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Oxfordshire Minerals Plan
Land East of Spring Lane,
Sonning Eye
Agricultural Land Classification
ALC Map and Report
October, 1994

AGRICULTURAL LAND CLASSIFICATION REPORT

OXFORDSHIRE MINERALS PLAN
LAND EAST OF SPRING LANE, SONNING EYE

1. Summary

1.1 ADAS was commissioned by MAFF's Land Use Planning Unit to provide information on land quality for a number of sites in Oxfordshire in connection with the preparation of the Oxfordshire Minerals Plan.

1.2 Approximately 64 hectares of land east of Spring Lane and north of Sonning Eye outside Reading was surveyed in October, 1994. The survey was undertaken at a detailed level of approximately one boring per hectare. A total of 66 borings and 6 soil inspection pits were assessed in accordance with MAFF's revised guidelines and criteria for grading the quality of agricultural land (MAFF, 1988). These guidelines provide a framework for classifying land according to the extent to which its physical or chemical characteristics impose a long term limitation on its use for agriculture.

1.3 The work was carried out by members of the Resource Planning Team in the Guildford Statutory Group of ADAS.

1.4 The adjacent land, west of Spring Lane, was surveyed by ADAS in September 1992 as part of the same round of minerals plan consultations (ADAS reference 3300/52/92).

1.5 At the time of survey, the agricultural land use was mostly cereal stubble, Set-aside and leys.

1.6 The distribution of grades and subgrades is shown on the attached ALC map and the areas and extent are given in the table below. The map has been drawn at a scale of 1:10,000. It is accurate at this scale, but any enlargement would be misleading. This map supersedes any previous survey information for this site.

Table 1 : Distribution of Grades and Subgrades

Grade	Area (ha)	% of Site	% of Agricultural Land
2	34.1	53.4	55.6
3a	6.7	10.5	10.9
3b	20.5	32.1	33.5
Non-agricultural land	0.8	1.2	**100% (61.3 ha)**
Woodland	1.8	2.8	
Total area of site	**63.9 ha**	**100%**	

1.7 A general description of the grades, subgrades and land use categories is provided in Appendix I. The main classes are described in terms of the type of limitation that can occur, the typical cropping range and the expected level and consistency of yield.

1.8 The land quality on the site has been classified as mostly Grade 2, very good quality, in the central and southern section where soils experience a droughtiness limitation due to the combination of textures, structures and stone contents restricting the amount of available water for crops. Subgrade 3b land, moderate quality, is mapped adjacent to the stream in the north of the site where clay subsoils cause a significant

wetness limitation. Two areas of Subgrade 3a land, good quality, are mapped on the site, both with a less severe wetness limitation than the adjacent Subgrade 3b.

2. Climate

2.1 The climatic criteria are considered first when classifying land as climate can be overriding in the sense that severe limitations will restrict land to low grades irrespective of favourable site or soil conditions. Estimates of climatic variables relevant to the assessment of agricultural land quality were obtained by interpolation from a 5km grid point dataset (Met. Office, 1989) for a representative location in the survey area.

2.2 The main parameters used in the assessment of an overall climatic limitation are average annual rainfall, as a measure of overall wetness, and accumulated temperature, as a measure of the relative warmth of a locality. The combination of rainfall and temperature at this site mean that there is no overall climatic limitation.

Table 2 : Climatic Interpolation

Grid Reference	SU 752 767
Altitude (m)	35
Accumulated Temperature (degree days, Jan-June)	1481
Average Annual Rainfall (mm)	667
Field Capacity (days)	141
Moisture Deficit, Wheat (mm)	116
Moisture Deficit, Potatoes (mm)	111
Overall Climatic Grade	1

2.3 No local climatic factors are relevant at this site.

3. Relief

3.1 The site is level and lies at approximately 35 metres. Minor topographic features mark out the floodplain adjacent to the stream in the north of the site.

3.2 Microrelief is not a limitation at this site.

3.3 No flooding information was forthcoming from the NRA for the site.

4. Geology and Soil

4.1 The published geology map for the site area (BGS, 1946) shows the site to be underlain by Alluvium adjacent to the stream in the north and Loam over the rest of the site.

4.2 The published soils information for the area (SSEW, 1967) shows the site to comprise a mixture of soil series - Thames Series (calcareous groundwater gley), Broadmoor Series (peaty gley), Purley Series (fine loamy drift over calcareous river gravel) and

Lashbrook Series (coarse loamy drift over river gravel). The detailed ALC survey did not find soils of such type or distribution.

5. Agricultural Land Classification

5.1 The ALC classification of the site is shown on the attached ALC map.

5.2 The location of the soil observation points are shown on the attached sample point map.

Grade 2

5.3 Given the very dry nature of the subsoils and the stone contents at the time of survey, the profiles could not always be examined to depth, even in the soil pits. Where this was possible, the combination of the textures, structures and stone contents slightly restricts the amount of water available in the profile for extraction by crops. This restriction affects the yield and range of crops that can be grown and, hence, the flexibility of the land.

5.4 Three soil pits (Pits, 1, 2 and 5) illustrate the range of soils that occur in this map unit. Two of the pits could not be described below 75 cm due to the dry and stony nature of the subsoil; these are classified as Subgrade 3a on the basis of the available water in the top 75 cm, but it has been assumed that roots can penetrate deeper to extract water, although the textures, structures and stone contents below 75 cm are unknown. Pit 5 was described to depth and shows sandy, stony layers occurring below clay subsoils.

Subgrade 3a

5.5 The two map units of this grade mark soils that experience a soil wetness limitation. The limitation may be variable over short distances, but Subgrade 3a is believed to be the appropriate classification for these minor areas.

5.6 Pit 3 is located in the eastern unit and has been classified as Subgrade 3b; the depth to the slowly permeable layer is generally deeper in the profile elsewhere in this map unit than in the soil pit.

5.7 Heavy clay loam topsoils overlie clay subsoils that are gleyed within 40 cm but which do not become slowly permeable until depth. These soils fall into Wetness Class II.

Subgrade 3b

5.7 Two areas of this grade have been mapped; a northern fringe of wet floodplain soils and a block of droughty soils in the south.

5.8 Pit 6 is representative of the northern soils which experience a significant wetness limitation related to the presence of shallow, poorly structured clay horizons which exhibit strongly developed coarse prismatic structures. These profiles are place in Wetness Class IV.

5.9 Pit 4 is representative of the southern soils which experience a significant soil droughtiness limitation related to very stony subsoils and sandy textures. Lower subsoils are loamy coarse sands with approximately 60% stone content.

SOURCES OF REFERENCE

British Geological Survey (1946) Sheet No. 268.

MAFF (1988), Agricultural Land Classification of England and Wales : Revised guidelines and criteria for grading the quality of agricultural land.

