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0 150m

Envirocheck®

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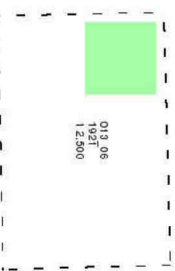
Essex

Published 1921

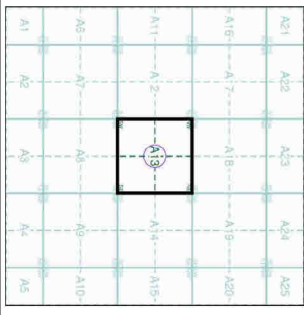
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1899 it covered the whole of what were considered to be the cultivated parts of Great Britain. The post 1921 OS maps often show a different scale than the original maps. The OS maps are often shown at a scale of 1:10,000 or 1:25,000, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



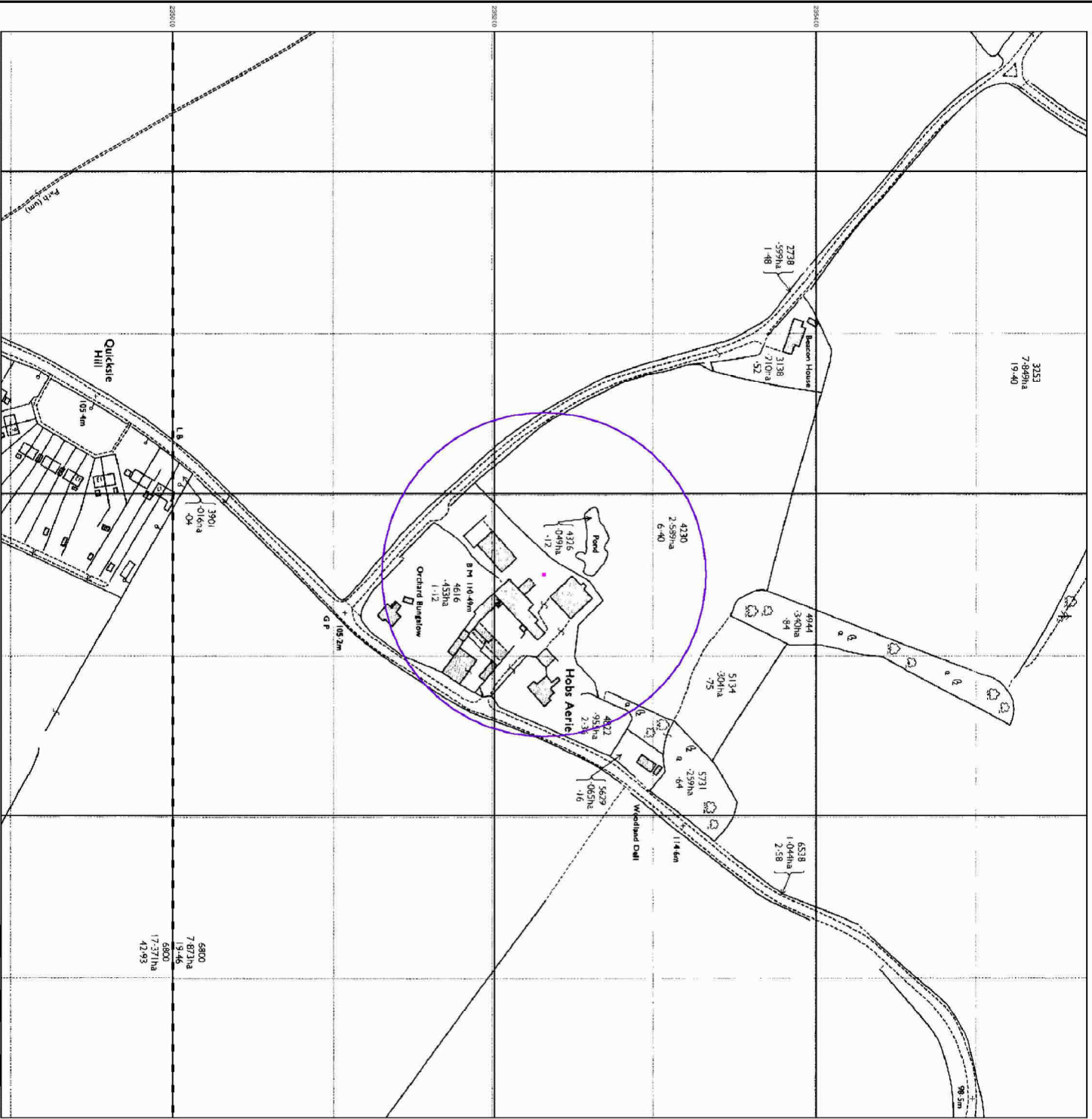
Order Details

Order Number: 317536487_11
 Customer Ref: 3404
 National Grid Reference: 548450, 235230
 Slice: A
 Site Area (Ha): 0.01
 Search Buffer (m): 100

Site Details
 Mulberry House Farm, Wenden Road, Arkessen, SAFFRON
 WALDEN, CB11 4HD



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Ordnance Survey Plan
Published 1979

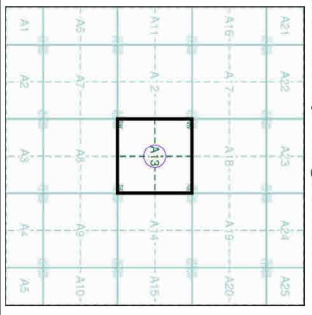
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1886 it covered the whole of what were considered to be the cultivated parts of Great Britain and Ireland. The OS 1:2,500 scale maps are often some years later than the source map. The 1979 OS 1:2,500 scale maps are the last of the OS 1:2,500 scale maps, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

TL4E3S	1979
TL4E3C	1979
TL4E3A	1979
TL4E3B	1979
TL4E3D	1979
TL4E3E	1979
TL4E3F	1979
TL4E3G	1979
TL4E3H	1979
TL4E3I	1979
TL4E3J	1979
TL4E3K	1979
TL4E3L	1979
TL4E3M	1979
TL4E3N	1979
TL4E3O	1979
TL4E3P	1979
TL4E3Q	1979
TL4E3R	1979
TL4E3S	1979
TL4E3T	1979
TL4E3U	1979
TL4E3V	1979
TL4E3W	1979
TL4E3X	1979
TL4E3Y	1979
TL4E3Z	1979

Historical Map - Segment A13

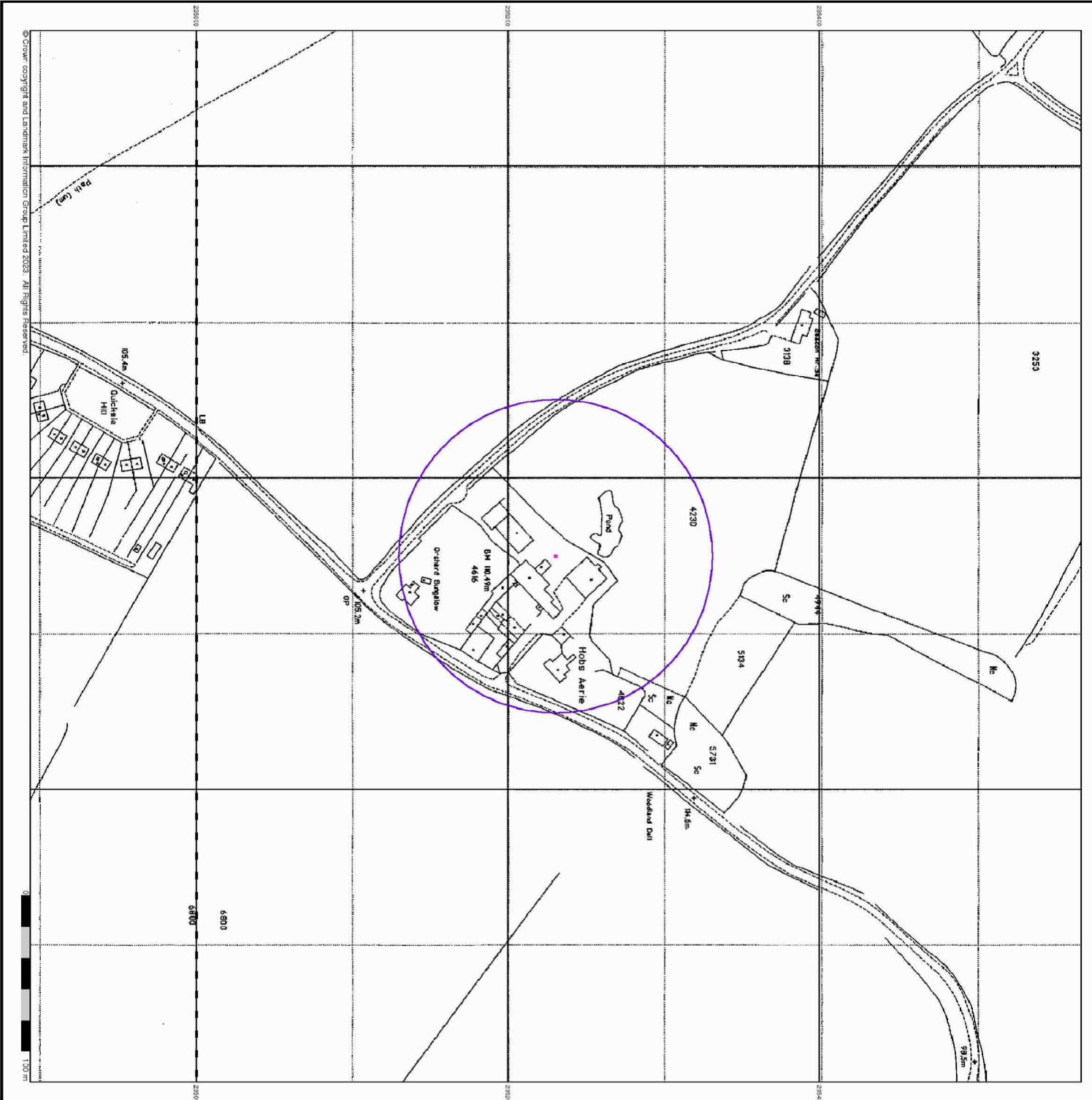


Order Details

Order Number: 317536487_1_1
 Customer Ref: 3404
 National Grid Reference: 548450, 235230
 Site: A
 Site Area (Ha): 0.01
 Search Buffer (m): 100

