a Street	**Hole Number:** PL27
25	**Logged By:** C Low
	Total Depth: 0.52m
urch Homes	**Remarks:** Trial hole for validation testing.

Legend	Depth (m)	Description
	0.00-0.51	TOPSOIL: Dark brown sandy gravelly CLAY. Sand is fine to medium. Gravel is angular to subrounded fine to coarse of sandstone, limestone, wood chippings and rare brick and concrete.
	0.51-0.52	Brown sandy angular to subrounded fine to medium GRAVEL of limestone, brick, sandstone and concrete.

GL

0.51m

0.52m

NOT TO SCALE

Hand dug pit terminated at 0.52m.

No groundwater encountered.

Environmental sample taken at 0.30m.

Photos:

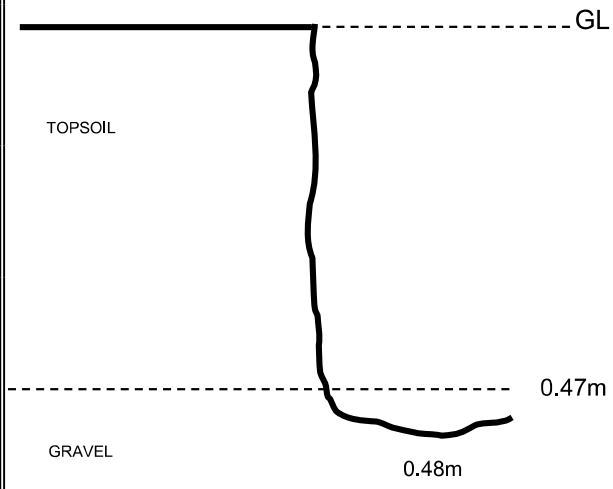
EARTH ENVIRONMENTAL & GEOTECHNICAL
Houldsworth Mill Business & Arts Centre, Houldsworth Street,
Stockport, SK5 6DA
Tel: 0161 975 6088
Email: info@earthenvironmental.co.uk
Web: www.earthenvironmental.co.uk

HAND DUG TRIAL HOLE LOG

Project Name: Louisa Street
Date: 13/05/25
Project No.: A4755
Client: Westchurch Homes

Hole Number: PL29
Logged By: C Low
Total Depth: 0.48m
Remarks: Trial hole for validation testing.

Schematic Profile:



NOT TO SCALE

Legend	Depth (m)	Description
	0.00-0.47	TOPSOIL: Dark brown sandy gravelly CLAY. Sand is fine to medium. Gravel is angular to subrounded fine to coarse of sandstone, limestone, wood chippings and rare brick and concrete.
	0.47-0.48	Brown sandy angular to subrounded fine to medium GRAVEL of limestone, brick, sandstone and concrete.

Hand dug pit terminated at 0.48m.

No groundwater encountered.

Environmental sample taken at 0.10m.

Photos:



PL29: Overview of Excavation.



PL29: Internal View of Excavation.

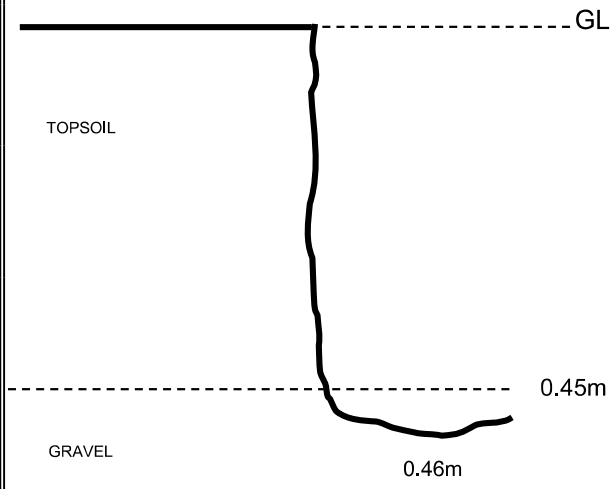
EARTH ENVIRONMENTAL & GEOTECHNICAL
Houldsworth Mill Business & Arts Centre, Houldsworth Street,
Stockport, SK5 6DA
Tel: 0161 975 6088
Email: info@earthenvironmental.co.uk
Web: www.earthenvironmental.co.uk

HAND DUG TRIAL HOLE LOG

Project Name: Louisa Street
Date: 13/05/25
Project No.: A4755
Client: Westchurch Homes

Hole Number: PL21 (Front)
Logged By: C Low
Total Depth: 0.46m
Remarks: Trial hole for validation testing.

