A1

Hampshire Minerals Plan
Omission Site Land at Cutty Brow
Longparish
Agricultural Land Classification
ALC Map and Report
December 1994

AGRICULTURAL LAND CLASSIFICATION REPORT

HAMPSHIRE MINERALS PLAN
OMISSION SITE CUTTY BROW LONGPARISH ANDOVER

1 Summary

1 1 ADAS was commissioned by MAFF s Land Use Planning Unit to provide information on land quality for a number of omission sites relating to the Hampshire Minerals and Waste Disposal Plan This work forms part of MAFF s Statutory input to the above plan

1 2 Approximately 25 hectares of land in four blocks relating to Cutty Brow site was surveyed in November 1994 The survey was undertaken at a detailed level of approximately one boring per hectare A total of 34 borings and one soil inspection pit 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 At the time of survey the agricultural land use was principally with some areas sown to game cover crops The non agricultural area represents a small area of scrub and an access track

1 5 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
3b	24 8	97 3	100%
Non agricultural land	0 7	2 7	
Total area of site	25 5 ha	100%	

1 6 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 7 The land quality on the site has been classified as Subgrade 3b (moderate quality land) as result of high topsoil stone contents The high stone content (typically 15 22% v/v flints > 2 cm) acts as an impediment to cultivation harvesting and crop growth and causes a reduction in the available water capacity of the soil

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

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 the site has no overall climatic limitation

Table 2 Climatic Interpolation

Grid Reference	SU 413 444
Altitude (m AOD)	80
Accumulated Temperature (days Jan June)	1451
Average Annual Rainfall (mm)	756
Field Capacity Days	164
Moisture deficit wheat (mm)	108
Moisture deficit potatoes (mm)	100
Overall Climatic Grade	1

3 Relief

3 1 The site lies at altitudes between approximately 75 and 90 metres AOD It lies within a block of land bisected by a valley trending NW/SE with a smaller subsidiary valley running northwards to Burnt Copse Nowhere on the four blocks of land do gradient or altitude impose a limitation on the agricultural use

4 Geology and Soils

4 1 The published geology map for the site area (BGS Sheet 283 Andover 1975) shows the site to be underlain by Upper Chalk and River/Valley Gravels

4 2 The published soils information for the area (SSEW (1983) Sheet 6 1 250 000) shows the site to comprise of the Carstens and Sonning 1 associations described as aeolian silty drift over clay with flints which are well drained (Carstens Association) and coarse textured well drained soils over gravels and terrace drift (Sonning 1 Association)

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 is shown on the attached sample point map

Subgrade 3b

Land of this quality represents the majority of the site (24 8 ha and 97 3%) and is subject to a high topsoil stone content (typically 15 22% by vol greater than 2 cm in size) which forms the main limitation in terms of agricultural land quality The well drained profiles typically comprise silt loam or medium silty clay loam topsoils over silt loam and/or medium silty clay loam over heavy silty clay loam or clay to depth Topsoils are stony (total typically 20 30% by vol > 2mm) with subsoils becoming very stony (around 40% by vol) There are isolated profiles of good quality land where soils are less stony However they are of an insufficient extent to map separately

The high topsoil stone content causes an impediment to cultivation harvesting and crop growth and also causes increased costs due to implement and tyre wear Together with the high subsoil stone contents there is also a reduction in the available water capacity of the soil which will increase drought risk

ADAS Ref 1512/281/94
MAFF Ref EL15/107

Resource Planning Team
Guildford Statutory Group
ADAS Reading

SOURCE OF REFERENCE

British Geological Survey (1975) Sheet Number 283 Andover 1 50 000

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 (1983) Sheet Number 6 Soils of South East England 1 250 000 and accompanying legend

Soil Survey of England and Wales (1984) Soils and their Use in South East England Bulletin Number 15

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 PROFILE DESCRIPTIONS EXPLANATORY NOTE

Soil pit and auger boring information collected during ALC fieldwork is held on a database This has commonly used notations and abbreviations as set out below

Boring Header Information

1 **GRID REF** national 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 measured by a hand held optical clinometer