Site Details

Mulberry House Farm, Wenden Road, Arkessen, SAFFRON WALDEN, CB11 4HD



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Large-Scale National Grid Data
Published 1993

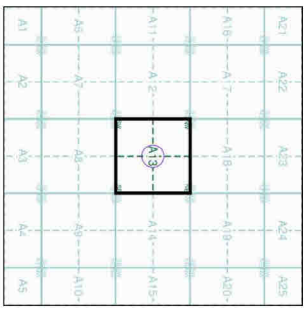
Source map scale - 1:2,500

Large Scale National Grid Data (superceded SIM cards (Ordnance Survey's Survey of Information on Microfilm) in 1982, and continued to be produced until 1989). These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads but tend to show less detail than the current maps such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

- TL4E05
1993
- 1:2,500
- 1L4E34
1993
- 1:2,500

Historical Map - Segment A13



Order Details

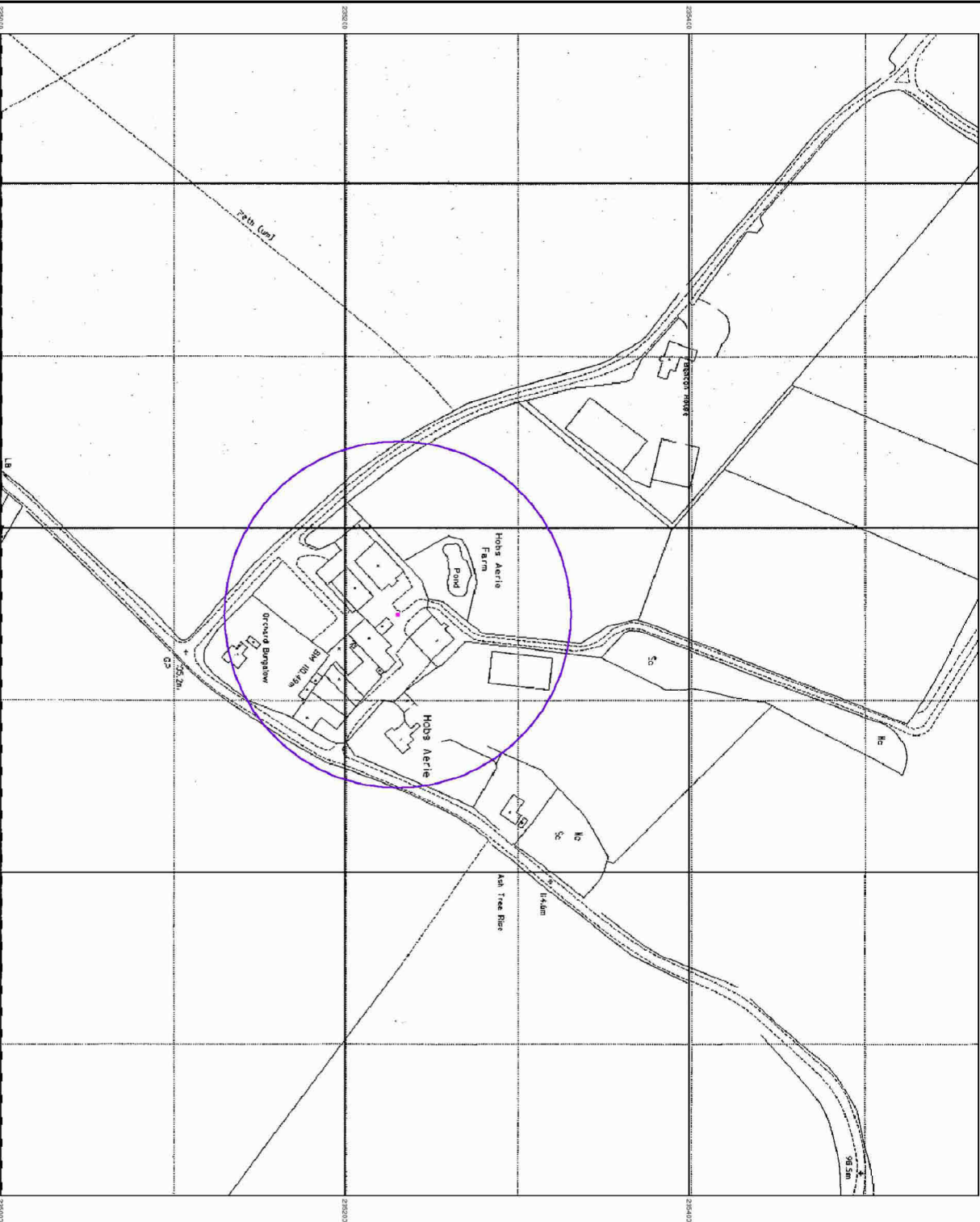
Order Number: 317536487_1_1
 Customer Ref: 3404
 National Grid Reference: 548450, 235230
 Slice: A
 Site Area (ha): 0.01
 Search Buffer (m): 100

Site Details

Mulberry House Farm, Wenden Road, Arkessen, SAFFRON WALDEN, CB11 4HD



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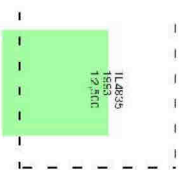
LANDMARK INFORMATION GROUP®

Large-Scale National Grid Data Published 1993

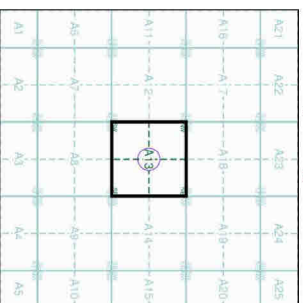
Source map scale - 1:2,500

Large Scale National Grid Data (superceded SIM cards (Ordnance Survey's Survey of Information on Microfilm) in 1982, and continued to be produced until 1989). These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads but tend to show less detail than modern maps such as Vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 317536487_1_1
 Customer Ref: 3404
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APPENDIX V
GEOLOGICAL LOGS

GEOLOGICAL LOG

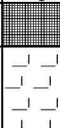


Project: Mulberry House Farm, Arkesden Location: Mulberry House Farm Wenden Road Arkesden, CB11 4HD Project No: 3404 Client: Amherst Homes Logged By: SB	Trial Pit Number: TP 1 Date of Excavation: 29-Sep-23 Type of Machine: 1.5 Tonne Mini Excavator Co-ordinates: TL 48525 35196 Ground Level (m AOD): N/A
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Sample/Test			Description	Log	Depth (m)	Thick- ness (m)	Ground Water (m)
Sample / Test	Result	Sample range					
J.V,T		0-0.2	MADE GROUND - Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse flint, brick, chalk. Fragments of asbestos noted. Rootlets. Soft cream mottled brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subrounded to subangular chalk and flint. Occasional flint cobbles.		0.2	0.2	
J.V,T		0.7-1.0	Base of pit		1.0	>0.8	

Remarks: Dimensions and Orientation: NW-SE Stability: Stable Keys J - 250 or 500ml Jar, T - Tub, V - Vial or 60ml jar, D - Small Disturbed, B - Large bulk sample, W - Water sample, HSV - hand shear vane	 Page 1 of 1
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GEOLOGICAL LOG



Project: Mulberry House Farm, Arkesden Location: Mulberry House Farm Wenden Road Arkesden, CB11 4HD Project No: 3404 Client: Amherst Homes Logged By: SB	Trial Pit Number: TP 2 Date of Excavation: 29-Sep-23 Type of Machine: 1.5 Tonne Mini Excavator Co-ordinates: TL 48507 35207 Ground Level (m AOD): N/A
---	---

Sample/Test			Description	Log	Depth (m)	Thick- ness (m)	Ground Water (m)
Sample / Test	Result	Sample range					
J,V,T		0-0.2	MADE GROUND - Brown slightly clayey slightly sandy GRAVEL. Sand is fine to coarse. Gravel is fine to coarse angular to subrounded flint and brick. Occasional flint cobbles. Rootlets. Structureless CHALK composed of low density white fine to coarse gravelly SILT with flint cobbles.		0.2	0.2	
J,V,T		0.7-1.0	Soft orange brown and grey mottled slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse rounded to subangular chalk and flint.		0.6	0.4	
			Base of pit.		1.0	>0.4	

Remarks: Water in base of pit at 0.8m. Assumed to be rainwater.	
Dimensions and Orientation: NW-SE Stability: Stable. Keys J - 250 or 500ml Jar, T - Tub, V - Vial or 60ml jar, D - Small Disturbed, B - Large bulk sample, W - Water sample, HSV - hand shear vane	Page 1 of 1

GEOLOGICAL LOG


Project: Mulberry House Farm, Arkesden Location: Mulberry House Farm Wenden Road Arkesden, CB11 4HD Project No: 3404 Client: Amherst Homes Logged By: SB	Trial Pit Number: TP 3 Date of Excavation: 29-Sep-23 Type of Machine: 1.5 Tonne Mini Excavator Co-ordinates: TL 48491 35219 Ground Level (m AOD): N/A
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Sample/Test			Description	Log	Depth (m)	Thick- ness (m)	Ground Water (m)
Sample / Test	Result	Sample range					
J,V,T		0-0.2	MADE GROUND - Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse angular to subangular flint. Occasional fine to medium gravel sized brick fragments. Rootlets. Structureless CHALK composed of low density white fine to coarse gravelly SILT with flint cobbles.		0.2	0.2	
J,V,T		0.7-1.0	Soft light grey and light brown mottled slightly sandy slightly gravelly CLAY. Sand is medium to coarse. Gravel is fine to coarse angular to subrounded chalk and flint. Occasional flint cobbles. Base of pit.		0.6 1.0	0.4 >0.4	

Remarks: Water in base of pit at 0.8m. Assumed to be rainwater.