Meteorological Office (1989), Climatological Data for Agricultural Land Classification.

Soil Survey of England and Wales (1967), Sheet 268, Soils of the Reading District, and accompanying memoir.

APPENDIX I

DESCRIPTION OF THE GRADES AND SUBGRADES

Grade 1 : Excellent Quality Agricultural Land

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

Grade 2 : Very Good Quality Agricultural Land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural or horticultural crops can usually be grown but on some land of this grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1 land.

Grade 3 : Good to Moderate Quality Land

Land with moderate limitations which affect the choice of crops, the timing and type of cultivation, harvesting or the level of yield. When more demanding crops are grown, yields are generally lower or more variable than on land in Grades 1 and 2.

Subgrade 3a : Good Quality Agricultural Land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Subgrade 3b : Moderate Quality Agricultural Land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass, or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4 : Poor Quality Agricultural Land

Land with severe limitations which significantly restrict the range of crops and/or the level of yields. It is mainly suited to grass with occasional arable crops (eg. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

Grade 5 : Very Poor Quality Agricultural Land

Land with severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

Urban

Built-up or 'hard' uses with relatively little potential for a return to agriculture including: housing, industry, commerce, education, transport, religous buildings, cemetries. Also, hard-surfaced sports facilities, permanent caravan sites and vacant land; all types of derelict land, including mineral workings which are only likely to be reclaimed using derelict land grants.

Non-agricultural

'Soft' uses where most of the land could be returned relatively easily to agriculture, including: private parkland, public open spaces, sports fields, allotments and soft-surfaced areas on airports. Also active mineral workings and refuse tips where restoration conditions to 'soft' after-uses may apply.

Woodland

Includes commercial and non-commercial woodland. A distinction may be made as necessary between farm and non-farm woodland.

Agricultural Buildings

Includes the normal range of agricultural buildings as well as other relatively permanent structures such as glasshouses. Temporary structures (eg. polythene tunnels erected for lambing) may be ignored.

Open Water

Includes lakes, ponds and rivers as map scale permits.

Land Not Surveyed

Agricultural land which has not been surveyed.

Where the land use includes more than one of the above, eg. buildings in large grounds, and where map scale permits, the cover types may be shown separately. Otherwise, the most extensive cover type will be shown.

APPENDIX II

FIELD ASSESSMENT OF SOIL WETNESS CLASS

SOIL WETNESS CLASSIFICATION

Soil wetness is classified according to the depth and duration of waterlogging in the soil profile. Six soil wetness classes are identified and are defined in the table below.

Definition of Soil Wetness Classes

Wetness Class	Duration of Waterlogging[1]
I	The soil profile is not wet within 70 cm depth for more than 30 days in most years.[2]
II	The soil profile is wet within 70 cm depth for 31-90 days in most years **or**, if there is no slowly permeable layer within 80 cm depth, it is wet within 70 cm for more than 90 days, but only wet within 40 cm depth for 30 days in most years.
III	The soil profile is wet within 70 cm depth for 91-180 days in most years **or**, if there is no slowly permeable layer present within 80 cm depth, it is wet within 70 cm for more than 180 days, but only wet within 40 cm depth for between 31-90 days in most years.
IV	The soil profile is wet within 70 cm depth for more than 180 days but not wet within 40 cm depth for more than 210 days in most years **or**, if there is no slowly permeable layer present within 80 cm depth, it is wet within 40 cm depth for 91-210 days in most years.
V	The soil profile is wet within 40 cm depth for 211-335 days in most years.
VI	The soil profile is wet within 40 cm depth for more than 335 days in most years.

Soils can be allocated to a wetness class on the basis of quantitative data recorded over a period of many years or by the interpretation of soil profile characteristics, site and climatic factors. Adequate quantitative data will rarely be available for ALC surveys and therefore the interpretative method of field assessment is used to identify soil wetness class in the field. The method adopted here is common to ADAS and the SSLRC.

[1]The number of days specified is not necessarily a continuous period.
[2]'In most years' is defined as more than 10 out of 20 years.

APPENDIX III

SOIL PIT AND SOIL BORING DESCRIPTIONS

Contents :

Soil Abbreviations - Explanatory Note

Soil Pit Descriptions

Database Printout - Boring Level Information

Database Printout - Horizon Level Information

SOIL PROFILE DESCRIPTIONS : EXPLANATORY NOTE

Soil pit and auger boring information collected during ALC fieldwork is held on a computer database. This uses notations and abbreviations as set out below.

Boring Header Information

1. **GRID REF** : national 100 km grid square and 8 figure grid reference.

2. **USE** : Land use at the time of survey. The following abbreviations are used.

ARA : Arable	**WHT** : Wheat	**BAR** : Barley
CER : Cereals	**OAT** : Oats	**MZE** : Maize
OSR : Oilseed rape	**BEN** : Field Beans	**BRA** : Brassicae
POT : Potatoes	**SBT** : Sugar Beet	**FCD** : Fodder Crops
LIN : Linseed	**FRT** : Soft and Top Fruit	**FLW** : Fallow
PGR : Permanent Pasture	**LEY** : Ley Grass	**RGR** : Rough Grazing
SCR : Scrub	**CFW** : Coniferous Woodland	**DCW** : Deciduous Wood
HTH : Heathland	**BOG** : Bog or Marsh	**FLW** : Fallow
PLO : Ploughed	**SAS** : Set aside	**OTH** : Other
HRT : Horticultural Crops		

3. **GRDNT** : Gradient as estimated or measured by a hand-held optical clinometer.

4. **GLEY/SPL** : Depth in centimetres (cm) to gleying and/or slowly permeable layers.

5. **AP (WHEAT/POTS)** : Crop-adjusted available water capacity.

6. **MB (WHEAT/POTS)** : Moisture Balance. (Crop adjusted AP - crop adjusted MD)

7. **DRT** : Best grade according to soil droughtiness.

8. If any of the following factors are considered significant, 'Y' will be entered in the relevant column.

MREL : Microrelief limitation	**FLOOD** : Flood risk	**EROSN** : Soil erosion risk
EXP : Exposure limitation	**FROST** : Frost prone	**DIST** : Disturbed land
CHEM : Chemical limitation		

9. **LIMIT** : The main limitation to land quality. The following abbreviations are used.

OC : Overall Climate	**AE** : Aspect	**EX** : Exposure
FR : Frost Risk	**GR** : Gradient	**MR** : Microrelief
FL : Flood Risk	**TX** : Topsoil Texture	**DP** : Soil Depth
CH : Chemical	**WE** : Wetness	**WK** : Workability
DR : Drought	**ER** : Erosion Risk	**WD** : Soil Wetness/Droughtiness
ST : Topsoil Stoniness		

Soil Pits and Auger Borings

1. **TEXTURE** : soil texture classes are denoted by the following abbreviations.

