2cm			>5%	2		
										MB	1	9								
									Droughtiness grade (DR)		3a	2								
512	T	0	28	C	very	10YR3/3	0	23			39	39	n	n	/	2	**3a**	DR		
		28	60	C	very	7.5YR4/4	0	50			28	32	n	n						
		60	120	Lst							18	4								
										Total	**85**	**75**		ST.stone>2cm			>10%	3a		
										MB	-16	-16								
									Droughtiness grade (DR)		3a	3a								

513	T	0	28	C	mod	10YR4/2			0	7		45	45	n	n	/	2	**2**	WE	
		28	40	C	mod	7.5YR4/6			0	10		18	18	n	n					
		40	120	C	n	7.5YR4/6	mn	few	0	0		72	48	n	n					
											Total	**135**	**111**							
											MB	34	20							
											Droughtiness grade (DR)	1	1							
514	T	0	27	C	very	10YR3/3			0	22		38	38	n	n	/	2	**3b**	ST	
		27	60	C	very	10YR5/2			0	10		42	49	n	n					
		60	120	Lst								18	4							
											Total	**98**	**91**							
											MB	-3	0							
											Droughtiness grade (DR)	3a	2							

Stony field boundary

ST.stone>2cm 15% 3b

Stone types		
%	TAv	EAv
hard	1	0.5
Lst	4	3

hard flint & pebble

Climate Data	
MDwheat	99
MDpotato	89
FCD	153
AAR	720

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>68cm	41-68cm	<41cm	
SPL within 80cm, gleying at 40-70cm	>53cm	<53cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Climate
1,384
Limitation
Grade 1

Maximum depth of auger penetration is underlined

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lst	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
515	T	0	26	C	very	10YR3/3			0	28		35	35	n	n	I	2	**3b**	ST
		26	50	C	very	7.5YR4/4			0	50		24	24	n	n				
		50	120	Lst								21	8	n	n				
											Total	**80**	**67**		ST.stone>2cm			>15%	3b
											MB	-19	-22						
											Droughtiness grade (DR)	3a	3a						
516	T	0	27	C	very	10YR3/3			0	28		36	36	n	n	I	2	**3b**	DR
Pit 24		27	40	C	very	7.5YR4/4			0	50		13	13	n	n				
		40	120	Lst								25	12	n	n				
											Total	**74**	**61**		ST.stone>2cm			15%	3b
											MB	-25	-28						
											Droughtiness grade (DR)	3b	3a						
517	T	0	27	C	very	10YR3/3			0	20		39	39	n	n	I	2	**3b**	DR
		27	35	C	very	7.5YR4/4			0	60		7	7	n	n				
		35	120	Lst								27	14	n	n				
											Total	**73**	**60**		ST.stone>2cm			>10%	3a
											MB	-26	-29						
											Droughtiness grade (DR)	3b	3a						
518	T	0	30	C+	mod	10YR3/3			0	5		49	49	n	n	II	3b	**3b**	WE
		30	70	C	very	10YR5/2	Fe	com	0	7	m/poor	42	55	y	n				
		70	120	Lst								15	0	n	n				
											Total	**106**	**104**		55% TS clay				
											MB	7	15						
											Droughtiness grade (DR)	2	1						

519	T	0	26	C	very	10YR3/3	0	22		37	37	n	n	/	2	**3b**	DR		
		26	44	C	very	7.5YR5/3	0	60		16	16	n	n						
		44	120	Lst						23	10	n	n						
									Total	**76**	**63**	ST.stone>2cm				>10%	3a		
									MB	-23	-26								
									Droughtiness grade (DR)	3b	3a								
520	T	0	27	C	very	10YR3/3	0	27		36	36	n	n	/	2	**3b**	DR ST		
		27	35	C	very	7.5YR4/4	0	60		7	7	n	n						
		35	120	Lst						27	14	n	n						
									Total	**70**	**57**	ST.stone>2cm				>15%	3b		
									MB	-29	-32								
									Droughtiness grade (DR)	3b	3b								
521	T	0	26	C	very	10YR3/3	0	27		35	35	n	n	/	2	**3b**	DR ST		
Pit 25		26	37	C	very	7.5YR4/4	0	60		10	10	n	n						
		37	120	Lst						26	13	n	n						
									Total	**71**	**58**	ST.stone>2cm				>15%	3b		
									MB	-28	-31								
									Droughtiness grade (DR)	3b	3b								
522	T	0	27	C	very	10YR3/3	0	27		36	36	n	n	/	2	**3b**	DR ST		
		27	37	C	very	7.5YR4/4	0	60		9	9	n	n						
		37	120	Lst						26	13	n	n						
									Total	**71**	**58**	ST.stone>2cm				>15%	3b		
									MB	-28	-31								
									Droughtiness grade (DR)	3b	3b								
523	T	0	27	C	very	10YR3/3	0	18		40	40	n	n	/	2	**3a**	DR ST		
		27	52	C	very	7.5YR4/4	0	40		27	28	n	n						
		52	120	Lst						20	7	n	n						
									Total	**87**	**75**	ST.stone>2cm				>10%	3a		
									MB	-12	-14								

										Droughtiness grade (DR)		3a	3a						
524	T	0	30	C	mod	10YR4/2	0	4			49	49	n	n	*I*	2	**2**	WE		
		30	120	C	very	7.5YR4/6	0	0			88	64	n	n						
										Total	**137**	**113**								
										MB	38	24								
										Droughtiness grade (DR)	1	1								
524a	T	0	28	C	sli	10YR4/2	0	5			46	46	n	n	*I*	2	**2**	WE		
		28	120	C	sli	7.5YR4/6	0	0			91	67	n	n						
										Total	**137**	**113**								
										MB	38	24								
										Droughtiness grade (DR)	1	1								
525	T	0	26	C	mod	10YR3/3	0	20			37	37	n	n	*I*	2	**3b**	DR		
		26	45	C	very	7.5YR4/4	0	60			17	17	n	n						
		45	120	Lst							23	10	n	n						
										Total	**77**	**64**		ST.stone>2cm			>10%	3a		
										MB	-22	-25								
										Droughtiness grade (DR)	3b	3a								
525a	T	0	26	C	very	10YR3/3	0	15			39	39	n	n	*I*	2	**3a**	DR		
		26	56	C	very	10YR4/6	0	25			35	39	n	n						
		56	120	Lst							19	6	n	n						
										Total	**94**	**84**		ST.stone>2cm			>5%	2		
										MB	-5	-5								
										Droughtiness grade (DR)	3a	2								
526	T	0	27	C	very	10YR3/3	0	15			41	41	n	n	*I*	2	**3a**	DR		
		27	43	C	very	10YR5/4	0	60			14	14	n	n						
		43	120	Lst							24	11	n	n						
										Total	**79**	**66**		ST.stone>2cm			10%	3a		
										MB	-20	-23								
										Droughtiness grade (DR)	3a	3a								

527	T	0	27	C	very	10YR3/3			0	17		40	40	n	n	*I*	2	**3a**	DR
		27	45	C	very	7.5YR4/6			0	60		16	16	n	n				
		45	120	Lst								23	10	n	n				
											Total	**79**	**66**	ST.stone>2cm			>5%	2	
											MB	-20	-23						
											Droughtiness grade (DR)	3a	3a						
528	T	0	25	C	very	10YR3/3			0	14		38	38	n	n	*I*	2	**3b**	DR
		25	32	C	very	10YR5/4			0	60		6	6	n	n				
		32	120	Lst								28	15	n	n				
											Total	**72**	**59**	ST.stone>2cm			>5%	2	
											MB	-27	-30						
											Droughtiness grade (DR)	3b	3a						
529	T	0	27	C	very	10YR3/3			0	20		39	39	n	n	*I*	2	**3b**	DR
Pit 26		27	45	C	very	7.5YR4/4			0	60		16	16	n	n				
		45	120	Lst								23	10	n	n				
											Total	**78**	**65**	USS- very stony tightly packed- clay matrix					
											MB	-21	-24	ST.stone>2cm			10%	3a	
											Droughtiness grade (DR)	3b	3a						
530	T	0	25	C	very	10YR3/3			0	8		40	40	n	n	*II*	3a	**3a**	WE
		25	50	C	very	10YR5/2	Fe	com	0	20		34	34	y	n				
		50	120	C	very	10YR6/3	Fe	com	0	30		46	25	y	n				
											Total	**119**	**99**						
											MB	20	10						
											Droughtiness grade (DR)	2	2						
531	T	0	28	C	very	10YR3/3			0	20		40	40	n	n	*I*	2	**3a**	DR ST
		28	43	C	very	10YR5/3			0	30		19	19	n	n				
		43	120	Lst								24	11	n	n				
											Total	**83**	**70**	ST.stone>2cm			>10%	3a	
											MB	-16	-19						
											Droughtiness grade (DR)	3a	3a						

532	T	0	27	C	very	10YR3/3	0	12		42	42	n	n	/	2	**3b**	DR
		27	40	C	very	7.5YR4/4	0	60		11	11	n	n				
		40	120	Lst						25	12	n	n				
									Total	**78**	**65**	ST.stone>2cm			>5%	2	
									MB	-21	-24						
									Droughtiness grade (DR)	3b	3a						
533	T	0	28	C	very	10YR3/3	0	20		40	40	n	n	/	2	**3a**	DR
		28	45	C	very	10YR5/4	0	50		17	17	n	n				
		45	120	Lst						23	10	n	n				
									Total	**80**	**67**	ST.stone>2cm			10%	3a	
									MB	-19	-22						
									Droughtiness grade (DR)	3a	3a						
534	T	0	28	C	very	10YR3/3	0	17		41	41	n	n	/	2	**3a**	DR
		28	45	C	very	7.5YR4/4	0	50		17	17	n	n				
		45	120	Lst						23	10	n	n				
									Total	**81**	**68**	ST.stone>2cm			10%	3a	
									MB	-18	-21						
									Droughtiness grade (DR)	3a	3a						
535	T	0	30	C	very	10YR3/2	0	13		46	46	n	n	/	2	**3a**	DR
		30	45	C	very	10YR5/3	0	30		19	19	n	n				
		45	120	Lst						23	10	n	n				
									Total	**88**	**75**	ST.stone>2cm			>5%	2	
									MB	-11	-14						
									Droughtiness grade (DR)	3a	3a						
536	T	0	27	C	very	10YR3/2	0	10		42	42	n	n	/	2	**3a**	DR
		27	45	C	very	10YR6/4	0	10		27	27	n	n				
		45	120	Lst						23	10	n	n				
									Total	**92**	**79**	ST.stone>2cm			>5%	2	
									MB	-7	-10						

										Droughtiness grade (DR)		3a	2							
537	T	0	26	C	very	10YR3/2	0	12			40	40	n	n	/	2	**3a**	DR			
		26	43	C	very	10YR5/4	0	30			21	21	n	n							
		43	120	Lst							24	11	n	n							
										Total	**85**	**72**		ST.stone>2cm			>5%	2		
										MB	-14	-17								
										Droughtiness grade (DR)		3a	3a							
538	T	0	27	C	very	10YR3/2	0	17			40	40	n	n	/	2	**3b**	DR			
		27	40	C	very	10YR5/4	0	60			11	11	n	n							
		40	120	Lst							25	12	n	n							
										Total	**76**	**63**		ST.stone>2cm			>5%	2		
										MB	-23	-26								
										Droughtiness grade (DR)		3b	3a							
539	T	0	27	C	very	10YR3/2	0	17			40	40	n	n	/	2	**3b**	DR			
Pit 27		27	40	C	very	10YR5/4	0	60			11	11	n	n							
		40	120	Lst							25	12	n	n							
										Total	**76**	**63**		ST.stone>2cm			>10%	3a		
										MB	-23	-26								
										Droughtiness grade (DR)		3b	3a							
540	T	0	27	C	very	10YR3/3	0	8			43	43	n	n	/	2	**3a**	DR			
Pit 28		27	50	C	very	7.5YR4/4	0	60			20	20	n	n							
		50	120	Lst							21	8	n	n							
										Total	**84**	**71**								
										MB	-15	-18								
										Droughtiness grade (DR)		3a	3a							
541	T	0	28	C	very	10YR3/3	0	11			44	44	n	n	/	2	**3b**	DR			
		28	35	C	very	7.5YR4/6	0	60			6	6	n	n							
		35	120	Lst							27	14	n	n							
										Total	**77**	**64**								