4 **GLEY/SPL** Depth in cm to gleying or slowly permeable layers

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

6 **MB (WHEAT/POTS)** Moisture Balance

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

8 If any of the following factors are considered significant an entry of Y will be entered in the relevant column

MREL Microrelief limitation	**FLOOD** Flood risk	**EROSN** Soil erosion risk
EXP Exposure limitation	**FROST** Frost	**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 **ST** Topsoil Stones
CH Chemical	**WE** Wetness	**WK** Workability
DR Drought	**ER** Erosion Risk	**WD** Soil Wetness/Droughtiness

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	**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 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

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

6 **STONE LITH** 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	**GH** gravel with non porous (hard) stones
SI soft weathered igneous/metamorphic rock	

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

7 **STRUCT** the degree of development size and shape of soil peds are described using the following notation

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

8 **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

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

10 **POR** Soil porosity If a soil horizon has less than 0 5% biopores >0 5 mm a Y will appear in this column

11 **IMP** If the profile is impenetrable a Y will appear in this column at the appropiate horizon

12 **SPL** Slowly permeable layer If the soil horizon is slowly permeable a Y will appear in this column

13 **CALC** If the soil horizon is calcareous a Y will appear in this column

14 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

SOIL PIT DESCRIPTION

S te Name HAMP MINERALS CUTTY BROW P t N mbe 1P

G d Reference SU41304430 A erage Annual Rainfall 753 mm
Accumul ted Tempe at re 1446 deg ee d ys
Field Capacity Lev l 163 d ys
Land U
Slope nd Aspect 01 degree S

HORIZON	TEXTURE	COLOUR	STONES 2	TOT STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0 27	ZL	10YR42 43	17	32	HR					
27 55	MZCL	10YR54 44	0	25	HR		MDFSB	FM	G	
55 90	C	75YR44 46	0	40	HR		WKMSB	FM	M	