S :	Sand	**LS** :	Loamy Sand	**SL** :	Sandy Loam
SZL :	Sandy Silt Loam	**CL** :	Clay Loam	**ZCL** :	Silty Clay Loam
ZL :	Silt Loam	**SCL** :	Sandy Clay Loam	**C** :	Clay
SC :	Sandy Clay	**ZC** :	Silty Clay	**OL** :	Organic Loam
P :	Peat	**SP** :	Sandy Peat	**LP** :	Loamy Peat
PL :	Peaty Loam	**PS** :	Peaty Sand	**MZ** :	Marine Light Silts

For the sand, loamy sand, sandy loam and sandy silt loam classes, the predominant size of sand fraction will be indicated by the use of the following prefixes:

F : Fine (more than 66% of the sand less than 0.2mm)
M : Medium (less than 66% fine sand and less than 33% coarse sand)
C : Coarse (more than 33% of the sand larger than 0.6mm)

The clay loam and silty clay loam classes will be sub-divided according to the clay content: **M** : Medium (<27% clay) **H** : Heavy (27-35% clay)

2. **MOTTLE COL** : Mottle colour using Munsell notation.

3. **MOTTLE ABUN** : Mottle abundance, expressed as a percentage of the matrix or surface described.

F : few <2% **C** : common 2-20% **M** : many 20-40% **VM** : very many 40% +

4. **MOTTLE CONT** : Mottle contrast

F : faint - indistinct mottles, evident only on close inspection
D : distinct - mottles are readily seen
P : prominent - mottling is conspicuous and one of the outstanding features of the horizon

5. **PED. COL** : Ped face colour using Munsell notation.

6. **GLEY** : If the soil horizon is gleyed a 'Y' will appear in this column. If slightly gleyed, an 'S' will appear.

7. **STONE LITH** : Stone Lithology - One of the following is used.

HR :	all hard rocks and stones	**SLST** :	soft oolitic or dolimitic limestone
CH :	chalk	**FSST** :	soft, fine grained sandstone
ZR :	soft, argillaceous, or silty rocks	**GH** :	gravel with non-porous (hard) stones
MSST :	soft, medium grained sandstone	**GS** :	gravel with porous (soft) stones
SI :	soft weathered igneous/metamorphic rock		

Stone contents (>2cm, >6cm and total) are given in percentages (by volume).

8. **STRUCT** : the degree of development, size and shape of soil peds are described using the following notation:

degree of development	**WK** : weakly developed **ST** : strongly developed	**MD** : moderately developed
ped size	**F** : fine **C** : coarse	**M** : medium **VC** : very coarse
ped shape	**S** : single grain **GR** : granular **SAB** : sub-angular blocky **PL** : platy	**M** : massive **AB** : angular blocky **PR** : prismatic

9. **CONSIST** : Soil consistence is described using the following notation:

L : loose **VF** : very friable **FR** : friable **FM** : firm **VM** : very firm
EM : extremely firm **EH** : extremely hard

10. **SUBS STR** : Subsoil structural condition recorded for the purpose of calculating profile droughtiness : **G** : good **M** : moderate **P** : poor

11. **POR** : Soil porosity. If a soil horizon has less than 0.5% biopores >0.5 mm, a 'Y' will appear in this column.

12. **IMP** : If the profile is impenetrable to rooting a 'Y' will appear in this column at the appropiate horizon.

13. **SPL** : Slowly permeable layer. If the soil horizon is slowly permeable a 'Y' will appear in this column.

14. **CALC** : If the soil horizon is calcareous, a 'Y' will appear in this column.

15. Other notations
APW : available water capacity (in mm) adjusted for wheat
APP : available water capacity (in mm) adjusted for potatoes
MBW : moisture balance, wheat
MBP : moisture balance, potatoes

SAMPLE NO.	GRID REF	USE	ASPECT GRDNT	GLEY	SPL	--WETNESS-- CLASS	GRADE	-WHEAT- AP	MB	-POTS- AP	MB	M.REL DRT	FLOOD	EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
1	SU75607709	SAS		20	20	4	3B		0		0					WE	3B	SPL 20
1P	SU75057630	CER				1	1	100	-16	115	4	3A				DR	3A	DRY PIT IMP 75
2P	SU74907647	LEY				1	1	108	-8	115	4	3A				DR	3A	PIT IMP 75
3P	SU75267663	CER		26	58	3	3B	135	19	113	2	2				WE	3B	PIT 70 AUG 120
4	SU75707771	LEY		25	25	4	3B		0		0					WE	3B	SPL 25
4P	SU75507663	SAS				1	1	65	-51	66	-45	4				DR	3B	PIT IMP 75
5	SU75107700	SAS		28	28	4	3B		0		0					WE	3B	SPL 28
5P	SU75637691	SAS		44		1	2	124	8	112	1	2				DR	2	ROOTS VIS TO82
6	SU75207700	SAS		0	25	4	3B		0		0					WE	3B	SPL 25
6P	SU75577700	SAS		15	15	4	3B		0		0					WE	3B	PIT 65 AUG 120
8	SU75407700	LEY		15	15	4	3B		0		0					WE	3B	SPL 15
11	SU75707700	LEY		20	20	4	3B		0		0					WE	3B	SPL 20
12	SU75797700	LEY		25		1	2	143	27	115	4	2				WD	2	SANDY WET 90+
14	SU75007690	SAS		25	25	4	3B		0		0					WE	3B	SPL 25
15	SU75107690	SAS		0	25	4	3B		0		0					WE	3B	SPL 25
16	SU75207690	SAS		25	25	4	3B		0		0					WE	3B	SANDY 70+SPL25
17	SU75307690	SAS				1	2	168	52	114	3	2				WD	2	SANDY 65+
18	SU75407690	LEY		45	45	3	3B	90	-26	98	-13	3B				WE	3B	IMP 65 SPL 45
19	SU75507690	LEY				1	2	107	-9	113	2	3A				DR	3A	IMPST 80
20	SU75607690	LEY				1	1	88	-28	92	-19	3B				DR	3A	IMPST 55
21	SU75707690	LEY				1	2	96	-20	106	-5	3A				DR	3A	IMPST 65
22	SU74807680	LEY		20	20	4	3B		0		0					WE	3B	SPL 20
23	SU74907680	LEY				1	1	136	20	114	3	2				DR	2	SANDY 32+
24	SU75007680	LEY		20	30	4	3B		0		0					WE	3B	SPL 30
25	SU75107680	STB		60		1	1	121	5	106	-5	3A				DR	3A	SANDY 60+
26	SU75207680	STB		33	55	2	2	134	18	112	1	2				WD	2	SPL 55
27	SU75307680	STB		30		1	1	99	-17	114	3	3A				DR	3A	IMPST 70
28	SU75407680	SAS		40		1	2	139	23	116	5	2				WD	2	WET 70+
29	SU75507680	LEY		55	70	2	3A	135	19	116	5	2				WE	3A	SPL 70
30	SU75607680	LEY				1	1	135	19	111	0	2				DR	2	IMPST 100
31	SU74807670	LEY		75		1	1	153	37	113	2	2				DR	2	CALC 75+
32	SU74907670	LEY		45		1	1	159	43	117	6	2				DR	2	SANDY 85+
33	SU75007670	LEY		25	85	2	3B	129	13	109	-2	2				WE	3B	SPL 85
34	SU75107670	CER				1	1	92	-24	99	-12	3B				DR	3A	IMPST 60
34A	SU75107669	STB				1	1	72	-44	72	-39	3B				DR	3B	IMPST 45
35	SU75207670	STB		30		2	3A		0		0					WE	3A	GLEY 30
36	SU75307670	STB		30	45	4	3B		0		0					WE	3B	SPL 45
37	SU75407670	STB		40	60	2	2	136	20	112	1	2				WD	2	SPL 60
38	SU75507670	LEY				1	2	64	-52	64	-47	4				DR	3B	IMPST 40
39	SU75607670	LEY				1	2	57	-59	57	-54	4				DR	3B	IMPST 35
40	SU74807660	LEY		28	55	2	3A		0		0					WE	3A	SPL 55
41	SU74907660	LEY		32	78	2	2	138	22	118	7	2				WE	2	SPL 78