Dimensions and Orientation: NW-SE
 Stability: Stable.


Keys J - 250 or 500ml Jar, T - Tub, V - Vial or 60ml jar, D - Small Disturbed, B - Large bulk sample, W - Water sample, HSV - hand shear vane


 Page 1 of 1

GEOLOGICAL LOG

Project: Mulberry House Farm, Arkesden Location: Mulberry House Farm Wenden Road Arkesden, CB11 4HD Project No: 3404 Client: Amherst Homes Logged By: SB	Trial Pit Number: TP 4 Date of Excavation: 29-Sep-23 Type of Machine: 1.5 Tonne Mini Excavator Co-ordinates: TL 48476 35239 Ground Level (m AOD): N/A
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Sample/Test			Description	Log	Depth (m)	Thick- ness (m)	Ground Water (m)
Sample / Test	Result	Sample range					
			MADE GROUND - Concrete.	█	0.15	0.15	
J,V,T		0.2-0.4	MADE GROUND - Yellowish brown and red brown SAND AND GRAVEL. Sand is medium to coarse. Gravel is fine to coarse brick. Numerous brick cobbles.	█	0.4	0.25	
J,V,T		0.7-1.0	Soft light brown mottled grey slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subrounded to rounded chalk.	O — — — — O	1.0	>0.6	
			Base of pit.				

Remarks: Water in base of pit at 0.9m. Assumed to be rainwater.	
Dimensions and Orientation: NE-SW Stability: Stable Keys J - 250 or 500ml Jar, T - Tub, V - Vial or 60ml jar, D - Small Disturbed, B - Large bulk sample, W - Water sample, HSV - hand shear vane	Page 1 of 1

GEOLOGICAL LOG

Project: Mulberry House Farm, Arkesden Location: Mulberry House Farm Wenden Road Arkesden, CB11 4HD Project No: 3404 Client: Amherst Homes Logged By: SB	Trial Pit Number: TP 5 Date of Excavation: 29-Sep-23 Type of Machine: 1.5 Tonne Mini Excavator Co-ordinates: TL 48467 35227 Ground Level (m AOD): N/A
---	---

Sample/Test		Description	Log	Depth (m)	Thick- ness (m)	Ground Water (m)
Sample / Test	Result					
J,V,T		0,1-0.3	MADE GROUND - Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse. Occasional fine to coarse gravel sized brick and tarmac fragments.	0.1	0.1	
			MADE GROUND - Yellowish brown SAND AND GRAVEL. Sand is fine to coarse. Gravel is fine to coarse. Occasional fine to coarse gravel sized brick fragments.	0.3	0.2	
			Soft to firm brown mottled grey slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subrounded chalk and flint. Occasional flint cobbles. Rare flint boulders.	0.8	>0.5	
			Base of pit.	1.0		
				2.0		
				3.0		
				4.0		
				5.0		
				6.0		
				7.0		

Remarks: Dimensions and Orientation: NW-SE Stability: Stable. Keys J - 250 or 500ml Jar, T - Tub, V - Vial or 60ml jar, D - Small Disturbed, B - Large bulk sample, W - Water sample, HSV - hand shear vane	 Page 1 of 1
--	--

GEOLOGICAL LOG

Project: Mulberry House Farm, Arkesden Location: Mulberry House Farm Wenden Road Arkesden, CB11 4HD Project No: 3404 Client: Amherst Homes Logged By: SB	Trial Pit Number: TP 6 Date of Excavation: 29-Sep-23 Type of Machine: 1.5 Tonne Mini Excavator Co-ordinates: TL 48451 35245 Ground Level (m AOD): N/A
---	---

Sample/Test			Description	Log	Depth (m)	Thick- ness (m)	Ground Water (m)
Sample / Test	Result	Sample range					
J,V,T		0-0.1	MADE GROUND - Greyish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse chalk, flint, brick, clinker. Rootlets. Soft light brown slightly sandy slightly gravelly CLAY. Sand is medium to coarse. Gravel is fine to coarse subrounded to rounded chalk and flint.		0.1	0.1	
			Base of pit.		0.5	>0.4	
					1.0		
					2.0		
					3.0		
					4.0		
					5.0		
					6.0		
					7.0		

Remarks:

Dimensions and Orientation: NE-SW
 Stability: Stable.

Keys J - 250 or 500ml Jar, T - Tub, V - Vial or 60ml jar, D - Small Disturbed, B - Large bulk sample, W - Water sample, HSV - hand shear vane

Page 1 of 1

GEOLOGICAL LOG


Project: Mulberry House Farm, Arkesden Location: Mulberry House Farm Wenden Road Arkesden, CB11 4HD Project No: 3404 Client: Amherst Homes Logged By: SB	Trial Pit Number: TP 7 Date of Excavation: 29-Sep-23 Type of Machine: 1.5 Tonne Mini Excavator Co-ordinates: TL 48449 35223 Ground Level (m AOD): N/A
---	--

Sample/Test		Sample range	Description	Log	Depth (m)	Thick- ness (m)	Ground Water (m)
Sample / Test	Result						
		0.1-0.3	MADE GROUND - Tarmac.	█	0.1	0.1	
J,V,T		0.1-0.3	MADE GROUND - NE SIDE - Yellowish brown SAND AND GRAVEL. Sand is fine to coarse. Gravel is fine to coarse subrounded chalk. Rare metal nails. SW SIDE - Red brown brick cobbles.	█	0.3	0.2	
J,V,T		0.7-1.0	Light brown and grey mottled slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse chalk and flint.	○ ○ ○ ○ ○ ○	1.0	>0.7	
			Base of pit.				
					2.0		
					3.0		
					4.0		
					5.0		
					6.0		
					7.0		

Remarks: Water in base of pit at 0.7m. Assumed to be rainwater.

Dimensions and Orientation: NW-SE
 Stability: Stable.


Keys J - 250 or 500ml Jar, T - Tub, V - Vial or 60ml jar, D - Small Disturbed, B - Large bulk sample, W - Water sample, HSV - hand shear vane


 Page 1 of 1

GEOLOGICAL LOG

Project: Mulberry House Farm, Arkesden Location: Mulberry House Farm Wenden Road Arkesden, CB11 4HD Project No: 3404 Client: Amherst Homes Logged By: SB	Trial Pit Number: TP 8 Date of Excavation: 29-Sep-23 Type of Machine: 1.5 Tonne Mini Excavator Co-ordinates: TL 48422 35229 Ground Level (m AOD): N/A
---	---


Sample/Test		Sample range	Description	Log	Depth (m)	Thick- ness (m)	Ground Water (m)
Sample / Test	Result						
J,V,T		0-0.1	Greyish brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse chalk. Rootlets.	0	0.1	0.1	
			Brown mottled dark grey slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse chalk.	0.7	0.7	>0.6	
			Base of pit.		1.0		
					2.0		
					3.0		
					4.0		
					5.0		
					6.0		
					7.0		

Remarks: Rainwater pooling at base of pit. Dimensions and Orientation: NE-SW Stability: Stable Keys J - 250 or 500ml Jar, T - Tub, V - Vial or 60ml jar, D - Small Disturbed, B - Large bulk sample, W - Water sample, HSV - hand shear vane	 Page 1 of 1
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GEOLOGICAL LOG

Project: Mulberry House Farm, Arkesden Location: Mulberry House Farm Wenden Road Arkesden, CB11 4HD Project No: 3404 Client: Amherst Homes Logged By: SB	Trial Pit Number: TP 9 Date of Excavation: 29-Sep-23 Type of Machine: 1.5 Tonne Mini Excavator Co-ordinates: TL 48413 35222 Ground Level (m AOD): N/A
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Sample/Test			Description	Log	Depth (m)	Thick- ness (m)	Ground Water (m)
Sample / Test	Result	Sample range					
J,V,T		0-0.2	Greyish brown slightly sandy slightly gravelly CLAY. Sand is medium to coarse. Gravel is fine to coarse chalk. Rootlets.	0 .	0.2	0.2	
			Soft brown mottled dark grey slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse chalk.	. _0 _. _0 _. _0 _.			
			Base of pit.	0 .	0.8	>0.6	
					1.0		
					2.0		
					3.0		
					4.0		
					5.0		
					6.0		
					7.0		

Remarks: Rainwater pooling at base of pit.	
Dimensions and Orientation: NE-SW Stability: Stable Keys J - 250 or 500ml Jar, T - Tub, V - Vial or 60ml jar, D - Small Disturbed, B - Large bulk sample, W - Water sample, HSV - hand shear vane	Page 1 of 1