										MB	-22	-25								
										Droughtiness grade (DR)	3b	3a								
542	T	0	28	C	very	10YR3/3	0	7			45	45	n	n	*I*	2	**3a**	DR		
		28	50	C	very	7.5YR4/4	0	10			33	33	n	n						
		50	120	Lst							21	8	n	n						
										Total	**99**	**86**								
										MB	0	-3								
										Droughtiness grade (DR)	3a	2								
543	T	0	30	C	very	10YR4/2	0	10			47	47	n	n	*I*	2	**3a**	DR		
		30	50	C	very	7.5YR4/4	0	15			28	28	n	n						
		50	72	C	very	10YR5/3	0	40			13	22	n	n						
		72	120	Lst							14	0	n	n						
										Total	**103**	**98**								
										MB	4	9								
										Droughtiness grade (DR)	3a	2								
544	T	0	29	C	very	10YR3/2	0	16			43	43	n	n	*I*	2	**3b**	DR		
		29	35	C	very	7.5YR4/4	0	60			5	5	n	n						
		35	120	Lst							27	14	n	n						
										Total	**76**	**63**								
										MB	-23	-26								
										Droughtiness grade (DR)	3b	3a								
545	T	0	28	C	very	10YR3/2	0	16			42	42	n	n	*I*	2	**3b**	DR		
		28	41	C	very	7.5YR4/4	0	60			11	11	n	n						
		41	120	Lst							25	12	n	n						
										Total	**78**	**65**		ST.stone>2cm			>5%	2		
										MB	-21	-24								
										Droughtiness grade (DR)	3b	3a								
546	T	0	29	C	very	10YR3/2	0	15			44	44	n	n	*I*	2	**3b**	DR		
		29	40	C	very	7.5YR4/4	0	60			10	10	n	n						

		40	120	Lst						25	12	n	n						
									Total	**78**	**65**	Locally variable depth over Lst							
									MB	-21	-24	ST.stone>2cm			>5%	2			
								Droughtiness grade (DR)		3b	3a								
547	T	0	27	C	very	10YR3/3	0	15		41	41	n	n	/	2	**3b**	DR		
		27	35	C	very	7.5YR4/4	0	50		8	8	n	n						
		35	120	Lst						27	14	n	n						
									Total	**76**	**63**	ST.stone>2cm			>5%	2			
									MB	-23	-26								
								Droughtiness grade (DR)		3b	3a								
548	T	0	30	C	very	10YR3/3	0	15		45	45	n	n	/	2	**3b**	DR		
Pit 29		30	120	Lst						29	16	n	n						
									Total	**74**	**61**	ST.stone>2cm			>5%	2			
									MB	-25	-28								
								Droughtiness grade (DR)		3b	3a								
549	T	0	30	C	very	10YR3/2	0	15		45	45	n	n	/	2	**3b**	DR		
		30	35	C	very	7.5YR4/4	0	60		4	4	n	n						
		35	120	Lst						27	14	n	n						
									Total	**77**	**64**	ST.stone>2cm			>5%	2			
									MB	-22	-25								
								Droughtiness grade (DR)		3b	3a								
550	T	0	29	C	very	10YR3/3	0	15		44	44	n	n	/	2	**3b**	DR		
		29	36	C	very	7.5YR4/6	0	40		8	8	n	n						
		36	120	Lst						27	14	n	n						
									Total	**78**	**65**	ST.stone>2cm			>5%	2			
									MB	-21	-24								
								Droughtiness grade (DR)		3b	3a								
551	T	0	28	C	very	10YR3/3	0	11		44	44	n	n	/	3a	**3a**	DR		
		28	45	C	very	10YR5/4	0	10		25	25	n	n						

		45	60	C	very	10YR6/3	0	30		13	19	n	n							
		60	120	Lst						18	4	n	n							
									Total	**99**	**91**									
									MB	0	2									
									Droughtiness grade (DR)	3a	2									
552	T	0	28	C	very	10YR3/3	0	13		43	43	n	n	/	2	**3a**	DR			
		28	50	C	very	10YR6/4	0	30		27	27	n	n							
		50	120	Lst						21	8	n	n							
									Total	**91**	**78**		ST.stone>2cm			>5%	2			
									MB	-8	-11									
									Droughtiness grade (DR)	3a	3a									
553	T	0	27	hCL	very	10YR3/3	0	18		42	42	n	n	/	2	**3b**	DR			
		27	29	C	very	7.5YR4/6	0	60		2	2	n	n							
		29	120	Lst						29	16	n	n							
									Total	**73**	**60**		ST.stone>2cm			>5%	2			
									MB	-26	-29									
									Droughtiness grade (DR)	3b	3a									
554	T	0	30	C	very	10YR3/3	0	17		44	44	n	n	/	2	**3a**	DR ST			
Pit 30		30	37	C	mod	7.5YR4/4	0	10		10	10	n	n							
		37	46	C	very	7.5YR4/4	0	60		8	8	n	n							
		46	120	Lst						23	10	n	n							
									Total	**85**	**72**		ST.stone>2cm			>10%	3a			
									MB	-14	-17									
									Droughtiness grade (DR)	3a	3a									
555	T	0	29	C	mod	10YR3/3	0	17		43	43	n	n	/	2	**3a**	ST			
		29	60	C	mod	10YR5/4	0	3		41	48	n	n							
		60	80	C	mod	10YR5/2	0	3		16	16	n	n							
		80	120	C	very	10YR6/1	0	10		30	0	n	n							
									Total	**129**	**107**		ST.stone>2cm			>10%	3a			
									MB	30	18									

Droughtiness grade (DR)	1	1

Stone types		
%	TAv	EAv
hard	1	0.5
Lst	4	3

hard flint & pebble

Climate Data	
MDwheat	99
MDpotato	89
FCD	153
AAR	720

Wetness Class Guidelines	II	III	IV	V	Climate
SPL within 80cm, gleying within 40cm	>68cm	41-68cm	<41cm		1,384
SPL within 80cm, gleying at 40-70cm	>53cm	<53cm			Limitation
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II	Grade 1

Maximum depth of auger penetration is underlined

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lst	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
556	T	0	30	hCL	very	7.5YR4/4			0	12		49	49	n	n	I	2	**3b**	DR
		30	120	Lst								29	16						
											Total	**78**	**65**						
											MB	-21	-24						
											Droughtiness grade (DR)	3b	3a						
557	T	0	30	C	very	10YR4/4			0	7		48	48	n	n	I	2	**3a**	DR
		30	40	C	very	7.5YR5/4			0	20		14	14	n	n				
		40	120	Lst								25	12						
											Total	**87**	**74**						
											MB	-12	-15						
											Droughtiness grade (DR)	3a	3a						
558	T	0	25	hCL	very	10YR4/4			0	15		40	40	n	n	I	1	**3b**	DR
		25	35	hCL	very	7.5YR5/4			0	50		10	10						
		35	120	Lst								27	14						
											Total	**77**	**64**						
											MB	-22	-25						
											Droughtiness grade (DR)	3b	3a						
559	T	0	25	C	very	10YR4/4			0	10		39	39	n	n	I	2	**3b**	DR
		25	36	C	very				0	40		12	12	n	n				
		36	120	Lst								27	14						
											Total	**78**	**65**						
											MB	-21	-24						
											Droughtiness grade (DR)	3b	3a						

560	T	0	30	C	very	10YR4/6			0	15		45	45	n	n	*I*	2	**3a**	DR		
		30	50	C	very				0	35		24	24	n	n						
		50	120	Lst								21	8								
											Total	**90**	**77**								
											MB	-9	-12								
											Droughtiness grade (DR)	3a	3a								
561	T	0	30	hCL	very	10YR4/4			0	15		48	48	n	n	*I*	2	**3b**	DR		
		30	120	Lst								29	16								
											Total	**77**	**64**								
											MB	-22	-25								
											Droughtiness grade (DR)	3b	3a								
562	T	0	28	hCL	very	7.5YR3/4			0	15		45	45	n	n	*I*	2	**3b**	DR		
		28	33	hCL	very				0	50		5	5	n	n						
		33	120	Lst								28	15								
											Total	**77**	**64**		Scrubland						
											MB	-22	-25								
											Droughtiness grade (DR)	3b	3a								
563	T	0	28	C	very	7.5YR3/4			0	15		42	42	n	n	*I*	2	**3b**	DR		
		28	37	C	very				0	60		8	8	n	n						
		37	120	Lst								26	13								
											Total	**76**	**63**								
											MB	-23	-26								
											Droughtiness grade (DR)	3b	3a								
564	T	0	40	ZC	very	10YR4/4				2		67	67	n	n	*II*	3a	**3a**	WE		
		40	60	ZC	very	10YR5/3	och	com		10		21	28	y	n						
		60	90	C	very	2.5Y5/4	och	many		10		23	15	(y)	n						
		90	120	Lst								9	0								
											Total	**120**	**110**								
											MB	21	21								
											Droughtiness grade (DR)	2	1								

565	T	0	30	C	very	7.5YR4/4	0	15		45	45	n	n	/	2	**3b**	DR		
		30	35	C	very		0	60		4	4	n	n						
		35	120	Lst						27	14								
									Total	**77**	**64**								
									MB	-22	-25								
									Droughtiness grade (DR)	3b	3a								
566	T	0	20	hCL	very	10YR4/4	0	10		33	33	n	n	/	2	**3b**	DR		
		20	30	hCL	very	7.5YR5/4	0	50		10	10	n	n						
		30	120	Lst						29	16								
									Total	**72**	**59**								
									MB	-27	-30								
									Droughtiness grade (DR)	3b	3a								
567	T	0	28	hCL	very	7.5YR4/3	0	15		45	45	n	n	/	2	**3b**	DR		
		28	36	C	very	7.5YR5/4	0	60		7	7	n	n						
		36	120	Lst						27	14								
									Total	**78**	**65**								
									MB	-21	-24								
									Droughtiness grade (DR)	3b	3a								
568	T	0	30	hCL	very	7.5YR4/3	0	15		48	48	n	n	/	2	**3a**	DR		
		30	48	hCL	very	7.5YR5/4	0	50		18	18	n	n						
		48	120	Lst						22	9								
									Total	**87**	**75**								
									MB	-12	-15								
									Droughtiness grade (DR)	3a	3a								
569	T	0	30	C	very	10YR4/4	0	18		44	44	n	n	/	2	**3b**	DR		
		30	38	C	very	7.5YR5/4	0	50		8	8	n	n						
		38	120	Lst						26	13								
									Total	**78**	**65**								
									MB	-21	-24								