SAMPLE NO.	GRID REF	USE	ASPECT GRDNT	GLEY	SPL	--WETNESS-- CLASS	GRADE	-WHEAT- AP	MB	-POTS- AP	MB	M.REL DRT	FLOOD	EROSN EXP	FROST DIST	CHEM LIMIT		ALC	COMMENTS
42	SU75007660	CER		60		1	1	158	42	111	0	2				DR		2	SANDY 0+
43	SU75107660	STB		32	90	1	1	143	27	118	7	2				DR		2	SPL 90
44	SU75207660	STB		35	80	2	3A		0		0					WE		3A	SPL 80
45	SU75307660	STB		33	75	2	3A		0		0					WE		3A	SPL 75
46	SU75407660	STB		28		1	1	113	-3	115	4	3A				DR		3A	IMPST 80
47	SU75507660	STB				1	1	70	-46	70	-41	3B				DR		3B	IMPST 42
48	SU75607660	LEY				1	1	66	-50	66	-45	4				DR		3B	IMPST 40
49	SU74807650	LEY		32	60	2	3A	135	19	114	3	2				WE		3A	SLGLEY32 SPL60
50	SU74907650	LEY		60	60	2	3A		0		0					WE		3A	CALC 90+ SPL60
51	SU75007650	STB		30		1	1	155	39	117	6	2				DR		2	
52	SU75107650	STB		35	70	2	2	139	23	119	8	2				WD		2	SPL 70
53	SU75207650	STB		105		1	1	141	25	115	4	2				DR		2	IMPST 110
54	SU75307650	STB		55		1	1	116	0	115	4	3A				DR		3A	IMPST 90
55	SU75407650	STB		35		1	1	83	-33	83	-28	3B				DR		3B	IMPST 50
56	SU75507650	STB				1	1	93	-23	100	-11	3B				DR		3A	IMPST 60
57	SU74907640	LEY		32	52	3	3B		0		0					WE		3B	SPL 52
58	SU75007640	STB		50	75	2	2	145	29	116	5	2				WD		2	SPL 75
59	SU75107640	STB		28		1	1	100	-16	109	-2	3A				DR		3A	IMPST 65
60	SU75207640	STB				1	1	107	-9	115	4	3A				DR		3A	IMPST 75
61	SU75307640	STB		45		1	1	153	37	113	2	2				DR		2	
62	SU75407640	STB		28		2	3A	90	-26	94	-17	3B				DR		3B	IMPST 55
63	SU75007630	STB		60		1	1	101	-15	114	3	3A				DR		3A	IMPST 70
64	SU75107630	STB				1	1	102	-14	114	3	3A				DR		3A	IMPST 70
65	SU75207630	STB		45		1	1	102	-14	112	1	3A				DR		3A	IMPST 68
66	SU75307630	STB		50		1	1	153	37	115	4	2				DR		2	GLEY 50
67	SU75107620	STB		45		1	1	112	-4	116	5	3A				DR		3A	IMPST 78
68	SU75207620	STB		60		1	1	126	10	115	4	2				DR		2	IMPST 95
69	SU74867636	LEY		35	68	2	3A	137	21	118	7	2				WE		3A	SPL 68
70	SU74847642	LEY		35		2	2	141	25	118	7	2				DR		2	SANDY 80+
71	SU75047628	STB				1	2	115	-1	116	5	3A				DR		2	IMPST 90

