

BA4

analysis report



TS0809/06 V.2

Test Date 20/08/2009

Sample received 04/08/2009

Client:
Colehill Parish Council
1 Hornbeam Way
Wimbourne
Dorset
BH21 2QE

Sample taken from:
"Bytheway"

concentration mg l ⁻¹		
Phosphorus	Potassium	Magnesium
P	K	Mg
6	31	28

Index		
Phosphorus	Potassium	Magnesium
P	K	Mg
0	0	1

Total Nitrogen
N %w/w
0.25

pH
5.7

Determinand	Method
pH	potentiometrically as per BS1377- 3 section 9
Phosphorous (P)	Extracted with Sodium bicarbonate then determined colourimetrically
Potassium (K)	Extracted in ammonium nitrate then flame AAS
Magnesium (Mg)	Extracted in ammonium nitrate then flame AAS
Total Nitrogen (N)	Combustion technique

Comments

Report authorised by:
Nigel Fahey.
Laboratory manger

These results refer specifically to the sample submitted for analysis and not the original site as a whole. No part of this report may be reproduced unless in full and with the permission of Baileys of Norfolk Ltd.

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TS0809/06



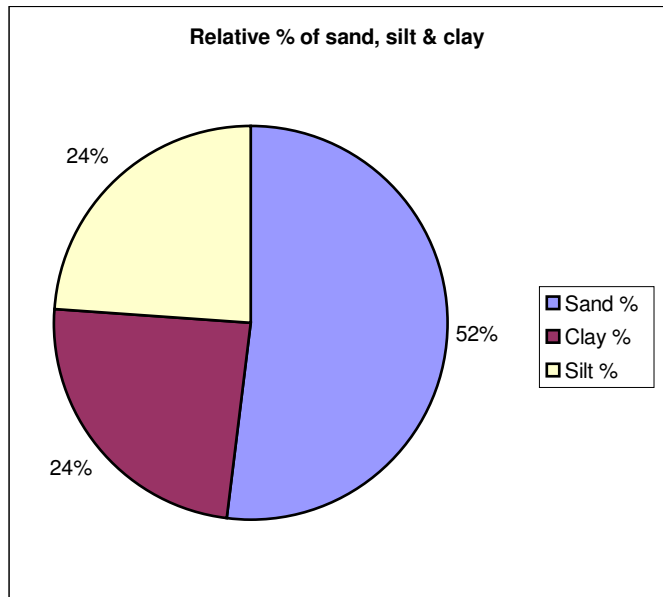
Organic matter % w/w	7.30
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Sand %	52
Clay %	24
Silt %	24

particle size ranges	
Sand (mm)	2.00 - 0.05
Clay (μm)	53 - 2
silt (μm)	< 2

Textural classification	Sandy Clay Loam
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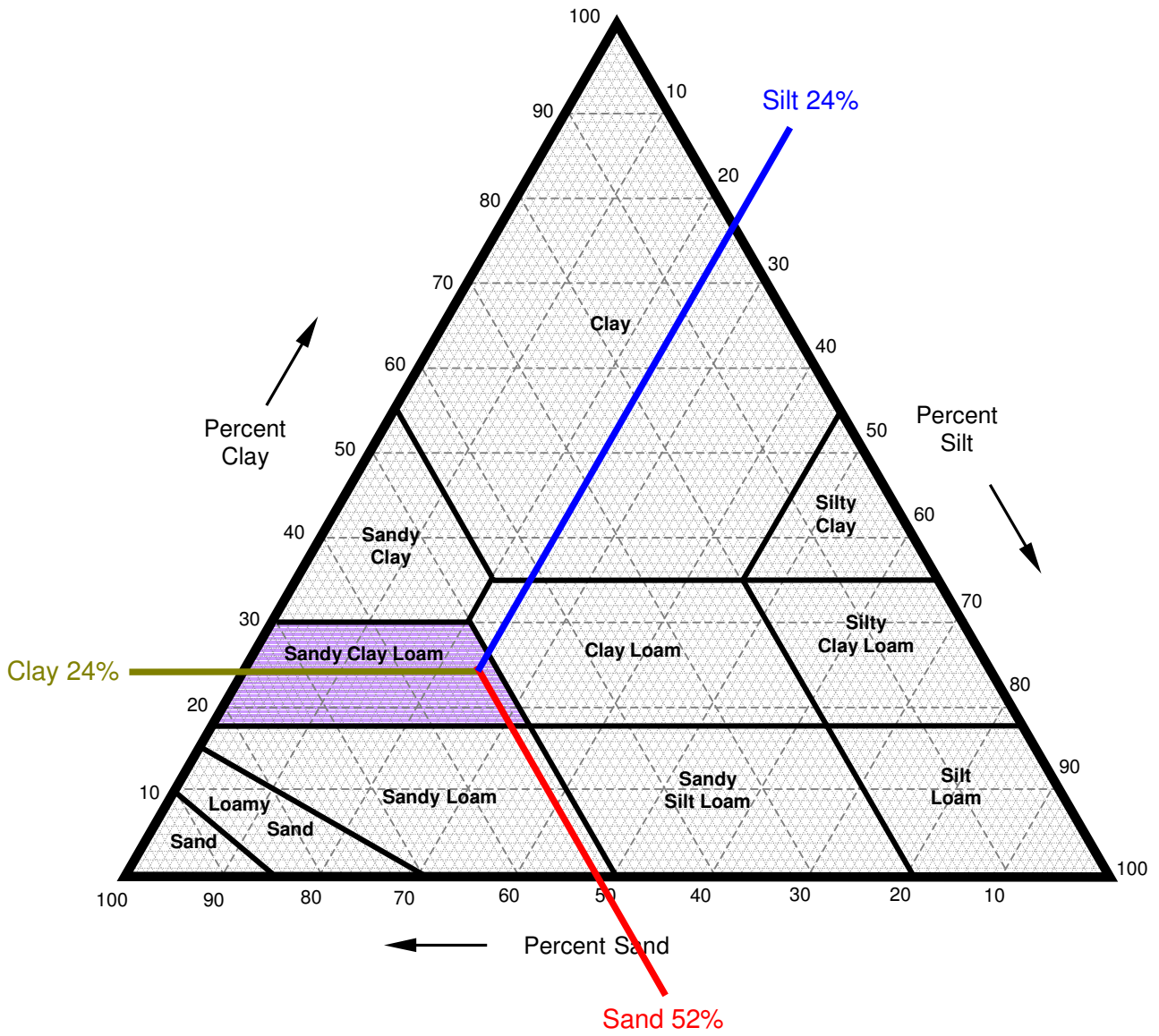
Coarse fragment content %	
> 2 mm	69
> 20 mm	6
> 50 mm	0