TS-hCL/C

												Droughtiness grade (DR)	3b	3a						
570	T	0	30	hCL	very	10YR3/4			0	15		48	48	n	n	*I*	2	**3b**	DR	
		30	120	Lst								29	16							
											Total	**77**	**64**							
											MB	-22	-25							
											Droughtiness grade (DR)	3b	3a						
571	T	0	28	hCL	very	10YR4/4			0	10		46	46	n	n	*III*	3b	**3b**	WE	
		28	45	C	very	10YR5/4	och	com	0	10		25	25	n	n					
		45	60	C	very	2.5Y5/2	och	com	0	20	poor	12	17	y	y					
		60	120	Lst								18	4							
											Total	**101**	**92**							
											MB	2	3							
											Droughtiness grade (DR)	3a	2						
572	T	0	38	C	very	10YR4/4			0	5		62	62	n	n	*IV*	3b	**3b**	WE	
		38	80	C	very	10YR5/1	och	many	0	10	poor	34	39	y	y					
		80	120	Lst								12	0							
											Total	**108**	**101**							
											MB	9	12							
											Droughtiness grade (DR)	2	1						
573	T	0	27	hCL	very	10YR4/4			0	15		43	43	n	n	*I*	2	**3a**	DR	
		27	45	C	very	10YR5/4			0	35		21	21	n	n					
		45	120	Lst								23	10							
											Total	**87**	**74**							
											MB	-12	-15							
											Droughtiness grade (DR)	3a	3a						
574	T	0	30	hCL	very	7.5YR4/3			0	10		50	50	n	n	*I*	2	**3a**	DR	
		30	45	hCL	very	2.5Y6/3			0	35		18	18	n	n					
		45	120	Lst								21	8							
											Total	**88**	**76**							

TS-hCL/C

									MB	-11	-14								
								Droughtiness grade (DR)		3a	3a								
575	T	0	30	C	very	10YR4/3	0	10		47	47	n	n	/	2	**3b**	DR		
		30	33	C	very	7.5YR5/4	0	50		3	3	n	n						
		33	120	Lst						28	15								
									Total	**78**	**65**								
									MB	-21	-24								
								Droughtiness grade (DR)		3b	3a								
576	T	0	30	C	very	10YR4/4	0	12		46	46	n	n	/	2	**3b**	DR		
		30	35	C	very		0	60		4	4	n	n						
		35	120	Lst						27	14								
									Total	**78**	**65**								
									MB	-21	-24								
								Droughtiness grade (DR)		3b	3a								
577	T	0	28	hCL	very	10YR4/4	0	12		46	46	n	n	/	2	**3a**	DR		
		28	45	C	very	10YR5/4	0	35		20	20	n	n						
		45	120	Lst						23	10								
									Total	**89**	**76**								
									MB	-10	-13								
								Droughtiness grade (DR)		3a	3a								
578	T	0	30	hCL	very	10YR4/4	0	10		50	50	n	n	/	2	**3a**	DR		
		30	45	hCL	very	10YR3/6	0	40		17	17	n	n						
		45	120	Lst						23	10								
									Total	**90**	**77**								
									MB	-9	-12								
								Droughtiness grade (DR)		3a	3a								
579	T	0	20	hCL	very	7.5YR3/4	0	10		33	33	n	n	/	2	**3b**	DR		
		20	30	hCL	very	10YR5/4	0	30		12	12	n	n						
		30	120	Lst						29	16								

										Total	**75**	**62**							
										MB	-24	-27							
										Droughtiness grade (DR)	3b	3a							
580	T	0	20	hCL	very	10YR3/6	0	10			33	33	n	n	/	2	**3b**	DR	
		20	33	hCL	very		0	40			15	15	n	n					
		33	120	Lst							28	15							
										Total	**76**	**63**							
										MB	-23	-26							
										Droughtiness grade (DR)	3b	3a							
581	T	0	33	hCL	very	10YR3/6	0	10			55	55	n	n	/	2	**3a**	DR	
		33	45	hCL	very	7.5YR5/4	0	20			16	16	n	n					
		45	120	Lst							23	10							
										Total	**94**	**81**							
										MB	-5	-8							
										Droughtiness grade (DR)	3a	2							
582	T	0	29	hCL	very	7.5YR3/4	0	12			47	47	n	n	/	2	**3b**	DR	
		29	120	Lst							29	16							
										Total	**77**	**64**							
										MB	-22	-25							
										Droughtiness grade (DR)	3b	3a							
583	T	0	28	hCL	very	10YR3/6	0	15			45	45	n	n	/	2	**3b**	DR	
		28	33	hCL	very	10YR3/6	0	40			6	6							
		33	120	Lst							28	15							
										Total	**78**	**65**							
										MB	-21	-24							
										Droughtiness grade (DR)	3b	3a							
584	T	0	25	C	very	10YR4/3	0	10			39	39	n	n	/	2	**3a**	DR	
		25	45	C	very	10YR5/4	0	20			27	27	n	n					
		45	120	Lst							23	10							

										Total	**89**	**76**		TS-hCL/C						
										MB	-10	-13								
										Droughtiness grade (DR)	3a	3a								
585	T	0	29	hCL	very	10YR4/4	0	15			46	46	n	n	/	2	**3b**	DR		
		29	33	hCL	very		0	60			4	4	n	n						
		33	120	Lst							28	15								
										Total	**77**	**64**								
										MB	-22	-25								
										Droughtiness grade (DR)	3b	3a								
586	T	0	27	hCL	very	10YR4/4	0	10			45	45	n	n	/	2	**3a**	DR		
		27	45	hCL	very		0	35			21	21	n	n						
		45	120	Lst							23	10								
										Total	**89**	**76**								
										MB	-10	-13								
										Droughtiness grade (DR)	3a	3a								
587	T	0	30	hCL	very	10YR4/4	0	10			50	50	n	n	/	2	**3a**	DR		
		30	50	hCL	very	10YR5/4	0	20			27	27	n	n						
		50	120	Lst							21	8								
										Total	**98**	**85**								
										MB	-1	-4								
										Droughtiness grade (DR)	3a	2								
588	T	0	30	hZCL	very	7.5YR4/4	0	10			53	53	n	n	/	2	**3a**	DR		
		30	50	hCL	very		0	40			22	22	n	n						
		50	120	Lst							21	8								
										Total	**96**	**83**								
										MB	-3	-6								
										Droughtiness grade (DR)	3a	2								
589	T	0	35	hCL	very	10YR4/4	0	10			58	58	n	n	/	2	**3a**	DR		
		35	40	hCL	very		0	20			7	7	n	n						

		50	120	Lst							21	8							
										Total	**86**	**73**							
										MB	-13	-16							
									Droughtiness grade (DR)		3a	3a							
590	T	0	27	hCL	very	7.5YR4/4	0	8			46	46	n	n	/	2	**3a**	DR	
		27	50	hCL	very		0	20			31	31	n	n					
		50	120	Lst							21	8							
										Total	**98**	**85**							
										MB	-1	-4							
									Droughtiness grade (DR)		3a	2							
591	T	0	30	hCL	very	7.5YR4/4	0	8			51	51	n	n	/	2	**3a**	DR	
		30	50	hCL	very		0	20			27	27	n	n					
		50	120	Lst							21	8							
										Total	**99**	**86**							
										MB	0	-3							
									Droughtiness grade (DR)		3a	2							
592	T	0	30	hCL	very	7.5YR4/4	0	12			49	49	n	n	/	2	**3a**	DR	
		30	50	hCL	very		0	35			24	24	n	n					
		50	120	Lst							21	8							
										Total	**94**	**81**							
										MB	-5	-8							
									Droughtiness grade (DR)		3a	2							

Stone types		
%	TAv	EAv
hard	1	0.5
Lst	4	3

Climate Data	
MDwheat	99
MDpotato	89
FCD	153
AAR	703

hard flint & pebble

Wetness Class Guidelines	II	III	IV	V	Climate
SPL within 80cm, gleying within 40cm	>68cm	41-68cm	<41cm		1,384
SPL within 80cm, gleying at 40-70cm	>53cm	<53cm			Limitation
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II	Grade 1

Maximum depth of auger penetration is underlined

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lst	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
593	T	0	27	C	mod	10YR3/3			0	8		43	43	n	n	III	3a	**3a**	WE
		27	45	C	very	10YR5/4			0	10		27	27	n	n				
		45	120	C	very	10YR5/1	Fe	com	0	15	poor	51	29	y	y				
											Total	**120**	**99**						
											MB	21	10						
											Droughtiness grade (DR)	2	2						
594	T	0	27	C	mod	10YR4/2			0	13		41	41	n	n	I	2	**3b**	DR
		27	37	hCL	very	White, 10YR4/3			0	60		9	9	n	n				
		37	120	Lst								26	13	n	n				
											Total	**76**	**63**						
											MB	-23	-26						
											Droughtiness grade (DR)	3b	3a						
595	T	0	27	C	very	10YR3/3			0	24		37	37	n	n	I	2	**3b**	DR
		27	40	C	very	10YR6/4			0	60		11	11	n	n				
		40	120	Lst								25	12	n	n				
											Total	**74**	**61**		ST.stone>2cm			>5%	2
											MB	-25	-28						
											Droughtiness grade (DR)	3b	3a						
596	T	0	28	C	very	10YR3/3			0	10		44	44	n	n	I	2	**3b**	DR DP
Pit 31		28	120	Lst								30	17	n	n				
											Total	**74**	**61**						
											MB	-25	-28						
											Droughtiness grade (DR)	3b	3a						

597	T	0	28	C	very	10YR3/3	0	12		43	43	n	n	/	2	**3b**	DR				
		28	35	C	very	10YR4/6	0	40		8	8	n	n								
		35	120	Lst						27	14	n	n								
									Total	**78**	**65**										
									MB	-21	-24										
									Droughtiness grade (DR)	3b	3a										
598	T	0	27	C	very	10YR3/3	0	24		37	37	n	n	/	2	**3b**	DR DP				
		27	120	Lst						30	17	n	n								
									Total	**68**	**55**	ST.stone>2cm				>10%	3a				
									MB	-31	-34										
									Droughtiness grade (DR)	3b	3b										
599	T	0	26	hCL	very	10YR3/3	0	24		38	38	n	n	/	2	**3b**	DR DP				
		26	120	Lst						31	18	n	n								
									Total	**69**	**56**	ST.stone>2cm				>5%	2				
									MB	-30	-33										
									Droughtiness grade (DR)	3b	3b										
600	T	0	28	C	very	10YR3/3	0	15		42	42	n	n	/	2	**3b**	DR				
Pit 32		28	35	C	very	7.5YR4/6	0	60		6	6	n	n								
		35	120	Lst						27	14	n	n								
									Total	**75**	**62**	ST.stone>2cm				>5%	2				
									MB	-24	-27										
									Droughtiness grade (DR)	3b	3a										
601	T	0	28	hCL	very	10YR3/3	0	17		44	44	n	n	/	2	**3a**	DR				
		28	38	hCL	very	7.5YR4/4	0	20		14	14	n	n								
		38	57	hCL	very	10YR6/4	0	30		20	24	n	n								
		57	120	Lst						19	5	n	n								
									Total	**97**	**86**	ST.stone>2cm				>5%	2				
									MB	-2	-3										
									Droughtiness grade (DR)	3a	2										