GEOLOGICAL LOG

Project: Mulberry House Farm, Arkesden Location: Mulberry House Farm Wenden Road Arkesden, CB11 4HD Project No: 3404 Client: Amherst Homes Logged By: SB	Trial Pit Number: TP 10 Date of Excavation: 29-Sep-23 Type of Machine: 1.5 Tonne Mini Excavator Co-ordinates: TL 48431 35211 Ground Level (m AOD): N/A
---	--


Sample/Test		Description	Log	Depth (m)	Thick- ness (m)	Ground Water (m)
Sample / Test	Result					
		MADE GROUND - Brownish grey gravelly SAND. Sand is fine to coarse. Gravel is fine to coarse brick, flint, tarmac	█	0.06	0.06	
J,V,T		MADE GROUND - Yellowish brown gravelly CLAY. Gravel is fine to coarse chalk and flint	█	0.1	0.04	
J,V,T		MADE GROUND - Black slightly clayey slightly sandy GRAVEL. Sand is fine to coarse. Gravel is fine to coarse, angular to rounded road scalplings. Faint hydrocarbon odor.	█	0.5	0.4	
J,V,T		Soft dark brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse chalk and flint.	█	1.0		
		Base of pit.	█	1.1	>0.6	
			█	2.0		
			█	3.0		
			█	4.0		
			█	5.0		
			█	6.0		
			█	7.0		

Remarks: Dimensions and Orientation: NE-SW Stability: Stable. Keys J - 250 or 500ml Jar, T - Tub, V - Vial or 60ml jar, D - Small Disturbed, B - Large bulk sample, W - Water sample, HSV - hand shear vane	 Page 1 of 1
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GEOLOGICAL LOG

Project: Mulberry House Farm, Arkesden Location: Mulberry House Farm Wenden Road Arkesden, CB11 4HD Project No: 3404 Client: Amherst Homes Logged By: SB	Trial Pit Number: TP 11 Date of Excavation: 29-Sep-23 Type of Machine: 1.5 Tonne Mini Excavator Co-ordinates: TL 48438 35190 Ground Level (m AOD): N/A
---	---


Sample/Test			Description	Log	Depth (m)	Thick- ness (m)	Ground Water (m)
Sample / Test	Result	Sample range					
J,V,T		0-0.2	Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to medium chalk. Rootlets.	0	0.2	0.2	
			Brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse chalk and flint. Rootlets.	0.5	0.5	>0.3	
			Base of pit.				
					1.0		
					2.0		
					3.0		
					4.0		
					5.0		
					6.0		
					7.0		

Remarks: Dimensions and Orientation: NE-SW Stability: Stable. Keys J - 250 or 500ml Jar, T - Tub, V - Vial or 60ml jar, D - Small Disturbed, B - Large bulk sample, W - Water sample, HSV - hand shear vane	 Page 1 of 1
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GEOLOGICAL LOG

Project: Mulberry House Farm, Arkesden Location: Mulberry House Farm Wenden Road Arkesden, CB11 4HD Project No: 3404 Client: Amherst Homes Logged By: SB	Trial Pit Number: TP 12 Date of Excavation: 29-Sep-23 Type of Machine: 1.5 Tonne Mini Excavator Co-ordinates: TL 48450 35203 Ground Level (m AOD): N/A
---	---

Sample/Test			Description	Log	Depth (m)	Thick- ness (m)	Ground Water (m)
Sample / Test	Result	Sample range					
J,V,T		0-0.2	Dark brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse subangular to rounded chalk and flint. Rootlets.	0 .	0.2	0.2	
			Brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is fine to coarse chalk and flint.	. 0 . .			
			Base of pit.	0 .	0.6	0.4	
					1.0		
					2.0		
					3.0		
					4.0		
					5.0		
					6.0		
					7.0		

Remarks: Dimensions and Orientation: NE-SW Stability: Stable. Keys J - 250 or 500ml Jar, T - Tub, V - Vial or 60ml jar, D - Small Disturbed, B - Large bulk sample, W - Water sample, HSV - hand shear vane	 Page 1 of 1
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APPENDIX VI
CHEMICAL ANALYSIS REPORTS



Amended Report

Report No.: 23-33357-4

Initial Date of Issue: 30-Oct-2023 **Date of Re-Issue:** 03-Nov-2023

Re-Issue Details: This report has been revised and directly supersedes 23-33357-3 in its entirety

Client: Brown 2 Green Associates

Client Address: Suite 1, Wenden Court
Station Road
Wendens Ambo
Nr. Saffron Walden
Essex
CB11 4LB

Contact(s): Philip Miles
Radu Mihai Ilie

Project: 3404 Mulberry House

Quotation No.: **Date Received:** 05-Oct-2023

Order No.: **Date Instructed:** 05-Oct-2023

No. of Samples: 29

Turnaround (Wkdays): 24 **Results Due:** 07-Nov-2023

Date Approved: 03-Nov-2023

Approved By:



Details: Stuart Henderson, Technical Manager

Results - Soil

Project: 3404 Mulberry House

Client: Brown 2 Green Associates	Chemtest Job No.:	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357
Quotation No.:	Chemtest Sample ID.:	1712617	1712618	1712619	1712620	1712621	1712622	1712623	1712624	1712625	1712626	1712627	1712628	1712629
	Sample Location:	TP1	TP1	TP2	TP3	TP3	TP4	TP4	TP5	TP6				
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL				
	Top Depth (m):	0.00	0.70	0.00	0.00	0.70	0.20	0.70	0.10	0.0				
	Bottom Depth (m):	0.20	1.00	0.20	0.20	1.00	0.40	1.00	0.30	0.1				
	Date Sampled:	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023				
	Asbestos Lab:	DURHAM		DURHAM	DURHAM		DURHAM		DURHAM	DURHAM				
Determinand	Accred.	SOP	Units	LOD										
ACM Type	U	2192		N/A	Cement	-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A	Chrysotile	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Asbestos by Gravimetry	U	2192	%	0.001	0.62									
Total Asbestos	U	2192	%	0.001	0.62									
Moisture	N	2030	%	0.020	12	14	5.6	7.3	14	14	4.0	8.3	12	
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Beige	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones and Roots	Stones	Stones and Roots	Stones and Roots	Stones	Stones	Stones	Stones	Stones	Stones and Roots
Soil Texture	N	2040		N/A	Clay	Clay	Loam	Clay	Clay	Clay	Loam	Loam	Loam	Loam
pH at 20C	M	2010		4.0			10.3				8.9			8.6
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010			< 0.010				< 0.010			< 0.010
Arsenic	M	2455	mg/kg	0.5	4.3	37	24	2.2	10	11	34	7.4		27
Cadmium	M	2455	mg/kg	0.10	0.12	0.35	0.47	0.11	0.23	0.25	0.43	0.25		0.37
Chromium	M	2455	mg/kg	0.5	9.1	20	32	6.6	30	28	21	17		23
Copper	M	2455	mg/kg	0.50	6.3	15	30	6.2	18	18	20	14		19
Mercury	M	2455	mg/kg	0.05	< 0.05	< 0.05	0.12	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		< 0.05
Nickel	M	2455	mg/kg	0.50	11	31	35	9.1	34	35	34	17		32
Lead	M	2455	mg/kg	0.50	11	19	73	4.7	14	15	17	61		17
Selenium	M	2455	mg/kg	0.25	< 0.25	0.46	0.71	< 0.25	0.81	0.90	0.60	0.44		0.57
Vanadium	U	2455	mg/kg	0.5	12	49	49	8.7	39	42	42	25		45
Zinc	M	2455	mg/kg	0.50	21	78	140	21	52	60	150	140		120
Aliphatic VPH >C5-C6	U	2780	mg/kg	0.05	< 0.05			< 0.05				< 0.05		< 0.05
Aliphatic VPH >C6-C7	U	2780	mg/kg	0.05	< 0.05			< 0.05				< 0.05		< 0.05
Aliphatic VPH >C7-C8	U	2780	mg/kg	0.05	< 0.05			< 0.05				< 0.05		< 0.05
Aliphatic VPH >C8-C10	U	2780	mg/kg	0.05	< 0.05			< 0.05				< 0.05		< 0.05
Total Aliphatic VPH >C5-C10	U	2780	mg/kg	0.25	< 0.25			< 0.25				< 0.25		< 0.25
Aliphatic EPH >C10-C12	M	2690	mg/kg	2.00	< 2.0			< 2.0				< 2.0		< 2.0
Aliphatic EPH >C12-C16	M	2690	mg/kg	1.00	< 1.0			< 1.0				< 1.0		< 1.0
Aliphatic EPH >C16-C21	M	2690	mg/kg	2.00	< 2.0			< 2.0				< 2.0		< 2.0
Aliphatic EPH >C21-C35	M	2690	mg/kg	3.00	3.3			< 3.0				< 3.0		7.2
Aliphatic EPH >C35-C40	N	2690	mg/kg	10.00	< 10			< 10				< 10		< 10
Total Aliphatic EPH >C10-C35	M	2690	mg/kg	5.00	< 5.0			< 5.0				< 5.0		9.2
Total Aliphatic EPH >C10-C40	N	2690	mg/kg	10.00	< 10			< 10				< 10		< 10
Aromatic VPH >C5-C7	U	2780	mg/kg	0.05	< 0.05			< 0.05				< 0.05		< 0.05
Aromatic VPH >C7-C8	U	2780	mg/kg	0.05	< 0.05			< 0.05				< 0.05		< 0.05
Aromatic VPH >C8-C10	U	2780	mg/kg	0.05	< 0.05			< 0.05				< 0.05		< 0.05
Total Aromatic VPH >C5-C10	U	2780	mg/kg	0.25	< 0.25			< 0.25				< 0.25		< 0.25