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES COL	MOTTLES ABUN	MOTTLES CONT	PED COL.	GLEY	STONES >2	STONES >6	LITH	TOT	STRUCT/ CONSIST	SUBS STR	POR	IMP	SPL	CALC
1	0-20	hcl	10YR31 41						0	0		0						Y
	20-50	c	25Y 61 00 75YR56 00 C					Y	0	0		0		P			Y	Y
	50-120	c	05Y 51 00 10YR68 00 M					Y	0	0	HR	5		P			Y	
1P	0-26	mcl	10YR42 00						0	0	HR	2	MCSAB	FR		Y		
	26-37	hcl	75YR43 00						0	0		0	MCSAB	FR	M	Y		
	37-60	c	75YR43 00						0	0		0	MCSAB	FM	M	Y		
	60-70	c	75YR43 00						0	0	HR	10		M				
2P	0-30	mcl	10YR42 00						0	0	HR	1	MDCSAB	FR		Y		
	30-65	mcl	75YR44 54						0	0		0	MDCSAB	FR	M	Y		
	65-75	hcl	10YR44 00						0	0	HR	31		M		Y		
3P	0-26	hcl	10YR42 00						0	0	HR	1	WCSAB	FR		Y		
	26-39	c	10YR53 00 75YR58 00 C					Y	0	0		0	MCSAB	FR	M	Y		
	39-58	c	10YR53 00 10YR56 00 C					Y	0	0		0	MCSAB	FR	M	Y		
	58-120	c	10YR53 00 10YR58 00 M					Y	0	0		0	WCP	FM	P	Y	Y	
4	0-25	hcl	10YR41 00 10YR56 00 C						0	0		0						
	25-120	c	05G 51 61 10YR68 00 C					Y	0	0		0		P			Y	
4P	0-27	mcl	10YR42 00						5	0	HR	32	MOD	FR				
	27-48	scl	10YR46 00						0	0	HR	24		FR	M			
	48-58	lcs	10YR46 00						0	0	HR	40		FR	M			
	58-75	lcs	10YR64 00						0	0	HR	59		M				Y
5	0-28	hcl	10YR41 00						0	0	HR	5						
	28-45	c	10YR52 00 10YR58 00 M					Y	0	0	HR	5		P			Y	
	45-120	c	25Y 51 00 75YR58 00 M					Y	0	0	HR	5		P			Y	
5P	0-29	hcl	10YR43 00						0	0	HR	2	WKCSAB	FR		Y		
	29-44	c	75YR44 00						0	0		0	MDCSAB	FR	M	Y		
	44-58	c	10YR52 00 10YR56 00 C				25Y 51 00	Y	0	0	HR	2	MDCSAB	FM	M	Y		
	58-65	c	10YR53 00 10YR56 00 C					Y	0	0	HR	21		M				
	65-82	msl	10YR66 00					Y	0	0	HR	22		M				
	82-120	lms	10YR64 00					Y	0	0	HR	28		M				Y
6	0-25	hcl	10YR42 00 10YR56 00 C					Y	0	0		0						
	25-70	c	25Y 51 00 10YR58 00 C					Y	0	0		0		P			Y	
	70-120	c	25Y 52 00 10YR68 00 C					Y	0	0		0		P			Y	
6P	0-15	hcl	10YR31 00						0	0		0	WKCSAB	FR				
	15-40	c	05Y 51 00 10YR58 00 M					Y	0	0	HR	2	STCPR	FM	P	Y	Y	
	40-70	c	25Y 63 00 10YR68 00 M					Y	0	0		0	MASSIV	FM	P	Y	Y	
	70-80	c	25Y 63 00 10YR68 00 M					Y	0	0	HR	15	MASSIV	FM	P	Y	Y	
	80-120	msl	25Y 63 53 10YR68 00 M					Y	0	0	HR	25		M			Y	
8	0-15	hcl	10YR31 00						0	0		0						
	15-80	zc	25Y 62 00 000C00 00 M					Y	0	0		0		P			Y	
	80-120	zc	25Y 62 00 000C00 00 M					Y	0	0	HR	5		P			Y	

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----- COL	ABUN	CONT	PED COL.	GLEY	----STONES---- >2	>6	LITH	TOT	STRUCT/ CONSIST	SUBS STR	POR	IMP	SPL	CALC
11	0-20	hcl	10YR41 00						0	0		0						
	20-75	c	25Y 51 00	10YR58 00	C			Y	0	0		0		P			Y	
	75-120	c	25Y 51 00	10YR58 00	M			Y	0	0	HR	20		P			Y	
12	0-25	hcl	10YR43 00						0	0		0						
	25-50	c	10YR54 00	10YR56 00	C		00MN00 00	S	0	0		0		M				
	50-90	msl	25Y 53 00	10YR58 00	C			Y	0	0		0		M				
	90-120	lms	10YR63 62	10YR68 00	C		00MN00 00	Y	0	0		0		M				Y
14	0-25	hcl	10YR42 41						0	0		0						
	25-90	c	25Y 61 62	75YR56 00	M			Y	0	0		0		P			Y	
	90-120	c	25Y 61 62	75YR56 00	M			Y	0	0	HR	10		P			Y	
15	0-25	hcl	10YR42 00	10YR66 00	C			Y	0	0		0						
	25-50	c	05Y 51 00	10YR58 00	C			Y	0	0		0		P			Y	
	50-80	sc	05Y 51 00	10YR56 58	F			Y	0	0	HR	30		M			Y	
	80-95	scl	10YR53 00	10YR66 00	C			Y	0	0	HR	10		M			Y	
	95-100	msl	10YR54 00					Y	0	0	HR	50		M			Y	
16	0-25	mcl	10YR41 00						0	0	HR	2						
	25-38	c	25Y 52 00	75YR58 00	M			Y	0	0		0		P			Y	
	38-70	c	05Y 61 00	10YR58 00	C			Y	0	0		0		P			Y	
	70-120	c	25Y 61 00	75YR58 00	M			Y	0	0		0		P			Y	
17	0-30	hcl	10YR42 00						0	0		0						
	30-65	scl	10YR44 00						0	0		0		M				Y
	65-80	msl	25Y 63 00						0	0		0		M				Y
	80-120	fsl	25Y 64 00						0	0		0		M				Y
18	0-30	hcl	10YR42 00						0	0	HR	2						
	30-45	scl	10YR44 00						0	0	HR	3		M				
	45-65	c	10YR53 00	10YR56 00	C			Y	0	0	HR	10		P			Y	
19	0-33	hcl	10YR43 00						0	0		0						
	55-80	c	10YR44 00						0	0	HR	10		M				
20	0-33	mcl	10YR42 43						0	0		0						
	33-40	c	10YR43 53	10YR56 00	F				0	0	HR	3		M				
	40-55	c	10YR44 00						0	0	HR	10		M				
21	0-33	hcl	10YR42 00						0	0	HR	3						
	33-55	hcl	10YR44 00	10YR58 00	F				0	0	HR	3		M				
	55-65	c	75YR44 00						0	0	HR	10		M				Y
22	0-20	hcl	10YR42 00						1	0	CH	5						
	20-55	c	10YR52 00	000C00 00	C			Y	0	0		0		P			Y	
	55-75	sc	75YR44 00	000C00 00	C			S	0	0		0		M				
	75-120	c	10YR61 00					Y	0	0		0		P			Y	