Schematic Profile:



NOT TO SCALE

Legend	Depth (m)	Description
	0.00-0.45	TOPSOIL: Dark brown clayey gravelly fine to medium SAND with occasional pockets of soft brown clay. Gravel is angular to subrounded fine to coarse of sandstone limestone and rare brick and concrete.
	0.45-0.46	Brown sandy angular to subrounded fine to medium GRAVEL of limestone, brick, sandstone and concrete.

Hand dug pit terminated at 0.46m.

No groundwater encountered.

Environmental sample taken at 0.40m.

Photos:



PL21 (Front): Overview of Excavation.



PL21 (Front): Internal View of Excavation.

EARTH ENVIRONMENTAL & GEOTECHNICAL
Houldsworth Mill Business & Arts Centre, Houldsworth Street,
Stockport, SK5 6DA
Tel: 0161 975 6088
Email: info@earthenvironmental.co.uk
Web: www.earthenvironmental.co.uk

HAND DUG TRIAL HOLE LOG

Project Name: Louisa Street

Date: 13/05/25

Project No.: A4755

Client: Westchurch Homes

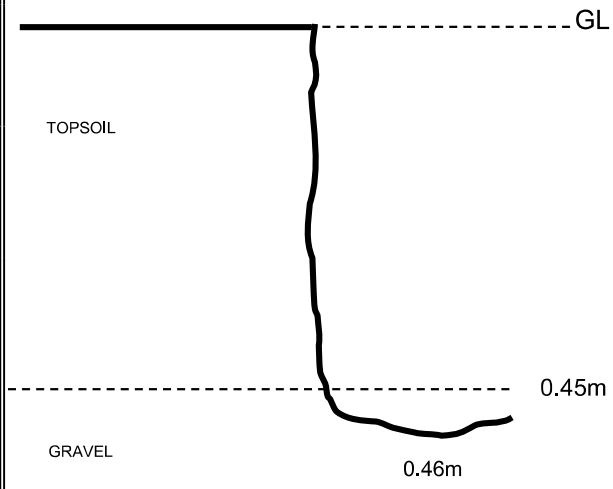
Hole Number: PL25 (Front)

Logged By: C Low

Total Depth: 0.46m

Remarks: Trial hole for validation testing.

Schematic Profile:



NOT TO SCALE

Legend	Depth (m)	Description
	0.00-0.45	TOPSOIL: Dark brown clayey gravelly fine to medium SAND. Gravel is angular to subrounded fine to coarse of, sandstone, limestone and rare brick and concrete.
	0.45-0.46	Brown sandy angular to subrounded fine to medium GRAVEL of limestone, brick, sandstone and concrete.

Hand dug pit terminated at 0.46m.

No groundwater encountered.

Environmental sample taken at 0.20m.

Photos:



PL25 (Front): Overview of Excavation.



PL25 (Front): Internal View of Excavation.

EARTH ENVIRONMENTAL & GEOTECHNICAL
Houldsworth Mill Business & Arts Centre, Houldsworth Street,
Stockport, SK5 6DA
Tel: 0161 975 6088
Email: info@earthenvironmental.co.uk
Web: www.earthenvironmental.co.uk

HAND DUG TRIAL HOLE LOG

Project Name: Louisa Street

Date: 13/05/25

Project No.: A4755

Client: Westchurch Homes

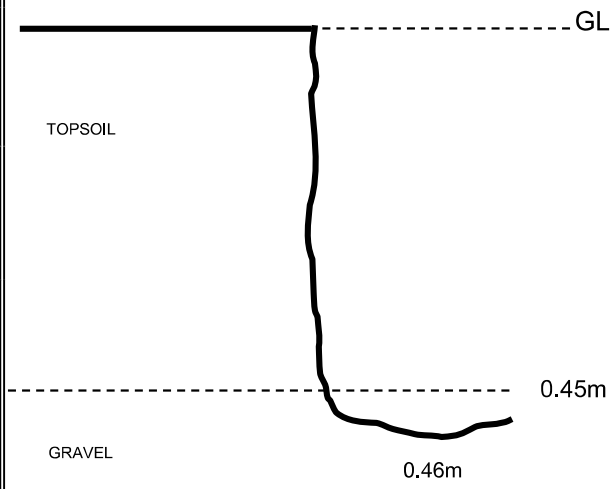
Hole Number: SS01

Logged By: C Low

Total Depth: 0.46m

Remarks: Trial hole for validation testing.