W t e G de 1 Wetness Cl ss I
Gl y g 000 cm
SPL No SPL

D ght G de 3A APW 102mm MBW 6 mm
APP 103mm MBP 3 mm

FINAL ALC GRADE 3B
MAIN LIMITATION Top oil St i ess

MPLE NO	GRID REF	USE	ASPECT	GRDNT	GLEY	SPL	WETNESS CLASS	WETNESS GRADE	WHEAT AP	WHEAT MB	POTS AP	POTS MB	M REL DRT	FLOOD	EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
1	SU41104490	CER	E	01	000				108	0	122	22	3A				ST	3B	
1A	SU41124482	CER	E	01	000				048	60	048	52	3B				ST	3B	IMP 30CM
1P	SU41304430	STU	S	01	000		1	1	102	6	103	3	3A				ST	3B	TO 90CM
2	SU41204490	CER	E	01	000				049	59	049	51	4				ST	3B	
3	SU41504490	PGR	E	04	000				066	42	066	34	3B				ST	3B	IMP 45CM
4	SU41204480	CER	W	01	000		1	1	141	33	116	16	1				ST	2	
5	SU41304480	CER	W	01	075		1	1	113	5	112	12	3A				ST	3B	
6	SU41504480	PGR	W	07	000				051	57	051	49	4				ST	3B	IMP 30CM
7	SU41604480	PGR	W	01	000				069	39	069	31	3B				ST	3B	IMP 45CM
8	SU41104470	BAR	S	01	000		1	1	093	15	099	1	3A				ST	3B	BORDER3A
9	SU41204470	BAR	W	02	000				067	41	067	33	3B				ST	3B	IMP 40
11	SU41404470	PGR	NE	03	000				088	20	088	12	3A				ST	3B	IMP 50CM
12	SU41504470	PGR	E	05	000				056	52	056	44	4				ST	3B	YR52 3CM IMP 3
13	SU41604470	PGR	E		000				043	65	043	57	4				ST	3B	IMP 30CM
14	SU41104460	BAR	SW	05	000				064	44	064	36	3B				ST	3B	IMP 40
15	SU41204460	BAR	SW	01	000				066	42	066	34	3B				ST	3B	BORDER3A
16	SU41304460	BAR	S	01	000		1	1	087	21	092	8	3B				ST	3B	IMP 60
17	SU41404460	GMC	E	01	000				062	46	062	38	3B				ST	3B	IMP 30
18	SU41104450	BAR	S	04	000		1	1	074	34	079	21	3B				ST	3B	IMP 60
19	SU41204450	BAR	SW	05	000		1	1	092	16	098	2	3A				ST	3B	IMP 60
20	SU41304450	GMC	S	01	000				064	44	064	36	3B				ST	3B	IMP 40
21	SU41404450	STB	N	01	000		1	1	062	46	062	32	3B				ST	3B	IMP 39
22	SU41504450	STB	NE	01	000		1	1	132	24	134	40	2				ST	3A	IMP 82GH
23	SU41204440	GMC	S	01	000		1	1	063	45	063	31	3B				ST	3B	IMP 40
24	SU41304440	STB	S	01	000			1	060	48	060	34	3B				DR	3B	IMP 38
25	SU41404440	STB	NE		000		1	1	061	47	061	33	3B				ST	3B	IMP 38
26	SU41304430	STB	S	02	045		1	1	082	26	085	9	3B				ST	3B	IMP 55
27	SU41404430	STB	S	02	065		1	1	111	3	118	24	3A				ST	3B	IMP 78
28	SU41404420	GMC	S	02	000		1	1	049	59	049	45	4				ST	3B	IMP 30CM
29	SU40604430	CER	S	01	058		1	1	100	8	111	17	3A				ST	3B	IMP 68
30	SU40704430	CER	S	02	000		1	1	153	45	128	34	1					1	
31	SU40804430	CER	S		045				079	29	085	15	3B				ST	3B	BORDER3A
32	SU40604420	CER	S	01	028		1	1	073	35	073	21	3B				ST	3B	IMP 45
33	SU40704420	CER	S		000		1	1	068	40	068	26	3B				ST	3B	IMP 35
34	SU40804420	GMC	S		000				056	52	056	44	4				ST	3B	IMP 35
35	SU40804410	GMC	S		000				048	60	048	52	4				ST	3B	IMP 30