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----- COL	ABUN	CONT	PED COL.	GLEY	----STONES---- >2	>6	LITH	TOT	STRUCT/ CONSIST	SUBS STR	POR	IMP	SPL	CALC
23	0-32	mcl	10YR42 00						0	0	HR	1						
	32-50	msl	10YR44 00						0	0		0		M				
	50-80	msl	10YR54 00						0	0		0		M				
	80-120	lms	10YR54 00						0	0		0		M				
24	0-20	hcl	10YR42 00						0	0		0						
	20-70	sc	10YR52 00	000C00	00	C		Y	0	0		0		P		Y		
	70-120	c	25Y 62 00	000C00	00	M		Y	0	0		0		P		Y		
25	0-30	mcl	10YR42 00						0	0		0						
	30-45	hcl	10YR54 00						0	0		0		M				
	45-60	scl	10YR54 00						0	0	HR	5		M				
	60-95	lms	25Y 53 00	10YR56	00	C		Y	0	0	HR	5		M				
	95-120	ms	25Y 53 00					Y	0	0		0		M				
26	0-33	mcl	10YR42 00						0	0	HR	3						
	33-55	c	10YR54 53	10YR56	00	C		S	0	0		0		M				
	55-90	c	25Y 53 00	10YR56	00	C	00MN00	00 Y	0	0		0		P		Y		
	90-120	c	25Y 63 00	10YR66	00	C		Y	0	0		0		P		Y		
27	0-30	mcl	10YR42 00						0	0	HR	3						
	30-65	c	10YR54 00	10YR56	00	C		S	0	0	HR	3		M				
	65-70	c	10YR54 00	10YR56	00	C		S	0	0	HR	15		M				
28	0-30	hcl	10YR42 00						0	0		0						
	30-40	c	10YR44 00						0	0		0		M				
	40-70	c	10YR53 00	10YR58	00	C	00MN00	00 Y	0	0		0		M				
	70-120	c	25Y 53 00	10YR58	00	C	00MN00	00 Y	0	0	HR	5		M				
29	0-30	hcl	10YR43 00						0	0	HR	3						
	30-55	c	10YR44 00						0	0		0		M				
	55-70	c	10YR53 00	10YR58	00	C	00MN00	00 Y	0	0		0		M				
	70-120	c	25Y 53 00	10YR58	00	M	00MN00	00 Y	0	0		0		P		Y		
30	0-28	mcl	10YR42 00						0	0	HR	3						
	28-45	hcl	10YR44 00						0	0	HR	5		M				
	45-80	scl	75YR44 00						0	0	HR	3		M				
	80-90	hcl	10YR54 62						0	0	HR	5		M				Y
	90-100	fszl	25Y 72 64						0	0	HR	5		M				Y
31	0-30	mcl	10YR42 00						0	0	HR	1						
	30-75	scl	75YR44 00						0	0		0		M				
	75-120	hcl	25Y 63 00	000C00	00	M		Y	0	0		0		M				Y
32	0-28	hcl	10YR42 00						0	0	HR	1						
	28-45	hcl	10YR54 00						0	0		0		M				
	45-80	mcl	10YR54 56	000C00	00	C		S	0	0		0		M				Y
	80-120	msl	10YR56 00	000C00	00	C		S	0	0		0		M				

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES COL	MOTTLES ABUN	MOTTLES CONT	PED COL.	GLEY	STONES >2	STONES >6	STONES LITH	STONES TOT	STRUCT/ CONSIST	SUBS STR	SUBS POR	SUBS IMP	SUBS SPL	SUBS CALC
33	0-25	c	10YR42 00						0	0		0						
	25-45	c	25Y 62 00	000C00	00	C		Y	0	0		0		P				
	45-85	c	25Y 63 00	000C00	00	M		Y	0	0		0		M				
	85-120	c	10YR53 62	000C00	00	M		Y	0	0		0		P			Y	
34	0-30	mcl	75YR43 00						0	0	HR	1						
	30-60	c	75YR44 00						0	0	HR	5		M				
34A	0-30	mcl	10YR43 00						0	0	HR	5						
	30-40	hcl	10YR54 44	10YR56	00	F			0	0	HR	10		M				
	40-45	hcl	10YR44 54	10YR56	00	F			0	0	HR	20		M				
35	0-30	hcl	10YR42 00						0	0	HR	3						
	30-80	hcl	25Y 53 00	10YR56	00	C	00MN00	00 Y	0	0	HR	5		M				
	80-120	scl	25Y 53 63	10YR56	00	C		Y	0	0	HR	5		M				
36	0-30	hcl	10YR42 00						0	0	HR	2						
	30-45	c	25Y 53 52	10YR58	00	C		Y	0	0		0		M				
	45-100	c	25Y 53 63	10YR58	00	M	00MN00	00 Y	0	0		0		M			Y	
	100-120	scl	10YR53 00	10YR56	00	M		Y	0	0	HR	5		M				
37	0-25	mcl	10YR42 00						0	0	HR	3						
	25-40	hcl	10YR44 00						0	0	HR	5		M				
	40-60	hcl	10YR53 00	10YR58	00	C		Y	0	0	HR	5		M				
	60-110	c	25Y 53 00	10YR58	00	C	00MN00	00 Y	0	0	HR	5		M			Y	
	110-120	c	25Y 53 00	10YR58	00	C		Y	0	0	HR	20		M			Y	
38	0-25	hcl	10YR43 00						0	0	HR	5						
	25-40	c	10YR44 00						0	0	HR	15		M				
39	0-25	hcl	10YR44 00						0	0	HR	5						
	25-35	hcl	10YR46 00						0	0	HR	15		M				
40	0-28	hcl	10YR32 00						0	0	HR	1						
	28-38	sc	10YR54 00	000C00	00	C		S	0	0	HR	1		M				
	38-55	sc	10YR53 56	000C00	00	C		Y	0	0		0		M				
	55-120	c	25Y 63 00	000C00	00	C		Y	0	0		0		P			Y	
41	0-32	mcl	10YR42 00						0	0	HR	1						
	32-55	c	10YR53 00	000C00	00	C		Y	0	0		0		M				
	55-78	c	10YR53 54	000C00	00	C		Y	0	0		0		M				
	78-120	c	10YR41 00	000C00	00	C		Y	0	0		0		P			Y	
42	0-30	msl	10YR42 00						0	0		0						
	30-60	msl	10YR54 00						0	0		0		M				
	60-120	msl	10YR54 00	000C00	00	C		S	0	0		0		M				
43	0-32	mcl	10YR42 00						0	0		0						
	32-70	hcl	10YR44 54	10YR56	00	C		S	0	0		0		M				
	70-90	c	10YR53 62	10YR58	00	M		Y	0	0		0		M				
	90-120	c	25Y 53 00	10YR58	00	M	00MN00	00 Y	0	0		0		P			Y	