Method O.M.	L.O.I. clause 4 of BS1377-3:1990
Method Text'l classification	ASTM152H

Determinand	Units	value	method
(available) Phosphorous	mg l ⁻¹	5.70	Extracted with Sodium Bicarbonate then determined colourimetrically
(available) Potassium	mg l ⁻¹	31.00	Extracted in Ammonium nitrate then determined by AAS
(available) Magnesium	mg l ⁻¹	28.00	Extracted in Ammonium nitrate then determined by AAS
Total Nitrogen	% w/w	0.25	determined by combustion technique
Conductivity	µS cm ⁻¹	930.00	1:2.5 soil suspension determined using conductivity meter
Copper	mg kg ⁻¹	8.80	ICP - OES on acid digest
Zinc	mg kg ⁻¹	15.10	ICP - OES on acid digest
Lead	mg kg ⁻¹	31.90	ICP - OES on acid digest
Arsenic	mg kg ⁻¹	3.20	ICP - OES on acid digest
Cadmium	mg kg ⁻¹	0.15	ICP - OES on acid digest
Nickel	mg kg ⁻¹	<10	ICP - OES on acid digest
Chromium	mg kg ⁻¹	11.90	ICP - OES on acid digest
Mercury	mg kg ⁻¹	<0.02	hydride generation AFS on an acid digest of the sample
Selenium	mg kg ⁻¹	0.31	hydride generation AFS on an acid digest of the sample
Hot water soluble Boron	mg kg ⁻¹	0.70	extraction by soil boiled with water (1:2.5) then ICP - OES
Water soluble sulphate	g l ⁻¹	0.02	extraction at 1:2.5 wt/ v then ICP - OES
Acid volatile sulphide	mg kg ⁻¹	<1	H ₂ S released to solution acid on marble chips then colourimetrically at 263 nm
Elemental Sulphur	mg kg ⁻¹	<20	extracted into solvent then HPLC at 263 nm
Total Phenols index	mg kg ⁻¹	<1	Steam distillation then colourimetrically
Total Cyanide	mg kg ⁻¹	<1	Steam distillation then automated colourimetrically
Benzene	mg kg ⁻¹	<0.1	banded GRO [C5 - C10] methanol extraction then headspace GC - MS
Toluene	mg kg ⁻¹	<0.2	banded GRO [C5 - C10] methanol extraction then headspace GC - MS
Ethylbenzene	mg kg ⁻¹	<0.1	banded GRO [C5 - C10] methanol extraction then headspace GC - MS
Xylene	mg kg ⁻¹	<0.3	banded GRO [C5 - C10] methanol extraction then headspace GC - MS
TPH [C10 - C40]	mg kg ⁻¹	<50	petroleum hydrocarbons [C10 - C40] extracted with iso-hexane then GC-FID
TEM	%	0.11	gravimetric determination after extraction
Total PAH [EPA - 16]	mg kg ⁻¹	<2	extracted into solvent then GC-MS
Napthaline	mg kg ⁻¹	<0.4	extracted into solvent then GC-MS
Acenaphylene	mg kg ⁻¹	<0.1	extracted into solvent then GC-MS
Acenaphthene	mg kg ⁻¹	<0.1	extracted into solvent then GC-MS
Flouene	mg kg ⁻¹	<0.1	extracted into solvent then GC-MS
Phenanthrene	mg kg ⁻¹	<0.2	extracted into solvent then GC-MS
Anthracene	mg kg ⁻¹	<0.1	extracted into solvent then GC-MS
Flouranthene	mg kg ⁻¹	<0.2	extracted into solvent then GC-MS
Pyrene	mg kg ⁻¹	<0.2	extracted into solvent then GC-MS
Benz[a]anthracene	mg kg ⁻¹	<0.1	extracted into solvent then GC-MS
Chrysene	mg kg ⁻¹	<0.1	extracted into solvent then GC-MS
Benzo[b]flouranthene	mg kg ⁻¹	<0.1	extracted into solvent then GC-MS
Benzo[k]flouranthene	mg kg ⁻¹	<0.1	extracted into solvent then GC-MS
Benzo[a]pyrene	mg kg ⁻¹	<0.1	extracted into solvent then GC-MS
Indeno[1,2,3-cd]pyrene	mg kg ⁻¹	<0.1	extracted into solvent then GC-MS
Dibenz[a,h]anthracene	mg kg ⁻¹	<0.1	extracted into solvent then GC-MS
Benzo[g,h,i]perylene	mg kg ⁻¹	<0.1	extracted into solvent then GC-MS

The textural classification of this soil is Sandy Clay Loam



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