Results - Soil

Project: 3404 Mulberry House

Client: Brown 2 Green Associates	Chemtest Job No.:	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357
Quotation No.:	Chemtest Sample ID.:	1712617	1712618	1712619	1712620	1712621	1712622	1712623	1712624	1712625				
	Sample Location:	TP1	TP1	TP2	TP3	TP3	TP4	TP4	TP5	TP6				
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL				
	Top Depth (m):	0.00	0.70	0.00	0.00	0.70	0.20	0.70	0.10	0.0				
	Bottom Depth (m):	0.20	1.00	0.20	0.20	1.00	0.40	1.00	0.30	0.1				
	Date Sampled:	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023				
	Asbestos Lab:	DURHAM		DURHAM	DURHAM		DURHAM		DURHAM	DURHAM				
Determinand	Accred.	SOP	Units	LOD										
Aromatic EPH >C10-C12	U	2690	mg/kg	1.00	< 1.0			< 1.0		< 1.0			< 1.0	< 1.0
Aromatic EPH >C12-C16	U	2690	mg/kg	1.00	< 1.0			< 1.0		< 1.0			< 1.0	< 1.0
Aromatic EPH >C16-C21	U	2690	mg/kg	2.00	52			6.6		8.4			19	19
Aromatic EPH >C21-C35	U	2690	mg/kg	2.00	210			4.5		10			79	79
Aromatic EPH >C35-C40	N	2690	mg/kg	1.00	98			1.3		< 1.0			2.6	2.6
Total Aromatic EPH >C10-C35	U	2690	mg/kg	5.00	260			11		18			98	98
Total Aromatic EPH >C10-C40	N	2690	mg/kg	10.00	360			12		18			100	100
Total VPH >C5-C10	U	2780	mg/kg	0.50	< 0.50			< 0.50		< 0.50			< 0.50	< 0.50
Total EPH >C10-C35	U	2690	mg/kg	10.00	260			12		20			110	110
Total EPH >C10-C40	N	2690	mg/kg	10.00	360			13		20			110	110
Benzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0			< 1.0	< 1.0
Toluene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0			< 1.0	< 1.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0			< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0			< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0			< 1.0	< 1.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0			< 1.0		< 1.0			< 1.0	< 1.0
Naphthalene	M	2800	mg/kg	0.10	0.31			0.13		< 0.10			< 0.10	0.19
Acenaphthylene	N	2800	mg/kg	0.10	0.44			< 0.10		< 0.10			< 0.10	0.14
Acenaphthene	M	2800	mg/kg	0.10	0.13			< 0.10		< 0.10			< 0.10	< 0.10
Fluorene	M	2800	mg/kg	0.10	0.21			< 0.10		< 0.10			< 0.10	< 0.10
Phenanthrene	M	2800	mg/kg	0.10	4.4			0.60		< 0.10			0.22	1.1
Anthracene	M	2800	mg/kg	0.10	0.75			0.13		< 0.10			< 0.10	0.31
Fluoranthene	M	2800	mg/kg	0.10	11			2.0		< 0.10			< 0.10	3.8
Pyrene	M	2800	mg/kg	0.10	9.2			1.1		< 0.10			< 0.10	3.4
Benzofluranthene	M	2800	mg/kg	0.10	5.3			1.1		< 0.10			< 0.10	2.1
Chrysene	M	2800	mg/kg	0.10	6.3			1.1		< 0.10			< 0.10	2.5
Benzol[fluoranthene	M	2800	mg/kg	0.10	8.1			1.7		< 0.10			< 0.10	3.9
Benzol[k]fluoranthene	M	2800	mg/kg	0.10	3.2			0.67		< 0.10			< 0.10	1.3
Benzol[a]pyrene	M	2800	mg/kg	0.10	6.4			1.3		< 0.10			< 0.10	2.8
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	4.3			0.82		< 0.10			< 0.10	2.2
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.77			0.12		< 0.10			< 0.10	0.48
Benzol[g,h,i]perylene	M	2800	mg/kg	0.10	4.1			0.85		< 0.10			< 0.10	2.2
Total Of 16 PAHs	N	2800	mg/kg	2.0	65			12		< 2.0			< 2.0	26
Demeton-O	N	2820	mg/kg	0.20										< 0.20
Demeton-S	N	2820	mg/kg	0.20										< 0.20
Disulfoton	N	2820	mg/kg	0.20										< 0.20
Fenthion	N	2820	mg/kg	0.20										< 0.20

Results - Soil

Project: 3404 Mulberry House

Client: Brown 2 Green Associates	Chemtest Job No.:	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357
Quotation No.:	Chemtest Sample ID.:	1712617	1712618	1712619	1712620	1712621	1712622	1712623	1712624	1712625		
	Sample Location:	TP1	TP1	TP2	TP3	TP3	TP4	TP4	TP5	TP6		
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL		
	Top Depth (m):	0.00	0.70	0.00	0.00	0.70	0.20	0.70	0.10	0.0		
	Bottom Depth (m):	0.20	1.00	0.20	0.20	1.00	0.40	1.00	0.30	0.1		
	Date Sampled:	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023		
	Asbestos Lab:	DURHAM		DURHAM	DURHAM				DURHAM	DURHAM		
Determinand	Accred.	SOP	Units	LOD								
Trichloronate	N	2820	mg/kg	0.20								< 0.20
Prothiofos	N	2820	mg/kg	0.20								< 0.20
Fensulphothion	N	2820	mg/kg	0.20								< 0.20
Sulprofos	N	2820	mg/kg	0.20								< 0.20
Azinphos-Methyl	N	2820	mg/kg	0.20								< 0.20
Counaphos	N	2820	mg/kg	0.20								< 0.20
Atraton	N	2830	mg/kg	0.20								< 0.20
Prometon	N	2830	mg/kg	0.20								< 0.20
Simazine	N	2830	mg/kg	0.20								< 0.20
Atrazine	N	2830	mg/kg	0.20								< 0.20
Propazine	N	2830	mg/kg	0.20								< 0.20
Terbutylazine	N	2830	mg/kg	0.20								< 0.20
Sebuneton	N	2830	mg/kg	0.20								< 0.20
Simebyn	N	2830	mg/kg	0.20								< 0.20
Ameryn	N	2830	mg/kg	0.20								< 0.20
Prometyrn	N	2830	mg/kg	0.20								< 0.20
Terbutyn	N	2830	mg/kg	0.20								< 0.20
Alpha-HCH	N	2840	mg/kg	0.20								< 0.20
Gamma-HCH (Lindane)	N	2840	mg/kg	0.20								< 0.20
Beta-HCH	N	2840	mg/kg	0.20								< 0.20
Delta-HCH	N	2840	mg/kg	0.20								< 0.20
Heptachlor	N	2840	mg/kg	0.20								< 0.20
Aldrin	N	2840	mg/kg	0.20								< 0.20
Heptachlor Epoxide	N	2840	mg/kg	0.20								< 0.20
Gamma-Chlordane	N	2840	mg/kg	0.20								< 0.20
Alpha-Chlordane	N	2840	mg/kg	0.20								< 0.20
Endosulfan I	N	2840	mg/kg	0.20								< 0.20
4,4-DDE	N	2840	mg/kg	0.20								< 0.20
Dieldrin	N	2840	mg/kg	0.20								< 0.20
Endrin	N	2840	mg/kg	0.20								< 0.20
4,4-DDD	N	2840	mg/kg	0.20								< 0.20
Endosulfan II	N	2840	mg/kg	0.20								< 0.20
Endrin Aldehyde	N	2840	mg/kg	0.20								< 0.20
4,4-DDT	N	2840	mg/kg	0.20								< 0.20
Endosulfan Sulphate	N	2840	mg/kg	0.20								< 0.20
Methoxychlor	N	2840	mg/kg	0.20								< 0.20
Endrin Keitone	N	2840	mg/kg	0.20								< 0.20