602	T	0	26	hCL	very	10YR3/3	0	15		41	41	n	n	/	2	**3a**	DR DP			
Pit 33		26	40	C	very	7.5YR4/6	0	50		14	14	n	n							
		40	120	Lst						25	12	n	n							
									Total	**80**	**67**		ST.stone>2cm			>5%	2		
									MB	-19	-22								
									Droughtiness grade (DR)	3a	3a								
603	T	0	28	hCL	very	10YR3/3	0	20		43	43	n	n	/	2	**3b**	DR			
		28	40	C	very	7.5YR4/4-4/6	0	60		11	11	n	n							
		40	120	Lst						25	12	n	n							
									Total	**78**	**65**		ST.stone>2cm			>5%	2		
									MB	-21	-24								
									Droughtiness grade (DR)	3b	3a								
604	T	0	27	C	very	10YR3/3	0	18		40	40	n	n	/	2	**3b**	DR DP			
		27	120	Lst						30	17	n	n							
									Total	**70**	**57**		ST.stone>2cm			>5%	2		
									MB	-29	-32								
									Droughtiness grade (DR)	3b	3b								
605	T	0	25	C	very	10YR3/3	0	11		39	39	n	n	/	2	**3b**	DR			
		25	35	hCL	very	10YR6/3	0	50		10	10	n	n							
		35	120	Lst						27	14	n	n							
									Total	**76**	**63**								
									MB	-23	-26								
									Droughtiness grade (DR)	3b	3a								

Stone types		
%	TAv	EAv
hard	1	0.5
Lst	4	3

hard flint & pebble

Climate Data	
MDwheat	99
MDpotato	89
FCD	153
AAR	720

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>68cm	41-68cm	<41cm	
SPL within 80cm, gleying at 40-70cm	>53cm	<53cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1,384
Limitation
Grade 1

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lst	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
606	T	0	30	C	very	10YR4/4			0	12		46	46	n	n	I	2	**3b**	DR
		30	120	Lst								29	16						
											Total	**75**	**62**						
											MB	-24	-27						
											Droughtiness grade (DR)	3b	3a						
607	T	0	30	C	very	7.5YR4/4			0	12		46	46	n	n	I	2	**3a**	DR
		30	43	C	very	7.5YR4/4			0	15		18	18	n	n				
		43	120	Lst								24	11						
											Total	**89**	**76**						
											MB	-10	-13						
											Droughtiness grade (DR)	3a	3a						
608	T	0	27	hCL	very	10YR4/4			0	15		43	43	n	n	I	2	**3b**	DR
		27	35	hCL					0	60		7	7	n	n				
		35	120	Lst								27	14						
											Total	**77**	**64**						
											MB	-22	-25						
											Droughtiness grade (DR)	3b	3a						
609	T	0	30	C	very	10YR4/4			0	15		45	45	n	n	I	2	**3b**	DR
		30	120	Lst								29	16						
											Total	**74**	**61**		ST.stone>2cm			>10%	3a
											MB	-25	-28						
											Droughtiness grade (DR)	3b	3a						
610	T	0	30	C	very	10YR3/3			0	15		45	45	n	n	I	2	**3a**	DR

		30	52	C	very	10YR5/4		0	10		31	33	n	n						
		52	120	Lst							20	7								
										Total	**97**	**85**								
										MB	-2	-4								
										Droughtiness grade (DR)	3a	2								
611	T	0	27	C	very	10YR3/3		0	14		41	41	n	n	/	2	**3b**	DR DP		
		27	120	Lst							30	17								
										Total	**71**	**58**								
										MB	-28	-31								
										Droughtiness grade (DR)	3b	3b								
612	T	0	26	C	very	10YR3/3		0	18		38	38	n	n	/	2	**3b**	DR		
Pit 34		26	34	C	very	10YR6/3		0	70		6	6	n	n						
		34	120	Lst							27	14								
										Total	**72**	**59**								
										MB	-27	-30								
										Droughtiness grade (DR)	3b	3b								
613	T	0	30	hCL	very	7.5YR4/4		0	15		48	48	n	n	/	2	**3a**	DR		
		30	40	hCL	very	10YR6/3		0	20		14	14	n	n						
		40	120	Lst							25	12								
										Total	**86**	**73**								
										MB	-13	-16								
										Droughtiness grade (DR)	3a	3a								
614	T	0	30	C	very	10YR4/4		0	12		46	46	n	n	/	1	**3b**	DR		
		30	37	C	very			0	70		5	5	n	n						
		37	120	Lst							26	13								
										Total	**78**	**65**								
										MB	-21	-24								
										Droughtiness grade (DR)	3b	3a								
615	T	0	30	hCL		10YR4/4		0	15		48	48	n	n	/	2	**3a**	DR ST		

USS- fractured tabular Lst tightly packed.

Thin clay matrix

ST.stone>2cm >5% 2

		30	40	hCL					0	60		9	9	n	n						
		40	120	Lst								25	12								
											Total	**82**	**69**								
											MB	-17	-21								
											Droughtiness grade (DR)	3a	3a								
616	T	0	28	hCL	very	10YR3/3			0	26		40	40	n	n	*I*	2	**3b**	ST		
		28	55	hCL	very	7.5YR4/4			0	25		33	35	n	n						
		55	120	Lst								20	6								
											Total	**92**	**81**								
											MB	-7	-8								
											Droughtiness grade (DR)	3a	2								
617	T	0	28	C	very	10YR4/4			0	10		44	44	n	n	*III*	3b	**3b**	WE		
		28	50	C	very	10YR5/3	och	com	0	10	poor	27	27	y	y						
		50	120	Lst								21	8								
											Total	**92**	**79**								
											MB	-7	-10								
											Droughtiness grade (DR)	3a	3a								
618	T	0	28	C	very	10YR4/4			0	15		42	42	n	n	*I*	2	**3b**	DR		
		28	120	Lst								30	17								
											Total	**72**	**59**								
											MB	-27	-30								
											Droughtiness grade (DR)	3b	3b								
619	T	0	29	C	very	10YR3/3			0	16		43	43	n	n	*I*	2	**3a**	DR		
		29	36	C	very	7.5YR4/4			0	20		10	10	n	n						
		36	45	hCL	very	10YR6/3			0	60		8	8	n	n						
		45	120	Lst								23	10								
											Total	**84**	**71**								
											MB	-15	-18								
											Droughtiness grade (DR)	3a	3a								

ST.stone>2cm >10% 3a

ST.stone>2cm >15% 3b

ST.stone>2cm >5 2

620	T	0	28	C	very	10YR3/3		0	16		42	42	n	n	/	2	**3b**	DR DP		
Pit 35		28	120	Lst							30	17								
										Total	**72**	**59**		ST.stone>2cm			10%	3a		
										MB	-27	-30								
										Droughtiness grade (DR)	3b	3b								
621	T	0	28	C	very	10YR3/3		0	15		42	42	n	n	/	2	**3a**	DR		
		28	43	hCL	very	7.5YR4/6		0	60		13	13	n	n						
		43	120	Lst							24	11								
										Total	**79**	**66**		ST.stone>2cm			>5%	2		
										MB	-20	-23								
										Droughtiness grade (DR)	3a	3a								
622	T	0	30	hZCL	very	10YR4/4		0	15		50	50	n	n	/	2	**3a**	DR		
		30	50	hZCL				0	35		25	25	n	n						
		50	120	Lst							21	8								
										Total	**96**	**83**								
										MB	-3	-6								
										Droughtiness grade (DR)	3a	2								
623	T	0	30	hZCL	very	10YR4/4		0	15		50	50	n	n	/	2	**3a**	DR		
		30	50	hZCL				0	35		25	25	n	n						
		50	120	Lst							21	8								
										Total	**96**	**83**								
										MB	-3	-6								
										Droughtiness grade (DR)	3a	2								
624	T	0	28	C	very	10YR3/3		0	15		42	42	n	n	/	2	**3a**	DR ST		
Pit 36		28	45	C	very	7.5YR4/6		0	30		21	21	n	n						
		45	120	Lst							23	10								
										Total	**86**	**73**		ST.stone>2cm			10%	3a		
										MB	-13	-16								
										Droughtiness grade (DR)	3a	3a								

625	T	0	30	C	very	10YR3/3			0	15		45	45	n	n	*I*	2	**3b**	DR
		30	35	C	very	7.5YR4/6			0	50		5	5	n	n				
		35	120	Lst								27	14						
											Total	**77**	**64**						
											MB	-22	-25						
											Droughtiness grade (DR)	3b	3a						
626	T	0	33	C	very	10YR4/4			0	10		52	52	n	n	*I*	2	**3a**	DR
		33	50	C					0	20		23	23	n	n				
		50	120	Lst								21	8						
											Total	**96**	**83**						
											MB	-3	-6						
											Droughtiness grade (DR)	3a	2						
627	T	0	28	C	very	10YR3/3			0	15		42	42	n	n	*I*	2	**3b**	DR
		28	35	C	very	7.5YR4/6			0	35		8	8	n	n				
		35	120	Lst								27	14						
											Total	**77**	**64**						
											MB	-22	-25						
											Droughtiness grade (DR)	3b	3a						
628	T	0	35	hZCL	very	10YR4/4			0	10		61	61	n	n	*IV*	3b	**3b**	WE
		35	70	C	very	2.5Y6/3	och	com	0	15	poor	30	41	y	y				
		70	120	Lst								15	0						
											Total	**107**	**102**						
											MB	8	13						
											Droughtiness grade (DR)	2	1						
629	T	0	28	C	trace	10YR3/3			0	8		45	45	n	n	*I*	2	**3a**	DR
		28	39	C	sli	7.5YR4/6			0	15		16	16	n	n				
		39	120	Lst								25	12						
											Total	**86**	**73**						
											MB	-13	-16						
											Droughtiness grade (DR)	3a	3a						

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3

Climate Data	
MDwheat	110
MDpotato	103
FCD	136

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>64cm	37-64cm	<37cm	
SPL within 80cm, gleying at 40-70cm	>46cm	<46cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Climate
1427 D°
Limitation
Grade 1

hard

AAR 646

Maximum depth of auger penetration is underlined

75 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
630	T	0	26	C	n	2.5Y4/2			2	0		43	43	n	n	*IV*	3b	**3b**	WE
		26	60	C	n	2.5Y5/2	Fe	many	0	0	poor	38	44	y	y				
		60	120	C	sli	10YR6/1	Fe	many	0	0	poor	42	13	y	y				
											Total	**124**	**101**						
											MB	14	-2						
									Droughtiness grade (DR)			2	2						
631	T	0	22	C	n	2.5Y4/2			1	0		37	37	n	n	*IV*	3b	**3b**	WE
		22	65	C	sli	2.5Y5/3	Femn	com	0	0	poor	47	56	y	y				
		65	120	C	mod	10YR6/1	Fe	many	0	0	poor	39	7	y	y				
											Total	**122**	**99**						
											MB	12	-4						
									Droughtiness grade (DR)			2	2						
632	T	0	20	C	sli	2.5Y4/2			2	5		32	32	n	n	*III*	3a	**3a**	WE
		20	52	C	mod	2.5Y5/3	Femn	com	0	3		48	50	y	n				
		52	120	C	calc	10YR5/1	Fe	many	0	5	poor	46	23	y	y				
											Total	**127**	**105**						
											MB	17	2						
									Droughtiness grade (DR)			2	2						
633	T	0	30	C	mod	10YR4/2			2	5		48	48	n	n	*I-II*	3a	**3a**	WE DR
		30	40	hCL	mod	10YR5/3			0	5		15	15	n	n				
		40	70	hCL	calc	N4/0	Fe	com	0	15		32	43	y	n				
		70	120	Lst								15	0	n	n				
											Total	**111**	**106**						