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----- COL	ABUN	CONT	PED COL.	GLEY	----STONES---- >2	>6	LITH	TOT	STRUCT/ CONSIST	SUBS STR	POR	IMP	SPL	CALC
44	0-35	hcl	10YR42 00						0	0	HR	2						
	35-60	c	25Y 52 53 10YR58 00 M				00MN00	00 Y	0	0		0		M				
	60-80	hcl	25Y 52 53 10YR58 00 M				00MN00	00 Y	0	0		0		M				
	80-120	c	25Y 61 00 10YR58 00 M				00MN00	00 Y	0	0		0		P			Y	
45	0-33	hcl	10YR42 00						0	0	HR	3						
	33-50	c	25Y 52 51 10YR58 00 M					Y	0	0		0		M				
	50-75	c	25Y 52 00 10YR58 00 M				00MN00	00 Y	0	0	HR	5		M				
	75-120	c	25Y 62 00 10YR68 00 M				00MN00	00 Y	0	0		0		P			Y	
46	0-28	mcl	10YR42 00						0	0	HR	2						
	28-50	c	10YR44 54 10YR56 00 C					S	0	0		0		M				
	50-70	hcl	10YR44 54 10YR56 00 C					S	0	0	HR	5		M				
	70-80	scl	10YR56 00					Y	0	0	HR	10		M				
47	0-28	mcl	10YR42 00						0	0	HR	2						
	28-38	hcl	10YR43 00						0	0	HR	5		M				
	38-42	hcl	10YR43 00						0	0	HR	15		M				
48	0-30	mcl	10YR42 43						0	0	HR	5						
	30-35	hcl	10YR43 00						0	0	HR	5		M				
	35-40	hcl	10YR43 00						0	0	HR	20		M				
49	0-32	hcl	10YR42 00						0	0	HR	2						
	32-60	c	10YR54 00 10YR56 00 C					S	0	0		0		M				
	60-105	c	10YR53 00 10YR56 00 C				00MN00	00 Y	0	0		0		P			Y	
	105-120	c	25Y 41 00 75YR46 00 C				00MN00	00 Y	0	0	HR	5		P			Y	Y
50	0-30	hcl	10YR42 00						0	0	HR	1						
	30-50	sc	10YR54 00						0	0	HR	1		M				
	50-60	c	10YR54 00						0	0	HR	1		M				
	60-90	c	10YR53 00 000C00 00 C					Y	0	0		0		P			Y	
	90-120	c	25Y 63 00 000C00 00 C					Y	0	0		0		M			Y	
51	0-30	mcl	10YR42 00						0	0	HR	2						
	30-55	mcl	10YR53 54 10YR56 00 C					S	0	0		0		M				
	55-85	hcl	10YR53 00 10YR58 00 C					Y	0	0		0		M				
	85-120	hcl	25Y 63 00 10YR68 00 C					Y	0	0		0		M				
52	0-35	mcl	10YR42 00						0	0		0						
	35-55	hcl	25Y 63 00 10YR56 00 C					Y	0	0		0		M				
	55-70	c	25Y 63 53 75YR58 00 M				00MN00	00 Y	0	0		0		M				
	70-120	c	25Y 53 00 10YR58 00 M				00MN00	00 Y	0	0		0		P			Y	
53	0-30	mcl	10YR42 00						0	0		0						
	30-95	hcl	10YR56 58						0	0	HR	5		M				
	95-105	mcl	10YR53 54 10YR58 00 F						0	0	HR	5		M				
	105-110	scl	10YR72 00 10YR56 00 C					Y	0	0	HR	20		M				

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----- COL	ABUN	CONT	PED COL.	GLEY	----STONES---- >2	>6	LITH	TOT	STRUCT/ CONSIST	SUBS STR	POR	IMP	SPL	CALC
54	0-30	mcl	10YR42 00						0	0	HR	2						
	30-45	mcl	10YR56 00						0	0		0		M				
	45-55	hcl	10YR58 00						0	0		0		M				
	55-60	scl	10YR72 00	10YR66 00	C			Y	0	0		0		M				
	60-75	msl	25Y 72 00	10YR68 00	C			Y	0	0	HR	5		M				
	75-90	lms	10YR54 00					Y	0	0	HR	30		M				
55	0-35	mcl	10YR42 00						0	0	HR	2						
	35-42	c	10YR54 00	10YR56 00	C			S	0	0	HR	5		M				
	42-50	c	10YR54 00	10YR56 00	C			S	0	0	HR	20		M				
56	0-30	mcl	10YR42 00						0	0	HR	2						
	30-55	c	10YR54 00	10YR56 00	F				0	0		0		M				
	55-60	c	10YR54 00	10YR56 00	F				0	0	HR	10		M				
57	0-32	hcl	10YR42 00						0	0	HR	1						
	32-52	c	10YR53 00	000C00 00	C			Y	0	0	HR	1		M				
	52-120	c	10YR53 54	000C00 00	M			Y	0	0	HR	1		P		Y		
58	0-30	mcl	10YR42 00						0	0	HR	2						
	30-50	hcl	10YR44 00						0	0	HR	3		M				
	50-75	hcl	10YR53 54	10YR58 00	C			Y	0	0		0		M				
	75-120	c	10YR53 63	10YR58 00	C			Y	0	0		0		M		Y		
59	0-28	mcl	10YR42 00						0	0	HR	2						
	28-45	c	10YR54 53	10YR58 00	C			S	0	0		0		M				
	45-53	hcl	10YR53 00	10YR56 00	C			Y	0	0		0		M				
	53-65	mcl	25Y 63 72	10YR66 00	C			Y	0	0		0		M				
60	0-35	hcl	10YR42 00						0	0	HR	5						
	35-45	hcl	10YR56 54						0	0	HR	5		M				
	45-70	hcl	10YR56 00						0	0		0		M				
	70-75	c	10YR56 54						0	0	HR	10		M				
61	0-30	mcl	10YR42 00						0	0	HR	2						
	30-45	scl	10YR54 00	10YR56 00	F				0	0		0		M				
	45-120	scl	10YR54 56	10YR56 00	C			S	0	0		0		M				
62	0-28	hcl	10YR42 00						0	0		0						
	28-55	c	10YR53 00	10YR58 00	C			Y	0	0		0		M				
63	0-32	mcl	10YR42 00						0	0	HR	3						
	32-40	mcl	10YR44 46						0	0	HR	5		M				
	40-60	hcl	10YR43 44						0	0	HR	5		M				
	60-70	c	10YR53 43	10YR58 00	C			S	0	0	HR	3		M				
64	0-30	mcl	10YR42 00						0	0	HR	3						
	30-40	hcl	10YR44 00						0	0	HR	3		M				
	40-70	hcl	10YR46 58	10YR53 00	F				0	0	HR	5		M				