Results - Soil

Project: 3404 Mulberry House

Client: Brown 2 Green Associates	Chemtest Job No.:	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357
Quotation No.:	Chemtest Sample ID.:	1712626	1712627	1712628	1712629	1712630	1712631	1712632	1712633	1712643		
	Sample Location:	TP7	TP8	TP9	TP10	TP10	TP10	TP10	TP10	TP11	TP12	TP2
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):	0.10	0.00	0.00	0.00	0.20	0.70	0.00	0.00	0.00	0.00	0.70
	Bottom Depth (m):	0.30	0.10	0.20	0.10	0.50	1.00	0.20	0.20	0.20	0.20	1.00
	Date Sampled:	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023
	Asbestos Lab:	DURHAM		DURHAM	DURHAM			DURHAM				
Determinand	Accred.	SOP	Units	LOD								
ACM Type	U	2192		N/A	-			-				
Asbestos Identification	U	2192		N/A	No Asbestos Detected			No Asbestos Detected				No Asbestos Detected
Asbestos by Gravimetry	U	2192	%	0.001								
Total Asbestos	U	2192	%	0.001								
Moisture	N	2030	%	0.020	9.8	19	19	5.9	3.7	16	14	15
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones and Roots	Stones and Roots	Stones	Stones	Stones	Stones and Roots	Stones and Roots
Soil Texture	N	2040		N/A	Loam	Clay	Clay	Loam	Loam	Clay	Loam	Clay
pH at 20C	M	2010		4.0					9.1			
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010					< 0.010			
Arsenic	M	2455	mg/kg	0.5	13	8.3	15	16		9.3		9.2
Cadmium	M	2455	mg/kg	0.10	0.31	0.18	0.26	0.52		0.29		0.15
Chromium	M	2455	mg/kg	0.5	31	24	14	37		18		23
Copper	M	2455	mg/kg	0.50	22	16	12	27		20		14
Mercury	M	2455	mg/kg	0.05	0.05	< 0.05	< 0.05	0.25		0.05		< 0.05
Nickel	M	2455	mg/kg	0.50	30	23	18	36		18		17
Lead	M	2455	mg/kg	0.50	25	14	14	80		35		26
Selenium	M	2455	mg/kg	0.25	0.76	0.45	0.36	1.0		0.53		0.71
Vanadium	U	2455	mg/kg	0.5	44	28	27	54		28		28
Zinc	M	2455	mg/kg	0.50	98	59	79	130		90		47
Aliphatic VPH >C5-C6	U	2780	mg/kg	0.05	< 0.05		< 0.05	< 0.05		< 0.05		< 0.05
Aliphatic VPH >C6-C7	U	2780	mg/kg	0.05	< 0.05		< 0.05	< 0.05		< 0.05		< 0.05
Aliphatic VPH >C7-C8	U	2780	mg/kg	0.05	< 0.05		< 0.05	< 0.05		< 0.05		< 0.05
Aliphatic VPH >C8-C10	U	2780	mg/kg	0.05	< 0.05		< 0.05	< 0.05		< 0.05		< 0.05
Total Aliphatic VPH >C5-C10	U	2780	mg/kg	0.25	< 0.25		< 0.25	< 0.25		< 0.25		< 0.25
Aliphatic EPH >C10-C12	M	2690	mg/kg	2.00	< 2.0		4.1	< 2.0		2.4		< 2.0
Aliphatic EPH >C12-C16	M	2690	mg/kg	1.00	< 1.0		4.7	< 1.0		4.6		< 1.0
Aliphatic EPH >C16-C21	M	2690	mg/kg	2.00	< 2.0		< 2.0	< 2.0		3.8		2.9
Aliphatic EPH >C21-C35	M	2690	mg/kg	3.00	< 3.0		4.3	< 3.0		< 3.0		8.5
Aliphatic EPH >C35-C40	N	2690	mg/kg	10.00	< 10		< 10	< 10		< 10		< 10
Total Aliphatic EPH >C10-C35	M	2690	mg/kg	5.00	< 5.0		14	< 5.0		14		12
Total Aliphatic EPH >C10-C40	N	2690	mg/kg	10.00	< 10		14	< 10		14		12
Aromatic VPH >C5-C7	U	2780	mg/kg	0.05	< 0.05		< 0.05	< 0.05		< 0.05		< 0.05
Aromatic VPH >C7-C8	U	2780	mg/kg	0.05	< 0.05		< 0.05	< 0.05		< 0.05		< 0.05
Aromatic VPH >C8-C10	U	2780	mg/kg	0.05	< 0.05		< 0.05	< 0.05		< 0.05		< 0.05
Total Aromatic VPH >C5-C10	U	2780	mg/kg	0.25	< 0.25		< 0.25	< 0.25		< 0.25		< 0.25

Results - Soil

Project: 3404 Mulberry House

Client: Brown 2 Green Associates	Chemtest Job No.:	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357
Quotation No.:	Chemtest Sample ID.:	1712626	1712627	1712628	1712629	1712630	1712631	1712632	1712633	1712643			
	Sample Location:	TP7	TP8	TP9	TP10	TP10	TP10	TP11	TP12	TP2			
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL			
	Top Depth (m):	0.10	0.00	0.00	0.00	0.20	0.70	0.00	0.00	0.70			
	Bottom Depth (m):	0.30	0.10	0.20	0.10	0.50	1.00	0.20	0.20	1.00			
	Date Sampled:	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023			
	Asbestos Lab:	DURHAM		DURHAM	DURHAM			DURHAM					
Determinand	Accred.	SOP	Units	LOD									
Aromatic EPH >C10-C12	U	2690	mg/kg	1.00	< 1.0			< 1.0	< 1.0	36	< 1.0	< 1.0	
Aromatic EPH >C12-C16	U	2690	mg/kg	1.00	< 1.0			< 1.0	< 1.0	280	< 1.0	< 1.0	7.2
Aromatic EPH >C16-C21	U	2690	mg/kg	2.00	< 2.0			< 2.0	< 2.0	1500	2.3	2.5	150
Aromatic EPH >C21-C35	U	2690	mg/kg	2.00	< 2.0			18	11	3800	3.0	14	420
Aromatic EPH >C35-C40	N	2690	mg/kg	1.00	< 1.0			1.3	< 1.0	310	3.7	2.4	13
Total Aromatic EPH >C10-C35	U	2690	mg/kg	5.00	< 5.0			20	15	5600	5.3	17	570
Total Aromatic EPH >C10-C40	N	2690	mg/kg	10.00	< 10			21	15	5900	< 10	19	590
Total VPH >C5-C10	U	2780	mg/kg	0.50	< 0.50			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total EPH >C10-C35	U	2690	mg/kg	10.00	< 10			33	17	5700	< 10	31	580
Total EPH >C10-C40	N	2690	mg/kg	10.00	< 10			35	17	6000	< 10	33	600
Benzene	M	2760	µg/kg	1.0	< 1.0			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	M	2760	µg/kg	1.0	< 1.0			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0			< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	M	2800	mg/kg	0.10	< 0.10			< 0.10	< 0.10	1.6	< 0.10	0.15	0.18
Acenaphthylene	N	2800	mg/kg	0.10	< 0.10			< 0.10	< 0.10	3.1	< 0.10	< 0.10	0.19
Acenaphthene	M	2800	mg/kg	0.10	< 0.10			< 0.10	< 0.10	3.9	< 0.10	< 0.10	0.27
Fluorene	M	2800	mg/kg	0.10	< 0.10			< 0.10	< 0.10	4.0	< 0.10	< 0.10	0.23
Phenanthrene	M	2800	mg/kg	0.10	< 0.10			< 0.10	< 0.10	31	0.27	0.47	3.0
Anthracene	M	2800	mg/kg	0.10	< 0.10			< 0.10	< 0.10	13	0.12	< 0.10	0.84
Fluoranthene	M	2800	mg/kg	0.10	0.77			< 0.10	< 0.10	98	0.81	0.75	8.5
Pyrene	M	2800	mg/kg	0.10	0.63			< 0.10	< 0.10	89	0.72	0.64	7.4
Benzofluranthracene	M	2800	mg/kg	0.10	0.35			< 0.10	< 0.10	57	0.38	0.32	4.0
Chrysene	M	2800	mg/kg	0.10	0.35			< 0.10	< 0.10	53	0.28	0.27	4.3
Benzol[<i>b</i>]fluoranthene	M	2800	mg/kg	0.10	0.64			< 0.10	< 0.10	80	0.50	0.41	5.9
Benzol[<i>k</i>]fluoranthene	M	2800	mg/kg	0.10	0.18			< 0.10	< 0.10	29	0.21	0.13	2.2
Benzol[<i>a</i>]pyrene	M	2800	mg/kg	0.10	0.40			< 0.10	< 0.10	67	0.35	0.31	4.6
Indeno(1,2,3- <i>c,d</i>)Pyrene	M	2800	mg/kg	0.10	0.35			< 0.10	< 0.10	44	0.30	0.20	3.0
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	< 0.10			< 0.10	< 0.10	7.8	< 0.10	< 0.10	0.55
Benzol[<i>g,h,i</i>]perylene	M	2800	mg/kg	0.10	0.36			< 0.10	< 0.10	40	0.25	0.22	3.0
Total Of 16 PAHs	N	2800	mg/kg	2.0	4.0			< 2.0	< 2.0	21	4.2	3.9	48
Demeton-O	N	2820	mg/kg	0.20									
Demeton-S	N	2820	mg/kg	0.20									
Disulfoton	N	2820	mg/kg	0.20									
Fenthion	N	2820	mg/kg	0.20									

Results - Soil

Project: 3404 Mulberry House

Client: Brown 2 Green Associates	Chemtest Job No.:	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357	23-33357
Quotation No.:	Chemtest Sample ID.:	1712626	1712627	1712628	1712629	1712630	1712631	1712632	1712633	1712643
	Sample Location:	TP7	TP8	TP9	TP10	TP10	TP10	TP11	TP12	TP2
	Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):	0.10	0.00	0.00	0.00	0.20	0.70	0.00	0.00	0.70
	Bottom Depth (m):	0.30	0.10	0.20	0.10	0.50	1.00	0.20	0.20	1.00
	Date Sampled:	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023	02-Oct-2023
	Asbestos Lab:	DURHAM		DURHAM	DURHAM			DURHAM		
Determinand	Accred.	SOP	Units	LOD						
Trichloronate	N	2820	mg/kg	0.20						
Prothiofos	N	2820	mg/kg	0.20						
Fensulphothion	N	2820	mg/kg	0.20						
Sulprofos	N	2820	mg/kg	0.20						
Azinphos-Methyl	N	2820	mg/kg	0.20						
Counaphos	N	2820	mg/kg	0.20						
Atraton	N	2830	mg/kg	0.20						
Prometon	N	2830	mg/kg	0.20						
Simazine	N	2830	mg/kg	0.20						
Atrazine	N	2830	mg/kg	0.20						
Propazine	N	2830	mg/kg	0.20						
Terbutylazine	N	2830	mg/kg	0.20						
Seccbumeton	N	2830	mg/kg	0.20						
Simebyn	N	2830	mg/kg	0.20						
Ametryn	N	2830	mg/kg	0.20						
Prometryn	N	2830	mg/kg	0.20						
Terbutyn	N	2830	mg/kg	0.20						
Alpha-HCH	N	2840	mg/kg	0.20						
Gamma-HCH (Lindane)	N	2840	mg/kg	0.20						
Beta-HCH	N	2840	mg/kg	0.20						
Delta-HCH	N	2840	mg/kg	0.20						
Heptachlor	N	2840	mg/kg	0.20						
Aldrin	N	2840	mg/kg	0.20						
Heptachlor Epoxide	N	2840	mg/kg	0.20						
Gamma-Chlordane	N	2840	mg/kg	0.20						
Alpha-Chlordane	N	2840	mg/kg	0.20						
Endosulfan I	N	2840	mg/kg	0.20						
4,4-DDE	N	2840	mg/kg	0.20						
Dieldrin	N	2840	mg/kg	0.20						
Endrin	N	2840	mg/kg	0.20						
4,4-DDD	N	2840	mg/kg	0.20						
Endosulfan II	N	2840	mg/kg	0.20						
Endrin Aldehyde	N	2840	mg/kg	0.20						
4,4-DDT	N	2840	mg/kg	0.20						
Endosulfan Sulphate	N	2840	mg/kg	0.20						
Methoxychlor	N	2840	mg/kg	0.20						
Endrin Keitone	N	2840	mg/kg	0.20						