											MB	1	3							
										Droughtiness grade (DR)		3a	2							
634	T	0	28	C	trace	2.5Y4/2			1	0		47	47	n	n	*III*	3b	**3b**	WE	
		28	45	C	mod	2.5Y5/2	Fe	com	0	3		27	27	y	n					
		45	70	C	calc	2.5Y5/2	Fe	many	0	7	poor	20	31	y	y					
		70	120	C	calc	10YR6/1	Fe	many	0	5	poor	34	0	y	y					
											Total	**127**	**105**		USS faint mottling					
											MB	17	2							
										Droughtiness grade (DR)		2	2							
635	T	0	26	C	n	10YR4/1	Fe	many	0	0		44	44	y	n	*IV*	3b	**3b**	WE	
		26	70	C	n	10YR5/2	Fe	many	0	0	poor	45	57	y	y					
		70	120	C	calc	N4/0	Fe	many	0	3	poor	34	0	y	y					
											Total	**124**	**101**		Subsoil plastic					
											MB	14	-2							
										Droughtiness grade (DR)		2	2							
636	T	0	27	C	n	10YR3/2			0	0		46	46	n	n	*III*	3b	**3b**	WE	
		27	47	C	n	2.5Y5/2	Fe	com	0	0		32	32	y	n					
		47	120	C	calc	10YR5/1	Fe	many	0	3	poor	52	29	y	y					
											Total	**130**	**107**							
											MB	20	4							
										Droughtiness grade (DR)		2	2							

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3

hard

Climate Data	
MDwheat	105
MDpotato	97
FCD	146
AAR	673

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>67cm	39-67cm	<39cm	
SPL within 80cm, gleying at 40-70cm	>50cm	<50cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1427 D^o
Limitation
Grade 1
75 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
637	T	0	30	SCL	n	10YR4/2			5	0		49	49	n	n	*III*	3a	**3a**	WE
		30	52	SCL	n	10YR6/4	Fe	com	5	0		31	31	y	n				
		52	120	SC	n	10YR6/3	Fe	many	0	0	poor	54	23	y	y				
											Total	**134**	**103**		SC-mix sand and clay				
											MB	29	6						
									Droughtiness grade (DR)			2	2						
638	T	0	26	mCL	n	10YR4/2			3	0		45	45	n	n	*IV*	3b	**3b**	WE
		26	35	hCL	n	10YR5/3	Femn	com	3	0		14	14	y	n				
		35	120	C	n	10YR6/1	Fe	many	0	0	poor	69	46	y	y				
											Total	**128**	**105**						
											MB	23	8						
									Droughtiness grade (DR)			2	2						
639	T	0	30	SCL	n	10YR4/2			5	0		49	49	n	n	*II*	2	**2**	WE DR
		30	57	SCL	sli	10YR6/4, 10YR5/6	Femn	com	5	0		35	39	y	n				
		57	120	mSL	n	10YR6/3			2	0		68	19	n	n				
											Total	**152**	**106**						
											MB	47	9						
									Droughtiness grade (DR)			1	2						

Stone types		
%	TAv	EAv
hard	1	0.5
Lstone	4	3
hard	flint & pebble	

Climate Data	
MDwheat	105
MDpotato	97
FCD	144
AAR	668

Wetness Class Guidelines	II	III	IV	V	Climate
SPL within 80cm, gleying within 40cm	>66cm	39-66cm	<39cm		1414
SPL within 80cm, gleying at 40-70cm	>49cm	<49cm			Limitation
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II	Grade 1

Maximum depth of auger penetration is underlined

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lstone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
640	T	0	27	C	n	10YR4/2			10	0		42	42	n	n	*III*	3b	**3b**	WE
		27	45	C	calc	2.5Y5/3	Fe	few	0	3		28	28	n	n				
		45	120	C	v.calc	10YR5/2	Fe	many	0	5	poor	54	31	y	y				
											Total	**124**	**101**						
											MB	19	4						
									Droughtiness grade (DR)			2	2						
641	T	0	28	hCL	trace	2.5Y4/2			7	0		47	47	n	n	*II*	3a	**3a**	WE
		28	50	C	calc	2.5Y6/3			0	2		35	35	n	n				
		50	66	C	calc	2.5Y6/3	Fe	few	0	5		12	25	n	n				
		66	120	C	calc	2.5Y6/3	Fe	com	0	7	poor	36	5	y	y				
											Total	**130**	**111**						
											MB	25	14						
									Droughtiness grade (DR)			2	1						
642	T	0	27	hCL	n	10YR4/2			7	0		45	45	n	n	*III*	3b	**3b**	WE
		27	50	C	sli	2.5Y5/3	Fe	com	0	0		37	37	y	n				
		50	72	C	sli	2.5Y5/2	Fe	com	0	0	poor	15	26	y	y				
		72	120	C	sli	10YR5/1	Fe	many	0	0	poor	34	0	y	y				
											Total	**131**	**108**						
											MB	26	11						
									Droughtiness grade (DR)			2	1						
643	T	0	27	hCL	n	10YR4/2			7	0		45	45	n	n	*II*	3a	**3a**	WE
		27	60	C	n	10YR5/3	Fe	com	5	0		43	50	y	n				

		60	70	hCL	n	10YR5/4	Fe	com	5	0		10	15	n	n					
		70	120	C	calc	10YR5/1	Femn	many	0	0	poor	35	0	y	y					
											Total	**133**	**111**							
											MB	28	14							
											Droughtiness grade (DR)	2	1							
644	T	0	30	SCL	sli	10YR4/2			12	0		45	45	n	n	*II*	2	**2**	WE DR	
		30	45	SCL	n	10YR4/4			15	0		19	19	n	n					
		45	64	SCL	n	10YR4/4			20	0		17	23	n	n					
		64	120	C	n	10YR5/3	Femn	many	20	0	poor	32	6	y	y					
											Total	**114**	**94**							
											MB	9	-3							
											Droughtiness grade (DR)	2	2							
645	T	0	30	mSL	very	10YR4/2			0	25		41	41	n	n	*I*	1	**3a**	DR	
		30	45	mSL	very	10YR4/3			0	40		16	16	n	n					
		45	120	LmS	very	10YR5/6			0	40		37	18	n	n					
											Total	**94**	**75**							
											MB	-11	-22							
											Droughtiness grade (DR)	3a	3a							
646	T	0	30	SCL	very	10YR4/2			5	15		43	43	n	n	*II*	2	**2**	WE DR	
		30	58	mSL	very	10YR4/3			0	40		27	30	n	n					
		58	80	SCL	very	10YR4/3			0	15		20	16	n	n					
		80	120	C	calc	10YR5/1	Fe	many	0	0	poor	28	0	y	y					
											Total	**118**	**88**							
											MB	13	-9							
											Droughtiness grade (DR)	2	2							
647	T	0	27	hCL	n	10YR4/2			15			42	42	n	n	*III*	3b	**3b**	WE	
		27	53	C	v.sli	10YR5/3	Femn	com	10			36	38	y	n					
		53	120	C	mod	10YR5/1	Fe	many	0		poor	47	22	y	y					
											Total	**124**	**102**		small stone/grit					

												MB	19	5						
												Droughtiness grade (DR)	2	2						
648	T	0	26	C	n	10YR4/2			2	0			43	43	n	n	*IV*	3b	**3b**	WE
		26	36	hCL	calc	10YR4/3			5	0			15	15	n	n				
		36	120	C	sli	N5/	Fe	com	0	0	poor		67	44	y	y				
												Total	**126**	**103**						
												MB	21	6						
												Droughtiness grade (DR)	2	2						

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3

hard pebbles & flints

Climate Data	
MDwheat	106
MDpotato	99
FCD	146
AAR	668

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>67cm	39-67cm	<39cm	
SPL within 80cm, gleying at 40-70cm	>50cm	<50cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1434 D^o
Limitation
Grade 1
68 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
649	T	0	25	hCL	mod	10YR4/2			0	17		39	39	n	n	I	2	**3b**	DR
		25	35	hCL	very	10YR5/4			0	25		13	13	n	n				
		35	120	Lst								27	14	n	n				
											Total	**79**	**66**		ST stone >2cm 8%				
											MB	-27	-33						
									Droughtiness grade (DR)			3b	3b						
650	T	0	25	hCL	mod	10YR4/2			0	24		37	37	n	n	II	2	**3a**	ST
		25	52	C	mod	10YR4/4	mn	com	0	0		42	43	n	n				
		52	68	C	calc	10YR5/3	Femn	com	0	0		13	26	y	n				
		68	120	C	calc	10YR6/1	Fe	many	0	0	poor	42	3	y	y				
											Total	**133**	**109**		ST stone 7/10/7				
											MB	27	10						
									Droughtiness grade (DR)			2	2						

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3

hard pebbles & flints

Climate Data	
MDwheat	105
MDpotato	98
FCD	147
AAR	674

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>67cm	40-67cm	<40cm	
SPL within 80cm, gleying at 40-70cm	>51cm	<51cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1430 D^o
Limitation
Grade 1
72 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
651	T	0	28	hCL	mod	10YR4/2			7	3		46	46	n	n	*I*	2	**3a**	DR
		28	45	hCL	calc	10YR5/4			0	20		23	23	n	n				
		45	120	Lst								23	10	n	n				
											Total	**92**	**79**						
											MB	-13	-19						
											Droughtiness grade (DR)	3a	3a						
652	T	0	30	hCL	n	10YR4/2			5	0		51	51	n	n	*I*	2	**2**	WE
		30	65	hCL	n	10YR4/3			5	0		45	53	n	n				
		65	120	hCL	v.sli	10YR4/4	mn	com	0	0		55	8	n	n				
											Total	**151**	**113**						
											MB	46	15						
											Droughtiness grade (DR)	1	1						

TS-mCL/hCL

Stone types		
%	TAv	EAv
hard	1	0.5
chalk	10	7
hard	flint & pebble	

Climate Data	
MDwheat	104
MDpotato	95
FCD	148
AAR	682

Wetness Class Guidelines	II	III	IV	V	Climate
SPL within 80cm, gleying within 40cm	>68cm	40-68cm	<40cm		1414 D^o
SPL within 80cm, gleying at 40-70cm	>51cm	<51cm			Limitation
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II	Grade 1

Maximum depth of auger penetration is underlined

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% chalk	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
653	T	0	28	hCL	n	10YR4/2			5	0		48	48	n	n	II	3a	**3a**	WE
		28	68	hCL	n	10YR4/6	Femn	few	10	0		48	58	n	n				
		68	100	C	n	10YR5/3, 10YR4/4	Femn	com	10	0	poor	20	2	y	y				
		100	120	hCL	calc	10YR6/3	Fe	com	0	10		19	0	y	n				
											Total	**136**	**108**						
											MB	32	13						
									Droughtiness grade (DR)			1	1						

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3
hard pebbles etc		

Climate Data	
MDwheat	104
MDpotato	96
FCD	147
AAR	681

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>67cm	40-67cm	<40cm	
SPL within 80cm, gleying at 40-70cm	>51cm	<51cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1411 D^o
Limitation
Grade 1
85 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
654	T	0	28	hCL	n	10YR4/2			12	0		45	45	n	n	III	3b	**3b**	WE
		28	50	hCL	n	10YR5/4	mn	com	15	0		30	30	n	n				
		50	120	C	n	10YR5/2, 10YR5/6	Fe/gr	many	15	0	poor	42	22	y	y				
											Total	**117**	**97**						
											MB	13	1						
											Droughtiness grade (DR)	2	2						
655	T	0	29	hCL	n	10YR4/2			5	0		50	50	n	n	I	2	**2**	WE
		29	120	hCL	n	10YR5/6			7	0		97	61	n	n				
											Total	**146**	**111**						
											MB	42	15						
											Droughtiness grade (DR)	1	1						
656	T	0	28	hCL	n	10YR4/2			4	0		48	48	n	n	III-IV	3b	**3b**	WE
		28	40	hCL	n	10YR5/2	Fe	many	5	0		18	18	y	n				
		40	120	C	n	N5/0	Fe	many	2	0	poor	61	38	y	y				
											Total	**128**	**105**						
											MB	24	9						
											Droughtiness grade (DR)	2	2						
657	T	0	30	hCL	n	10YR4/2			5	0		51	51	n	n	II	3a	**3a**	WE
		30	63	hCL	n	10YR5/3	Fe	com	10	0		41	48	y	n				
		63	120	hCL	n	10YR5/3	Femn	com	10	0		52	10	y	n				
											Total	**144**	**109**						
											MB	40	13						
											Droughtiness grade (DR)	1	1						