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES COL	MOTTLES ABUN	MOTTLES CONT	PED COL	PED GLEY	STONES 2	STONES 6	STONES LITH	STONES TOT	STRUCT/ CONSIST	SUBS STR	SUBS POR	SUBS IMP	SUBS SPL	SUBS CALC
1	0 35	l	10YR43 00						16	1	HR	20						
	35 70	mzcl	10YR53 54						0	0	HR	5		M				
1A	0 30	l	10YR43 00						22	4	HR	32						
1P	0 27	l	10YR42 43						17	2	HR	32						
	27 55	mzcl	10YR54 44						0	0	HR	25	MDFSB	FM	G			
	55 90		75YR44 46						0	0	HR	40	WKMSB	FM	M			
2	0 30	l	10YR43 00						21	5	HR	30						
3	0 15	l	10YR52 42						15	0	HR	30						
	15 45	ms l	10YR44 46						0	0	HR	20		M				
4	0 27	m cl	10YR43 00						5	0	HR	10						
	27 47	mzcl	10YR44 00						0	0	HR	10		M				
	47 110	hz l	10YR54 56						0	0	HR	2		M				
5	0 25	l	10YR43 00						20	2	HR	30						
	25 55	m l	10YR44 00						0	0	HR	10		M				
	55 75	h cl	75YR54 46						0	0	HR	5		M				
	75 85	h l	75YR46 54					S	0	0	CH	15		M				
6	0 30	l	10YR52 43						17	0	HR	28						
7	0 20	l	10YR43 00						17	0	HR	30						
	20 45	mzcl	10YR44 00						0	0	HR	15		M				
8	0 28	l	10YR42 43						15	5	HR	25						
	28 60	l	10YR54 00						0	0	HR	30		M				
9	0 30	l	10YR42 43						17	3	HR	27						
	30 40	l	10YR54 00						0	0	HR	30		M				
11	0 25	l	10YR43 00						20	2	HR	30						
	25 50	l	10YR53 44						0	0	HR	15		M				
12	0 30	l	10YR43 00						17	0	HR	20						
13	0 30	l	10YR43 00						27	5	HR	40						
14	0 28	l	10YR42 43						17	5	HR	25						
	28 40	m l	10YR54 00						0	0	HR	30		M				
15	0 29	l	10YR42 43						16	4	HR	25						
	29 40	l	10YR54 00						0	0	HR	40		M				
16	0 30	l	10YR42 43						17	5	HR	27						
	30 50	l	10YR54 00						0	0	HR	35		M				
	50 60	mz l	10YR54 00						0	0	HR	35		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
17	0 30	l	10YR42 00						20	3	HR	10						
18	0 28	mzcl	10YR42 00						17	5	HR	27						
	28 60	h cl	10YR44 00						0	0	HR	30		M				
19	0 28	l	10YR42 43						17	5	HR	27						
	28 60	l	10YR54 00						0	0	HR	30		M				
20	0 28	zl	10YR42 43						20	5	HR	30						
	28 40	zl	10YR54 00						0	0	HR	35		M				
21	0 30	l	10YR43 00						16	2	HR	28						
	30 39		75YR54 00						0	0	HR	20		M				
22	0 35	l	10YR43 00						12	2	HR	20						
	35 50	l	10YR44 00						0	0	HR	15		M				
	50 80	l	10YR44 00						0	0	HR	8		M				
	80 82	gh	10YR44 00						0	0		0		M				
23	0 32	l	10YR43 00						20	3	HR	30						
	32 40	l	10YR44 00						0	0	HR	45		M				
24	0 20	zl	10YR43 00						14	1	HR	23						
	20 30	mz l	10YR43 00						0	0	HR	23		M				
	30 38	mz l	10YR54 00						0	0	HR	23		M				
25	0 32	l	10YR43 00						16	2	HR	28						
	2 38	l	10YR43 00						0	0	HR	45		M				
26	0 30	l	10YR43 00						18	2	HR	28						
	30 45	m cl	10YR54 00	75YR54 00	F				0	0	HR	18		M				
	45 55	mzcl	10YR54 00	75YR54 52	C			S	0	0	HR	25		M				
27	0 28	l	10YR43 00						19	2	HR	29						
	28 55	l	10YR44 54						0	0	HR	18		M				
	55 65	mz l	10YR54 00						0	0	HR	10		M				
	65 78	c	10YR54 00	75YR46 00	C			S	0	0	HR	10		M				
28	0 28	l	10YR43 00						19	2	HR	29						
	28 30	l	10YR44 00						0	0	HR	45		M				
29	0 28	l	10YR43 00						16	1	HR	26						
	28 40	l	10YR44 00						0	0	HR	15		M				
	40 58	mz l	10YR54 00						0	0	HR	15		M				
	58 65	hzcl	10YR54 00	75YR46 00	C			S	0	0	HR	15		M				
	65 68	c	10YR54 00	75YR46 00	C		00ZZ00 00	S	0	0	HR	40		M				
30	0 28	l	10YR43 00						1	0	HR	5						
	28 35	mzcl	10YR43 00						0	0	HR	10		M				
	35 45	mz l	10YR54 00						0	0	HR	8		M				
	45 62	h l	10YR54 00						0	0	HR	3		M				
	62 120		10YR54 00						0	0	HR	2		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
31	0 28	mzcl	10YR42 43						15	5	HR	20						
	28 45	mzcl	10YR54 00						0	0	HR	25		M				
	45 60	h cl	10YR54 56	75YR56 00	C			S	0	0	HR	25		M				
32	0 28	l	10YR43 00						16	1	HR	26						
	28 45	h cl	10YR54 00	75YR56 00	C			S	0	0	HR	15		M				
33	0 28	l	10YR43 00						18	2	HR	8						
	28 35	l	10YR44 00						0	0	HR	50		M				
34	0 30	l	10YR42 43						20	7	HR	30						
	30 35	l	10YR54 00						0	0	HR	40		M				
35	0 30	l	10YR42 43						22	5	HR	32						