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----- COL	ABUN	CONT	PED COL.	GLEY	----STONES---- >2	>6	LITH	TOT	STRUCT/ CONSIST	SUBS STR	POR	IMP	SPL	CALC
65	0-32	mcl	10YR42 00						0	0	HR	3						
	32-45	hcl	10YR54 00	10YR56 00	F				0	0	HR	2		M				
	45-68	hcl	10YR53 00	10YR58 00	C			Y	0	0	HR	3		M				
66	0-32	mcl	10YR42 00						0	0	HR	2						
	32-50	scl	10YR53 54	10YR56 00	F				0	0	HR	2		M				
	50-70	mcl	10YR53 00	10YR56 00	C			Y	0	0	HR	1		M				
	70-120	hcl	10YR53 00	10YR56 00	C			Y	0	0		0		M				
67	0-30	mcl	10YR43 00						0	0	HR	2						
	30-45	mcl	10YR43 53	10YR58 00	F				0	0	HR	2		M				
	45-65	hcl	10YR43 53	10YR58 00	C			S	0	0	HR	2		M				
	65-78	mcl	25Y 63 00	10YR58 00	C			Y	0	0	HR	2		M				
68	0-32	mcl	10YR42 00						0	0	HR	2						
	32-45	hcl	10YR54 00						0	0	HR	5		M				
	45-60	c	10YR54 53	00MN00 00	F				0	0	HR	2		M				
	60-90	scl	25Y 53 00	10YR58 00	C		00MN00 00	Y	0	0	HR	2		M				
	90-95	scl	25Y 53 00	10YR58 00	C		00MN00 00	Y	0	0	HR	10		M				
69	0-35	hcl	10YR42 00						0	0	HR	1						
	35-68	c	10YR53 00	10YR58 00	M		00MN00 00	Y	0	0		0		M				
	68-120	c	25Y 53 00	10YR58 00	M		00MN00 00	Y	0	0		0		P		Y		
70	0-35	mcl	10YR42 00						0	0	HR	2						
	35-45	c	10YR53 54	10YR58 00	C			Y	0	0		0		M				
	45-80	c	25Y 53 00	10YR58 00	M		00MN00 00	Y	0	0		0		M				
	80-100	msl	25Y 63 00	10YR58 00	M			Y	0	0		0		M				Y
	100-120	lms	25Y 63 00	10YR58 00	M			Y	0	0		0		M				Y
71	0-30	hcl	10YR42 00						0	0	HR	3						
	30-50	c	75YR44 00						0	0		0		M				
	50-85	c	10YR56 00						0	0	HR	3		M				
	85-90	c	10YR56 00						0	0	HR	10		M				

SOIL PIT DESCRIPTION

Site Name : OXON MINS SITE C SONNING Pit Number : 1P

Grid Reference: SU75057630 Average Annual Rainfall : 667 mm
Accumulated Temperature : 1481 degree days
Field Capacity Level : 141 days
Land Use : Cereals
Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 26	MCL	10YR42 00	0	2	HR		MCSAB	FR		
26- 37	HCL	75YR43 00	0	0			MCSAB	FR	M	
37- 60	C	75YR43 00	0	0			MCSAB	FM	M	
60- 70	C	75YR43 00	0	10	HR				M	

Wetness Grade : 1 Wetness Class : I
Gleying : cm
SPL : cm

Drought Grade : 3A APW : 100mm MBW : -16 mm
APP : 115mm MBP : 4 mm

FINAL ALC GRADE : 3A
MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name. : OXON MINS SITE C SONNING Pit Number : 2P

Grid Reference: SU74907647 Average Annual Rainfall : 667 mm
Accumulated Temperature : 1481 degree days
Field Capacity Level : 141 days
Land Use : Ley
Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 30	MCL	10YR42 00	0	1	HR		MDCSAB	FR		
30- 65	MCL	75YR44 54	0	0			MDCSAB	FR	M	
65- 75	HCL	10YR44 00	0	31	HR				M	

Wetness Grade : 1 Wetness Class : I
Gleying : cm
SPL : cm

Drought Grade : 3A APW : 108mm MBW : -8 mm
APP : 115mm MBP : 4 mm

FINAL ALC GRADE : 3A
MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : OXON MINS SITE C SONNING Pit Number : 3P

Grid Reference: SU75267663 Average Annual Rainfall : 667 mm
Accumulated Temperature : 1481 degree days
Field Capacity Level : 141 days
Land Use : Cereals
Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 26	HCL	10YR42 00	0	1	HR		WCSAB	FR		
26- 39	C	10YR53 00	0	0		C	MCSAB	FR	M	
39- 58	C	10YR53 00	0	0		C	MCSAB	FR	M	
58-120	C	10YR53 00	0	0		M	WCP	FM	P	

Wetness Grade : 3B Wetness Class : III
Gleying : 26 cm
SPL : 58 cm

Drought Grade : 2 APW : 135mm MBW : 19 mm
APP : 113mm MBP : 2 mm

FINAL ALC GRADE : 3B
MAIN LIMITATION : Wetness

SOIL PIT DESCRIPTION

Site Name-: OXON MINS SITE C SONNING Pit Number : 4P

Grid Reference: SU75507663 Average Annual Rainfall : 667 mm
Accumulated Temperature : 1481 degree days
Field Capacity Level : 141 days
Land Use : Set-aside
Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 27	MCL	10YR42 00	5	32	HR		MOD	FR		
27- 48	SCL	10YR46 00	0	24	HR			FR	M	
48- 58	LCS	10YR46 00	0	40	HR			FR	M	
58- 75	LCS	10YR64 00	0	59	HR				M	Y

Wetness Grade : 1 Wetness Class : I
Gleying : cm
SPL : cm

Drought Grade : 4 APW : 65mm MBW : -51 mm
APP : 66mm MBP : -45 mm

FINAL ALC GRADE : 3B
MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : OXON MINS SITE C SONNING Pit Number : 5P

Grid Reference: SU75637691 Average Annual Rainfall : 667 mm
Accumulated Temperature : 1481 degree days
Field Capacity Level : 141 days
Land Use : Set-aside
Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 29	HCL	10YR43 00	0	2	HR		WKCSAB	FR		
29- 44	C	75YR44 00	0	0			MDCSAB	FR	M	
44- 58	C	10YR52 00	0	2	HR	C	MDCSAB	FM	M	
58- 65	C	10YR53 00	0	21	HR	C			M	
65- 82	MSL	10YR66 00	0	22	HR				M	
82-120	LMS	10YR64 00	0	28	HR				M	Y

Wetness Grade : 2 Wetness Class : I
Gleying : 44 cm
SPL : cm

Drought Grade : 2 APW : 124mm MBW : 8 mm
APP : 112mm MBP : 1 mm

FINAL ALC GRADE : 2
MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : OXON MINS SITE C SONNING Pit Number : 6P

Grid Reference: SU75577700 Average Annual Rainfall : 667 mm
Accumulated Temperature : 1481 degree days
Field Capacity Level : 141 days
Land Use : Set-aside
Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 15	HCL	10YR31 00	0	0			WKCSAB	FR		
15- 40	C	05Y 51 00	0	2	HR	M	STCPR	FM	P	
40- 70	C	25Y 63 00	0	0		M	MASSIV	FM	P	
70- 80	C	25Y 63 00	0	15	HR	M	MASSIV	FM	P	
80-120	MSL	25Y 63 53	0	25	HR	M			M	

Wetness Grade : 3B Wetness Class : IV
Gleying : 15 cm
SPL : 15 cm

Drought Grade : APW : mm MBW : 0 mm
APP : mm MBP : 0 mm

FINAL ALC GRADE : 3B
MAIN LIMITATION : Wetness