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3
hard pebbles etc		

Climate Data	
MDwheat	107
MDpotato	100
FCD	144
AAR	666

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>66cm	39-66cm	<39cm	
SPL within 80cm, gleying at 40-70cm	>49cm	<49cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1422 D^o
Limitation
Grade 1
71 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
658	T	0	28	hCL	mod	10YR4/2			5	2		47	47	n	n	III	3a	**3a**	WE
		28	46	C	sli	10YR4/3			5	0		27	27	n	n				
		46	73	SC	sli	10YR6/3, 10YR5/2	Femn	many	5	0	poor	22	30	y	y				
		73	120	SCL	sli	10YR5/6	Fe	com	10	0		43	0	n	n				
											Total	**140**	**104**						
											MB	33	4						
											Droughtiness grade (DR)	1	2						
659	T	0	27	hCL	sli	2.5Y5/2			7	3		44	44	n	n	I	3a	**3a**	DR
		27	38	C	mod	10YR5/4	Few	mn	5	10		15	15	n	n				
		38	50	C	v.calc	10YR5/4			0	30		15	15	n	n				
		50	120	Lst								21	8	n	n				
											Total	**96**	**83**						
											MB	-11	-17						
											Droughtiness grade (DR)	3a	3a						

Stone types		
%	TAv	EAv
hard	1	0.5
L'stone	4	3

Climate Data	
MDwheat	102
MDpotato	93
FCD	149
AAR	684

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>68cm	40-68cm	<40cm	
SPL within 80cm, gleying at 40-70cm	>51cm	<51cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1401 D^o
Limitation
Grade 1
95 m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% L'stone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
660	T	0	30	C	calc	10YR4/2			0	7		48	48	n	n	I	2	**3a**	DR
		30	52	C	calc	2.5Y5/3	mn	com	0	7		32	33	n	n				
		52	65	C	very	10YR6/3	Fe	com	0	30		8	16	y	n				
		65	120	Lst								17	2	n	n				
											Total	**105**	**100**						
											MB	3	7						
											Droughtiness grade (DR)	3a	2						
661	T	0	29	hCL	mod	10YR4/3			0	15		46	46	n	n	I	2	**3a**	DR
		29	48	hCL	calc	7.5YR5/4			0	20		26	26	n	n				
		48	120	Lst								22	9	n	n				
											Total	**94**	**81**						
											MB	-8	-12						
											Droughtiness grade (DR)	3a	3a						
662	T	0	28	hCL	mod	10YR4/3			0	12		46	46	n	n	I	2	**3a**	DR
		28	40	hCL	very	10YR6/3			0	30		15	15	n	n				
		40	120	Lst								25	12	n	n				
											Total	**86**	**73**						
											MB	-16	-20						
											Droughtiness grade (DR)	3a	3a						

Stone types		
%	TAv	EAv
hard	1	0.5
Lstone	4	3
hard	flint & pebble	

Climate Data	
MDwheat	101
MDpotato	91
FCD	151
AAR	694

Wetness Class Guidelines	II	III	IV	V
SPL within 80cm, gleying within 40cm	>68cm	41-68cm	<41cm	
SPL within 80cm, gleying at 40-70cm	>52cm	<52cm		
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II

Maximum depth of auger penetration is underlined

Climate
1,391
Limitation
Grade 1

Elevation: 103m

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lstone	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
663	T	0	24	C	mod	10YR3/3			0	13		37	37	n	n	*I*	2	**3b**	DR
		24	33	C	very	7.5YR4/4			0	60		8	8	n	n				
		33	120	Lst								28	15	n	n				
											Total	**72**	**59**		large flat fragmented Lst-Uss				
											MB	-29	-32						
											Droughtiness grade (DR)	3b	3b						

Stone types		
%	TAv	EAv
hard	1	0.5
Lst	4	3

hard flint & pebble

Climate Data	
MDwheat	99
MDpotato	89
FCD	153
AAR	720

Wetness Class Guidelines	II	III	IV	V	Climate
SPL within 80cm, gleying within 40cm	>68cm	41-68cm	<41cm		1,384
SPL within 80cm, gleying at 40-70cm	>53cm	<53cm			Limitation
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II	Grade 1

Maximum depth of auger penetration is underlined

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lst	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
664	T	0	25	C	very	10YR3/3			0	18		37	37	n	n	I	3a	**3a**	DR
		25	58	C	very	7.5YR4/4			0	40		33	37	n	n				
		58	120	Lst								19	5	n	n				
											Total	**88**	**78**		10/8/0 stone				
											MB	-11	-11						
									Droughtiness grade (DR)			3a	3a						

Stone types		
%	TAv	EAv
hard	1	0.5
Lst	4	3

Climate Data	
MDwheat	99
MDpotato	89
FCD	153

Wetness Class Guidelines	II	III	IV	V	Climate
SPL within 80cm, gleying within 40cm	>68cm	41-68cm	<41cm		1,384
SPL within 80cm, gleying at 40-70cm	>53cm	<53cm			Limitation
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II	Grade 1

hard flint & pebble

AAR 703

Maximum depth of auger penetration is underlined

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lst	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
665	T	0	26	C	very	10YR4/3			0	13		40	40	n	n	I	2	**3b**	DR
		26	38	hCL	very	10YR6/2			0	50		12	12	n	n				
		38	120	Lst								26	13	n	n				
											Total	**78**	**65**						
											MB	-21	-24						
											Droughtiness grade (DR)	3b	3a						
666	T	0	30	C	mod	10YR3/3			0	10		47	47	n	n	II	3a	**3a**	WE
		30	58	C	very	10YR5/4			0	10		36	41	n	n				
		58	120	C	very	10YR6/2	Fe	com	0	7	poor	42	15	y	y				
											Total	**124**	**103**						
											MB	25	14						
											Droughtiness grade (DR)	2	1						
667	T	0	27	hCL	very	10YR4/3			0	22		40	40	n	n	I	2	**3b**	DR
		27	40	C	very	7.5YR4/4			0	50		13	13	n	n				
		40	120	Lst								25	12	n	n				
											Total	**78**	**65**						
											MB	-21	-24						
											Droughtiness grade (DR)	3b	3a						

Stone types		
%	TAv	EAv
hard	1	0.5
Lst	4	3

Climate Data	
MDwheat	99
MDpotato	89
FCD	153
AAR	720

Wetness Class Guidelines	II	III	IV	V	Climate
SPL within 80cm, gleying within 40cm	>68cm	41-68cm	<41cm		1,384
SPL within 80cm, gleying at 40-70cm	>53cm	<53cm			Limitation
No SPL but gleying within 40cm	coarse subsoil	I	other cases	II	Grade 1

hard flint & pebble

Maximum depth of auger penetration is underlined

Site No.		Depth cm		Texture	$CaCO_3$	Colour	Mottle colour	abund-ance	stone% hard	stone% Lst	Struct-ure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
668	T	0	26	C	very	10YR4/3			0	15		39	39	n	n	I	2	**3a**	DR
		26	41	C	very	7.5YR4/4			0	20		20	20	n	n				
		41	120	Lst								25	12	n	n				
											Total	**84**	**71**						
											MB	-15	-18						
									Droughtiness grade (DR)			3a	3a						
669	T	0	26	C	mod	10YR3/3			0	20		37	37	n	n	I	2	**3b**	DR
		26	38	C	very	7.5YR4/4			0	50		12	12	n	n				
		38	120	Lst								26	13	n	n				
											Total	**75**	**62**						
											MB	-24	-27						
									Droughtiness grade (DR)			3b	3a						

Appendix 3: Photographs

Denman's Farm

Pit 1, Observations 17-18
Black marker is 40cm depth

Structures (note contrast below 40cm)

Pit 2, Observations 24-28
Soil structures

Parcel 1 – Pit 3, Observations 54-55

Pit

Structures

Parcel 1 – Pit 4, Observations 62-63

Pit

Structures

Parcel 2 – Pit 5, Observation 79

Pit 5 - small pit overview

Pit 5 - topsoil and upper subsoil arisings

Pit 5 - friable topsoil

Pit 5 - subsoil mottling

Parcel 2 – Pit 6, Observation 83

Pit

Pit topsoil

Pit subsoils

Parcel 3

Pit 7, Observation 100 - overview

Pit 7- subsoil arisings

Pit 8, Obs 140 - Shallow over calcareous gravel.

Pit 8 - upper subsoil arisings

Pit 9, Observation 155

Pit 9 topsoil

Pit 9 subsoil

Pit 10, Observation 197 - overview

Pit 10 - topsoil and dense upper subsoil

Heavy poaching around pit

Typical SPL clay auger arisings (Obs 197/P10)

Parcel 5 – Topsoil structures, Observation 227

Parcel 5 – Soil spit, Observation 240

Parcel 5 – Pit 11, Observation 242

Surface structures

Upper subsoil structures

Topsoil structures

Parcel 5 – Pit 12, Observation 254

Parcel 6 - Pit 13, Observations 267-268

Pit. Yellow marker is 30cm

Structures (SOM 4.2%)

Parcel 7, 8, 9 – Pit 14, Observations 277-278

Pit structures

Upper and lower subsoil

Parcel 11 – Pit 15, Observation 298

Pit 15- overview. Slowly permeable clay

Pit 15 - coarse greyish angular subsoil peds

Parcel 14 – Pit 16, Observation 325

Pit

Topsoil

Upper subsoil

Lower subsoil

Worton – Pit 17, Observation 386

Pit

Pit face

Topsoil

Subsoil

Parcel 15 – Pit 18, Observation 442-443

Pit. Black marker is 25cm

Topsoil structures

Parcel 15 – Observation 451

Topsoil structures

Parcel 17 – Pit 19, Observation 466

Topsoil and upper subsoil structure

Subsoil (40-50cm) structure

Lionza North

Pit 20, Observation 472

Pit 20 structures

Pit 21, Observation 501

Structures of topsoil and upper subsoil

Lower subsoil (40-55cm)

Pit 22, Observation 507

Pit

Topsoil stone

Pit 23, Observation 509

Pit

Topsoil stone

Observation 513 - deep strong brown clay

Pit 25, Observation 521. Shallow over limestone thin very stony fractured limestone upper subsoil horizon