Results - Soil

Project: 3404 Mulberry House

Client: Brown 2 Green Associates	Chemtest Job No.:	23-33357			
Quotation No.:	Chemtest Sample ID.:	1712644			
	Sample Location:	TP7			
	Sample Type:	SOIL			
	Top Depth (m):	0.70			
	Bottom Depth (m):	1.00			
	Date Sampled:	02-Oct-2023			
	Asbestos Lab:				
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	
Asbestos Identification	U	2192		N/A	
Asbestos by Gravimetry	U	2192	%	0.001	
Total Asbestos	U	2192	%	0.001	
Moisture	N	2030	%	0.020	16
Soil Colour	N	2040		N/A	Beige
Other Material	N	2040		N/A	Stones
Soil Texture	N	2040		N/A	Clay
pH at 20C	M	2010		4.0	
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	
Arsenic	M	2455	mg/kg	0.5	
Cadmium	M	2455	mg/kg	0.10	
Chromium	M	2455	mg/kg	0.5	
Copper	M	2455	mg/kg	0.50	
Mercury	M	2455	mg/kg	0.05	
Nickel	M	2455	mg/kg	0.50	
Lead	M	2455	mg/kg	0.50	
Selenium	M	2455	mg/kg	0.25	
Vanadium	U	2455	mg/kg	0.5	
Zinc	M	2455	mg/kg	0.50	
Aliphatic VPH >C5-C6	U	2780	mg/kg	0.05	
Aliphatic VPH >C6-C7	U	2780	mg/kg	0.05	
Aliphatic VPH >C7-C8	U	2780	mg/kg	0.05	
Aliphatic VPH >C8-C10	U	2780	mg/kg	0.05	
Total Aliphatic VPH >C5-C10	U	2780	mg/kg	0.25	
Aliphatic EPH >C10-C12	M	2690	mg/kg	2.00	
Aliphatic EPH >C12-C16	M	2690	mg/kg	1.00	
Aliphatic EPH >C16-C21	M	2690	mg/kg	2.00	
Aliphatic EPH >C21-C35	M	2690	mg/kg	3.00	
Aliphatic EPH >C35-C40	N	2690	mg/kg	10.00	
Total Aliphatic EPH >C10-C35	M	2690	mg/kg	5.00	
Total Aliphatic EPH >C10-C40	N	2690	mg/kg	10.00	
Aromatic VPH >C5-C7	U	2780	mg/kg	0.05	
Aromatic VPH >C7-C8	U	2780	mg/kg	0.05	
Aromatic VPH >C8-C10	U	2780	mg/kg	0.05	
Total Aromatic VPH >C5-C10	U	2780	mg/kg	0.25	

Results - Soil

Project: 3404 Mulberry House		Chemtest Job No.:		23-33357
Client: Brown 2 Green Associates		Chemtest Sample ID.:		1712644
Quotation No.:		Sample Location:	TP7	
		Sample Type:	SOIL	
		Top Depth (m):	0.70	
		Bottom Depth (m):	1.00	
		Date Sampled:	02-Oct-2023	
		Asbestos Lab:		
Determinand	Accred.	SOP	Units	LOD
Aromatic EPH >C10-C12	U	2690	mg/kg	1.00
Aromatic EPH >C12-C16	U	2690	mg/kg	1.00
Aromatic EPH >C16-C21	U	2690	mg/kg	2.00
Aromatic EPH >C21-C35	U	2690	mg/kg	2.00
Aromatic EPH >C35-C40	N	2690	mg/kg	1.00
Total Aromatic EPH >C10-C35	U	2690	mg/kg	5.00
Total Aromatic EPH >C10-C40	N	2690	mg/kg	10.00
Total VPH >C5-C10	U	2780	mg/kg	0.50
Total EPH >C10-C35	U	2690	mg/kg	10.00
Total EPH >C10-C40	N	2690	mg/kg	10.00
Benzene	M	2760	µg/kg	1.0
Toluene	M	2760	µg/kg	1.0
Ethylbenzene	M	2760	µg/kg	1.0
m & p-Xylene	M	2760	µg/kg	1.0
o-Xylene	M	2760	µg/kg	1.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0
Naphthalene	M	2800	mg/kg	0.10
Acenaphthylene	N	2800	mg/kg	0.10
Acenaphthene	M	2800	mg/kg	0.10
Fluorene	M	2800	mg/kg	0.10
Phenanthrene	M	2800	mg/kg	0.10
Anthracene	M	2800	mg/kg	0.10
Fluoranthene	M	2800	mg/kg	0.10
Pyrene	M	2800	mg/kg	0.10
Benzofluranthracene	M	2800	mg/kg	0.10
Chrysene	M	2800	mg/kg	0.10
Benzol[bi]fluoranthene	M	2800	mg/kg	0.10
Benzol[k]fluoranthene	M	2800	mg/kg	0.10
Benzol[a]pyrene	M	2800	mg/kg	0.10
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10
Benzol[ghi]perylene	M	2800	mg/kg	0.10
Total Of 16 PAHs	N	2800	mg/kg	2.0
Demeton-O	N	2820	mg/kg	0.20
Phorate	N	2820	mg/kg	0.20
Demeton-S	N	2820	mg/kg	0.20
Disulfoton	N	2820	mg/kg	0.20
Fenthion	N	2820	mg/kg	0.20

Results - Soil

Project: 3404 Mulberry House

Client: Brown 2 Green Associates		Chemtest Job No.:		23-33357
Quotation No.:		Chemtest Sample ID.:		1712644
		Sample Location:	TP7	
		Sample Type:	SOIL	
		Top Depth (m):	0.70	
		Bottom Depth (m):	1.00	
		Date Sampled:	02-Oct-2023	
		Asbestos Lab:		
Determinand	Accred.	SOP	Units	LOD
Trichloronate	N	2820	mg/kg	0.20
Prothiofos	N	2820	mg/kg	0.20
Fensulphothion	N	2820	mg/kg	0.20
Sulprofos	N	2820	mg/kg	0.20
Azinphos-Methyl	N	2820	mg/kg	0.20
Counaphos	N	2820	mg/kg	0.20
Atraton	N	2830	mg/kg	0.20
Prometon	N	2830	mg/kg	0.20
Simazine	N	2830	mg/kg	0.20
Atrazine	N	2830	mg/kg	0.20
Propazine	N	2830	mg/kg	0.20
Terbutylazine	N	2830	mg/kg	0.20
Secbumeton	N	2830	mg/kg	0.20
Simetryn	N	2830	mg/kg	0.20
Ametryn	N	2830	mg/kg	0.20
Prometryn	N	2830	mg/kg	0.20
Terbutryn	N	2830	mg/kg	0.20
Alpha-HCH	N	2840	mg/kg	0.20
Gamma-HCH (Lindane)	N	2840	mg/kg	0.20
Beta-HCH	N	2840	mg/kg	0.20
Delta-HCH	N	2840	mg/kg	0.20
Heptachlor	N	2840	mg/kg	0.20
Aldrin	N	2840	mg/kg	0.20
Heptachlor Epoxide	N	2840	mg/kg	0.20
Gamma-Chlordane	N	2840	mg/kg	0.20
Alpha-Chlordane	N	2840	mg/kg	0.20
Endosulfan I	N	2840	mg/kg	0.20
4,4-DDE	N	2840	mg/kg	0.20
Dieldrin	N	2840	mg/kg	0.20
Endrin	N	2840	mg/kg	0.20
4,4-DDD	N	2840	mg/kg	0.20
Endosulfan II	N	2840	mg/kg	0.20
Endrin Aldehyde	N	2840	mg/kg	0.20
4,4-DDT	N	2840	mg/kg	0.20
Endosulfan Sulphate	N	2840	mg/kg	0.20
Methoxychlor	N	2840	mg/kg	0.20
Endrin Ketone	N	2840	mg/kg	0.20