Pit 26, Observation 529 - shallow over fractured limestone with clay matrix

Pit 26- Fractured limestone upper subsoil

Pit 28, Observation 540 - small pit

Pit 28 - fractured limestone from upper subsoil

Pit 29, Observation 548

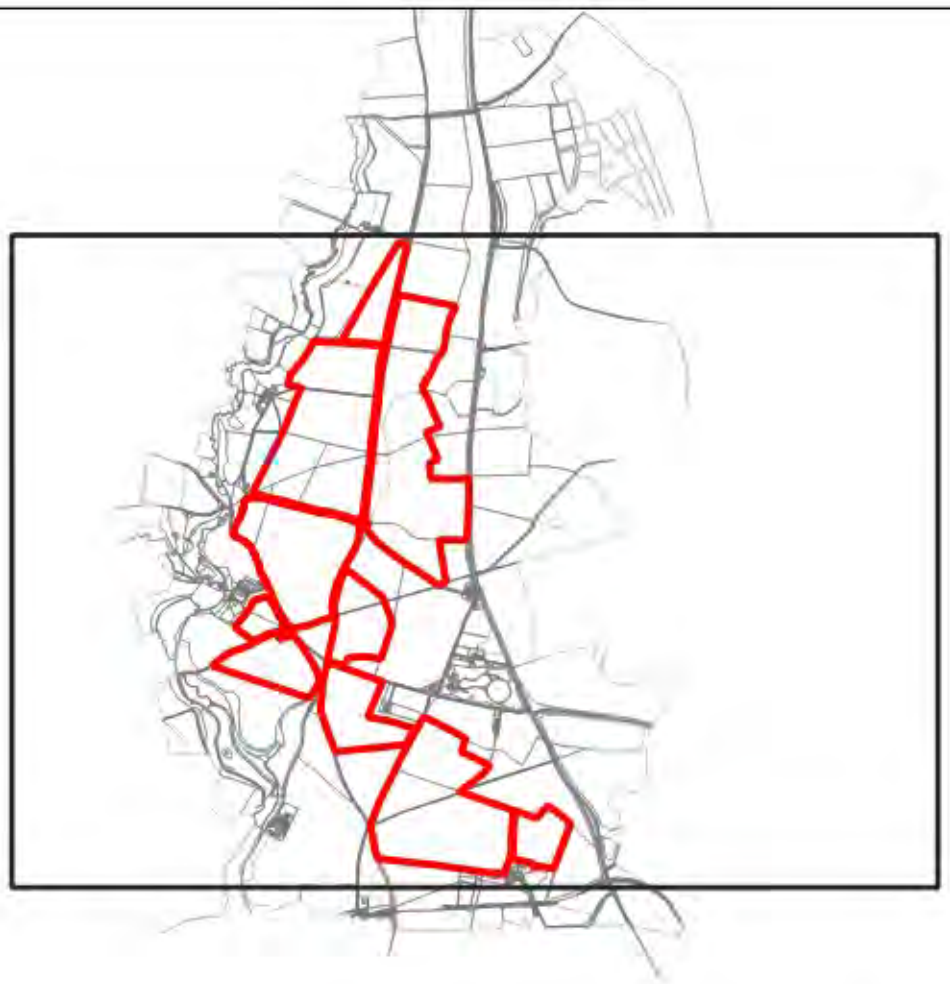
Pit 30, Observation 554

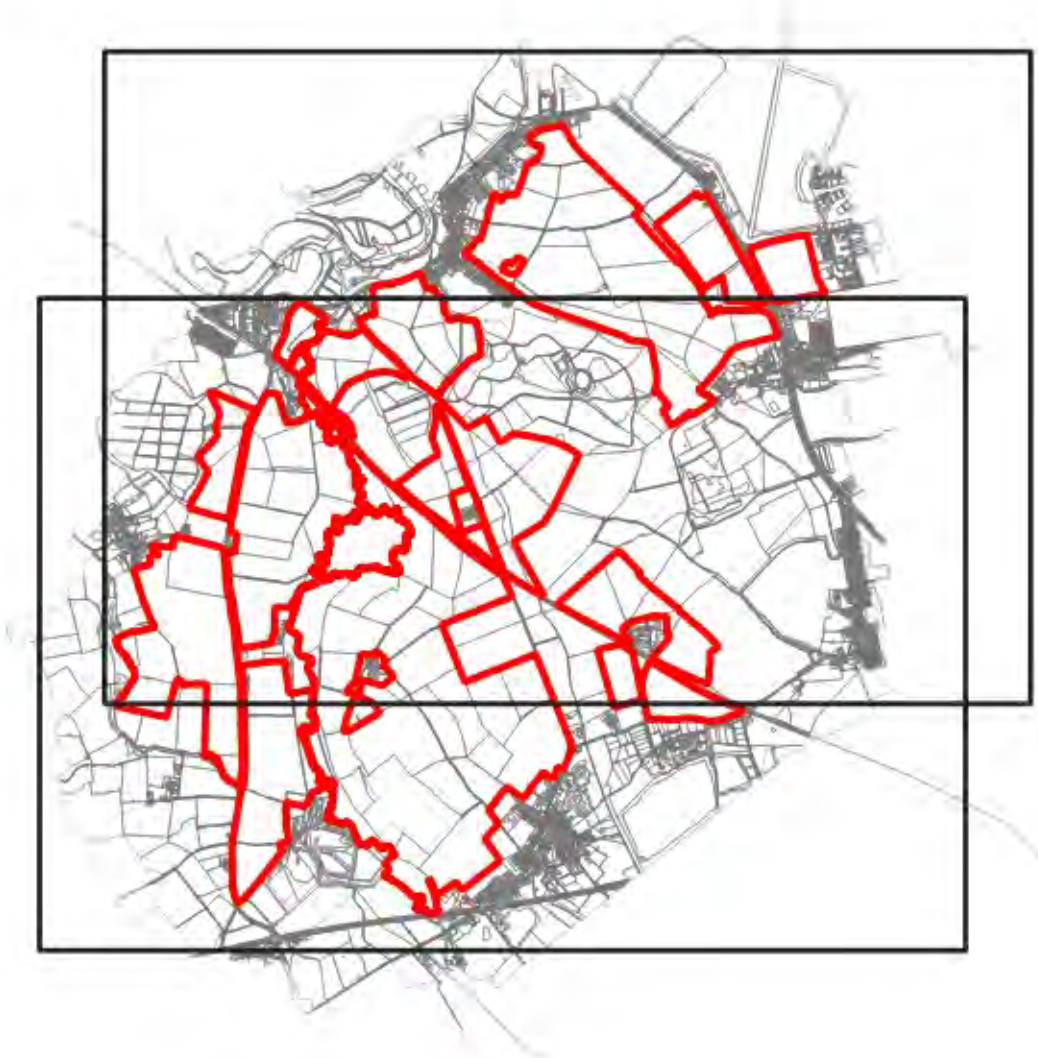
Pit 31, Observation 596 - shallow over limestone

Pit 32, Observation 600 - fractured limestone from upper subsoil. Thin clay matrix

Pit 34, Observation 612 - shallow over fractured tabular limestone. Tightly packed

Pit 35, Observation 620 - shallow over limestone





N

0 1 2 3 km

Title
SURVEY EXTENT OVERVIEW

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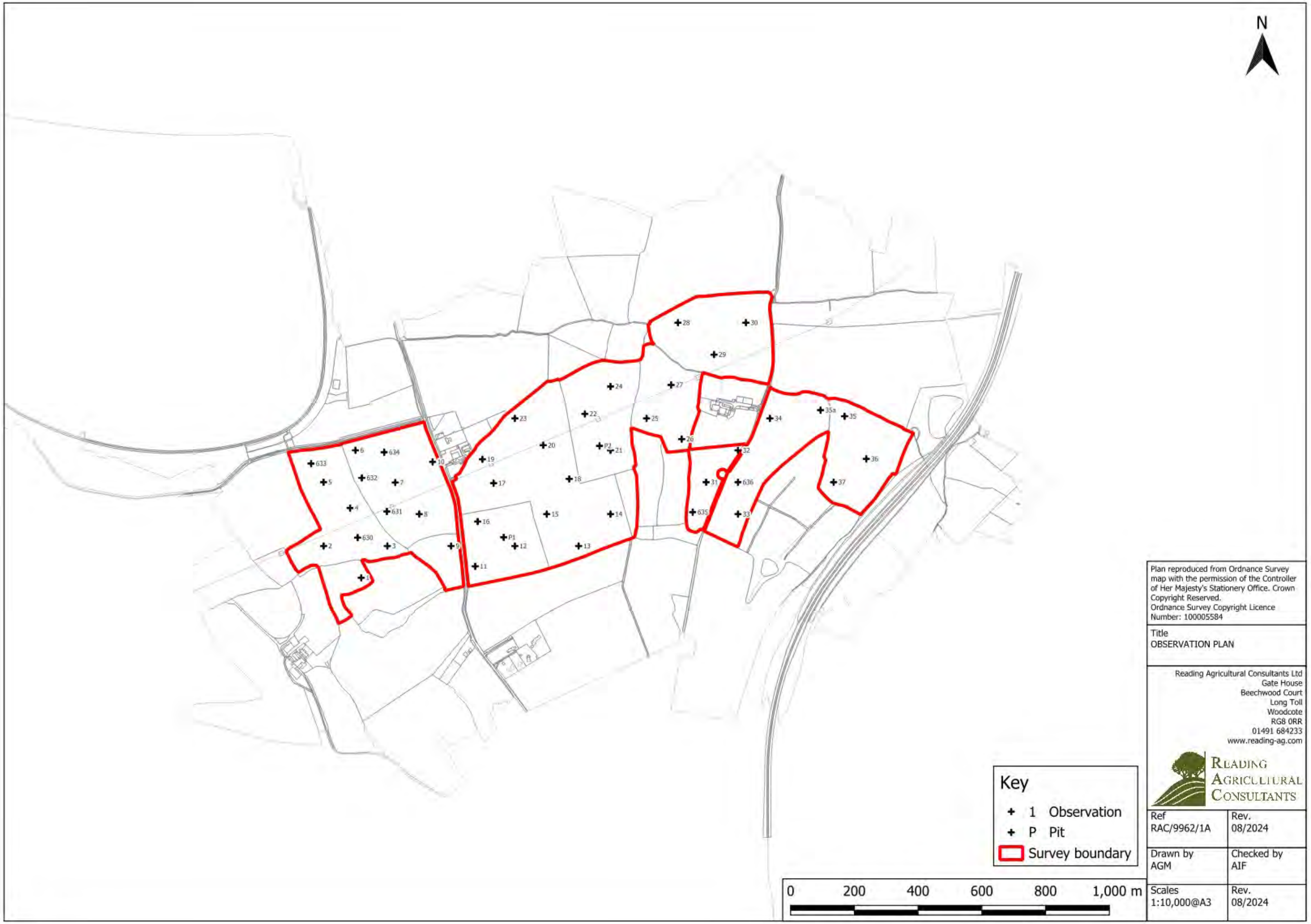

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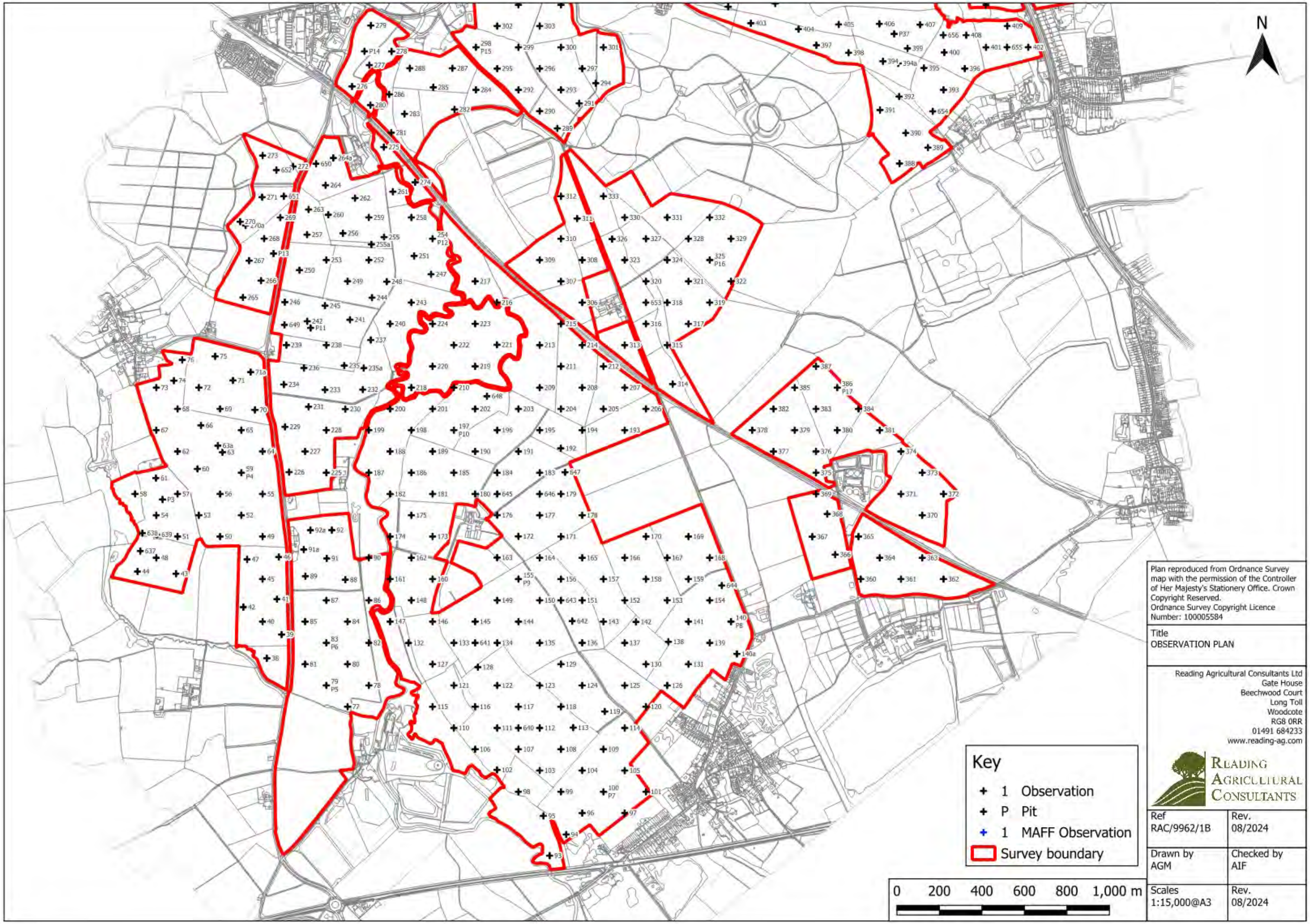

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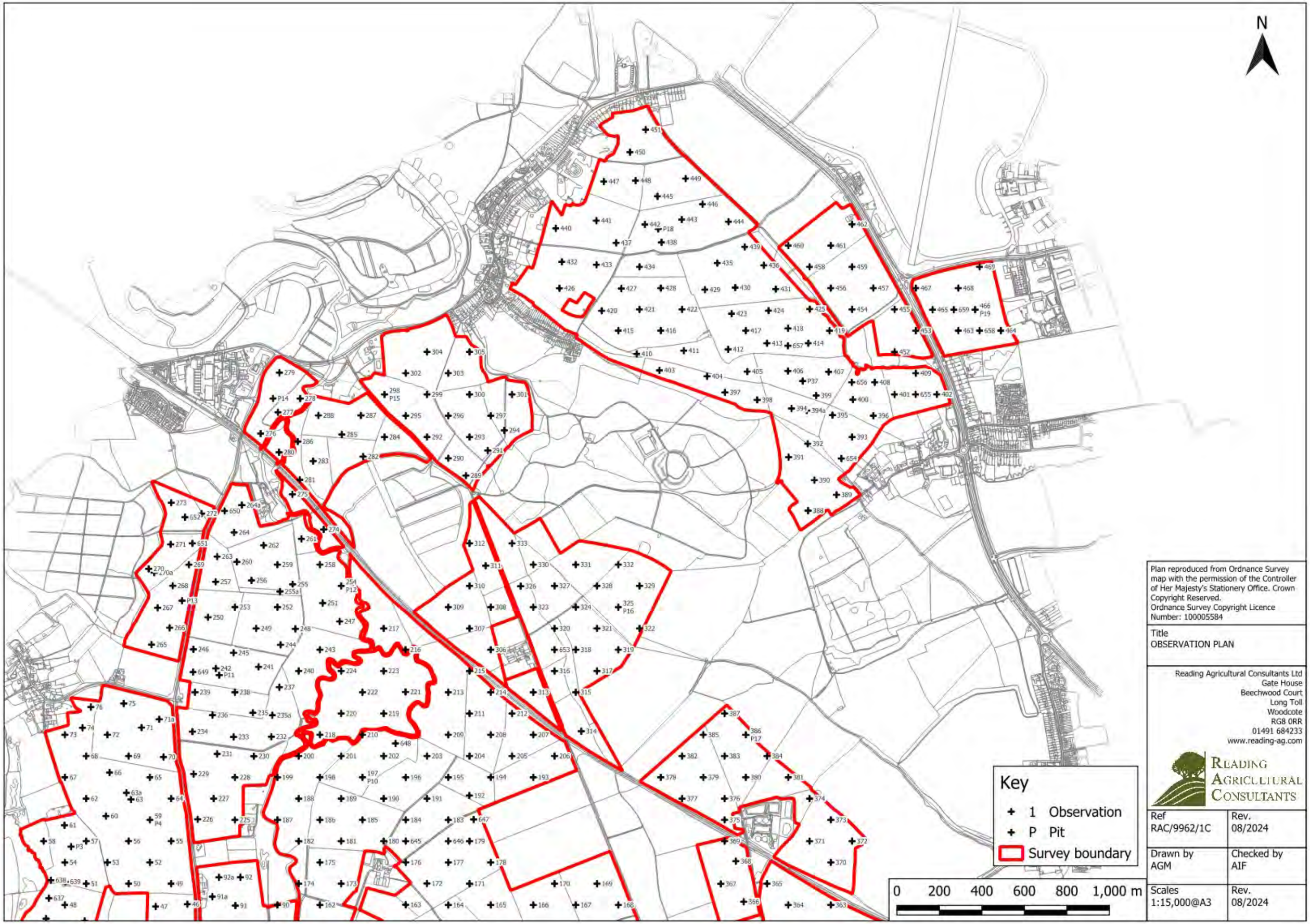

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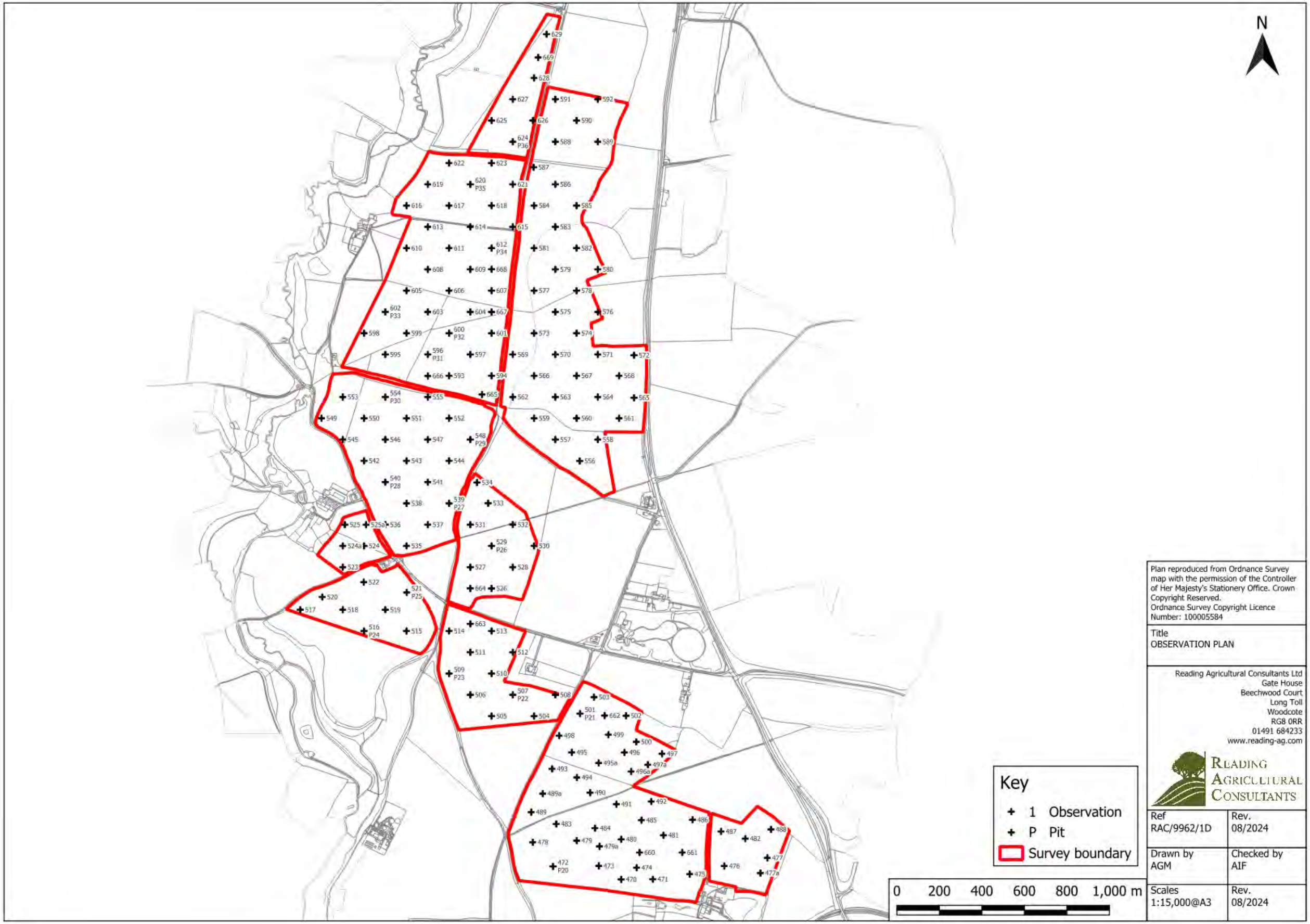

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N

Soil Type

- Imperfectly to poorly draining clayey soils WC III-IV. Some over limestone at depth.
- Well drained to moderately drained clayey or loamy soils WC I-II. Some over limestone at depth.
- Shallow soils over calcareous gravel (within 60cm of ground level). Gravel is mostly sandy with some loamy or clayey textures in transitional profiles.
- Shallow soils over limestone (within 60cm of ground level)
- Non-agricultural

0 200 400 600 800 1,000 m

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SOIL TYPE

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N

Soil Type

- Imperfectly to poorly draining clayey soils WC III-IV. Some over limestone at depth.
- Well drained to moderately drained clayey or loamy soils WC I-II. Some over limestone at depth.
- Shallow soils over calcareous gravel (within 60cm of ground level). Gravel is mostly sandy with some loamy or clayey textures in transitional profiles.
- Shallow soils over limestone (within 60cm of ground level)
- Non-agricultural

0 200 400 600 800 1,000 m

Title
SOIL TYPE

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N

Soil Type

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- Well drained to moderately drained clayey or loamy soils WC I-II. Some over limestone at depth.
- Shallow soils over calcareous gravel (within 60cm of ground level). Gravel is mostly sandy with some loamy or clayey textures in transitional profiles.
- Shallow soils over limestone (within 60cm of ground level)
- Non-agricultural

0 200 400 600 800 1,000 m

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SOIL TYPE

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N

Soil Type

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- Well drained to moderately drained clayey or loamy soils WC I-II. Some over limestone at depth.
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0 200 400 600 800 1,000 m

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N

Agricultural Land Classification

- Grade 1
- Grade 2
- Subgrade 3a
- Subgrade 3b
- Grade 4
- Grade 5
- Not present

0 200 400 600 800 1,000 m

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Agricultural Land Classification

- Grade 1
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- Subgrade 3a
- Subgrade 3b
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- Not present

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