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH at 20°C	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2690	EPH A/A Split	Aliphatics: >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35– C40 Aromatics: >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C40	Acetone/Heptane extraction / GCxGC FID detection
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2780	VPH A/A Split	Aliphatics: >C5–C6, >C6–C7,>C7–C8,>C8–C10 Aromatics: >C5–C7,>C7–C8,>C8–C10	Water extraction / Headspace GCxGC FID detection
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2820	Organophosphorus (O-P) Pesticides in Soils by GC-MS	Organophosphorus pesticide representative suite including Parathion, Malathion etc, plus client specific determinands	Dichloromethane extraction / GC-MS
2830	Organonitrogen (O-N) Pesticides in Soils by GC-MS	Organonitrogen pesticide representative suite including Triazines etc, plus client specific determinands	Dichloromethane extraction / GC-MS
2840	Organochlorine (O-Cl) Pesticides in Soils by GC-MS	Organochlorine pesticide representative suite including DDT and its metabolites, 'drins' and HCH etc, plus client specific determinands	Dichloromethane extraction / GC-MS

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied

B - Sample age exceeds stability time (sampling to extraction)

C - Sample not received in appropriate containers

D - Broken Container

E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

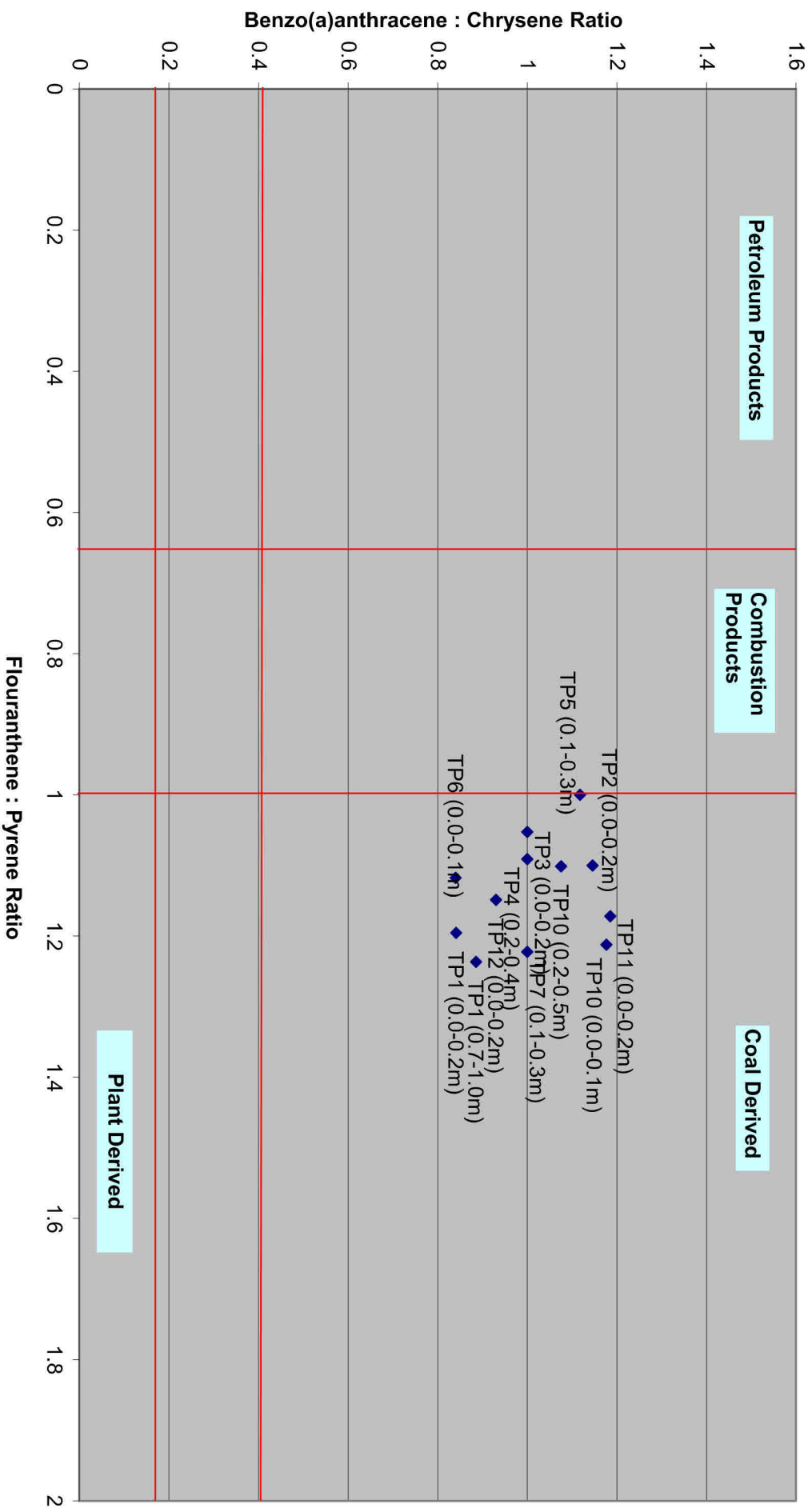
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:

customerservices@chemtest.com

APPENDIX VII
DOUBLE RATIO PLOT

Polycyclic Aromatic Hydrocarbons Plotted on a Signature Double Plot



APPENDIX VIII
ASBESTOS RISK ASSESSMENT



Joint Industry Working Group
Asbestos in Soil and Construction & Demolition Materials

Project Reference	3404
Site Name	Barns at Mulberry House Farm, Wenden Road, Arkesden
Client	Amburst
Run by	RMI
Date	31-Oct-23
Scenario details	Cluster of ACM present beneath a localised area beneath the eastern track.

Decision Support Tool for CAR2012 Work Categories

Stage 1
Hazard Factors

Select ACM type (run model for each type to generate 'Worst Case' output)
Extent of degradation of ACMs at outset of work
Friability and degree of bonding by matrix (ACM matrix, not ground materials)
Distribution of Visible Asbestos Across Affected Area
Amount of asbestos fibre in selected ACM/fibre type as % of host material

	Score
Bonded ACMs: cement, vinyl, composites, textured decorative coatings, bitumen products	1
Intact (Very good condition ACM/ACM fragments)	1
Non-friable ACM or ACM with fibres firmly linked in a matrix	0
Occasional/random occurrences of visible contamination by ACMs	1
Large quantities - >0.1 %w/wt	4
Sub-total	7

Hazard ranking

Low

Note: the asbestos licensing regime is unaffected by the type of asbestos fibre present in ACMs

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool.
It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.

Stage 2 Exposure Factors		Score
Anticipated airborne fibre concentration - Control limit or SALL?	<0.001 fibres/ml	0
Anticipated duration of exposure to asbestos	> 2 hours in a 7 day period and Up to 10 hours in a day (e.g. full time occupational exposure)	4
Activity type and effect on deterioration of ACMs during work	Maintenance tasks, significant deterioration expected	2
Best description of primary host material matrix (soil/made ground)	Fine Silt and/or Clay	1
Respirable fibre index for ACM - RIVM report 711701034 (2003)	Negligible	0
Sub-total		7
Exposure ranking		Low
Combined hazard and exposure ranking		14 Low

Stage 3
Risk Assessment Outputs

Probable Licensing Status

Non-Licensed Work
EN149 type FFP3 disposable
Manual/localised dust suppression
Localised and basic personal decontamination facilities

RPE*

Dust Suppression**

Hygiene/Decontamination***

*Where RPE has to be worn continuously for long periods (e.g. more than 1-hour), then powered RPE may be necessary.
**Reduction in control measures possible if natural mitigation factors are present (e.g. raining, wet ground)
***Guide only; suitability of selected personal hygiene measures may be reviewed on a site/contamination-specific basis

Decision Support Tool for Receptor Risk Ranking

Stage 1		Score
Hazard Identification		
Select ACM type (run model for each type to generate 'Worst Case' output)		
Extent of degradation of ACMs	Bonded ACMs: cement, vinyl, composites, textured decorative coatings, bitumen products	0
Friability and degree of bonding by matrix (ACM matrix, not ground materials)	Intact (Very good condition ACM/ACM fragments)	1
Distribution of Visible Asbestos Across Affected Area	Non-friable ACM or ACM with fibres firmly linked in a matrix	0
Asbestos fibre type	No visible ACMs/fibre bundles	0
Sub-total	Chrysotile alone	0
Hazard ranking		1
		Very Low

No warranty, expressed or implied, or reliance, is provided in relation to the use of this tool. It is contingent on users to satisfy themselves that the output from the tool is relevant and appropriate to the assessment being made.

Stage 2

Emission Factors

Amount of asbestos fibre in selected ACM/fibre type as % of host material

Respirable fibre index for ACM - RIVM report 711701034 (2003)

Activity type and effect on deterioration of ACMs

Best description of primary host material matrix

Sub-total

Exposure ranking

	Score
Large quantities - >0.1 %wt/wt	4
Negligible	0
High disturbance, significant deterioration expected	4
Fine Silt and/or Clay	1

9

Low

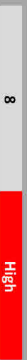
Stage 3

Pathway and Receptor Sensitivity

Receptor category	Score
Residential	No score required
Infant (under 5)	4
Duration of exposure/site occupancy	4

>> 10 hours per day (e.g. 24 hour residential exposure)

Receptor ranking



Combined hazard, exposure and receptor ranking



Pathway: Distance of Receptor from Source
Pathway: Depth to Impacted material

In or within 10m of area of disturbance	4
Material present near the surface, potential to be disturbed during non-construction/routine use of land	D

Pathway ranking



Project Reference	Number 3404
Site Name	Mulberry House Farmyard, Arkesden
Client	Amburst Homes
Run by	RMI
Date	31-Oct-23
Reviewed by	PDM
Characterisation of scenario being evaluated	Cluster of fragments present in a localised area, immediately underneath the eastern track.
Interpretation of scenario ranking by DST	The risk is considered to be low. It is recommended that the fragments of ACM should be removed and disposed off site in a safety manner.