Schematic Profile:



NOT TO SCALE

Legend	Depth (m)	Description
	0.00-0.45	TOPSOIL: Dark brown sandy gravelly CLAY. Sand is fine to medium. Gravel is angular to subrounded fine to coarse of sandstone, limestone, wood chippings and rare brick and concrete.
	0.45-0.46	Brown sandy angular to subrounded fine to medium GRAVEL of limestone, brick, sandstone and concrete.

Hand dug pit terminated at 0.46m.

No groundwater encountered.

Environmental sample taken at 0.30m.

Photos:



SS01: Overview of Excavation.



SS01: Internal View of Excavation.

APPENDIX B

WASTE TRANSFER NOTES
(EXPORTED MATERIAL)

HURT

923308

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ
Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
31/10/23	PN71 CRV	8w	
	Driver:	Grab	
	Des Donaldson	Artic	

Customer:							
From:							
To:							
Wet		Inert Spoil	1	Hardcore		Other	
Contaminated Soil		Non-Hazardous		Hazardous			

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	

Extra Notes:

[redacted]

HURT

923309

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ

Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date: 31/10/25	Vehicle Reg. No: PN11 CRJ	6w	
		8w	
	Driver: Des Davidson	Grab	
		Artic	

Customer: Westbrick

From: Lowe Pit

To: AI Services

Wet		Inert Spoil	✓	Hardcore		Other	

Contaminated Soil	Non-Hazardous		Hazardous

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	✓	Weight in Tonnes	

Extra Notes:

[redacted]

HURT Hurt Plant Hire FOX BROTHERS

HURT

923310

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ
Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
31/10/23	PN71 EBV	8w	/
	Driver:	Grab	
	Des Davidson	Artic	

Customer:	Wardentree
From:	Louisa Sheets
To:	AI Services

Wet		Inert Spoil	1	Hardcore		Other	

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	

Extra Notes:

[redacted]

HURT Hurt Plant Hire FOX BROTHERS CAMP

HURT

Hurt Plant Hire

923311

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ

Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
31.10.23	PN71 ERJ	8w	1
	Driver:	Grab	
	Des Donaldson	Artic	

Customer:	Westcheem
From:	Louisa Street
To:	A1

Wet		Inert Spoil	1	Hardcore		Other	

Contaminated Soil	Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	

Extra Notes:

[redacted]

HURT Hurt Plant Hire FOX BROTHERS

HURT

923105

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ

Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
31/10/23	PN71 ERK	8w	/
	Driver: KEVIN OLD	Grab	
		Artic	

Customer: WESTCHURCH

From: LOUISA STREET OLDHAM

To: AI SERVICES

Wet		Inert Spoil		Hardcore		Other	/

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	18.00

Extra Notes:

1 x MUCK

[redacted]

HURT Hurt Plant Hire FOX BROTHERS CMP

HURT

Hurt Plant Hire

923106

Hurt (Plant Hire) Limited
Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ
Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
30/10/23	PN71 FRK	8w	/
	Driver: KEVIN OCD	Grab	
		Artic	

Customer:	WESTCHURCH
From:	LOUISA STREET OPENSHAW
To:	

Wet		Inert Spoil		Hardcore		Other	/

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	18.00

Extra Notes:
1x much

[redacted]

HURT

923107

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ

Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
31/10/23	PN71 ERK	8w	/
	Driver: KEVIN OLD	Grab	
		Artic	

Customer: WESTCHURCH

From: LOUISA STREET OPENSTAN

To: AJ SERVICES

Wet		Inert Spoil		Hardcore		Other	/

/ Contaminated Soil	Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	18·00

Extra Notes:

1x MUCK

[redacted]

HURT Hurt Plant Hire FOX BROTHERS EMP

HURT

923108

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ
Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
31/10/23	PN71 ERK	8w	/
	Driver: KEVIN OLD	Grab	
		Artic	

Customer: WESTCHURCH

From: LOUISE STREET

To: AI SERVICES

Wet		Inert Spoil		Hardcore		Other	/

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	18.00

Extra Notes:

1 y muck

[redacted]

HURT Hurt Plant Hire FOX BROTHERS CMP

HURT 912745

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ
Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
31/10/23	PN71 LRO	8w	x
	Driver: Ben Connor	Grab	
		Artic	

Customer: Westlands

From: Lowsa St Openshaw

To: A1 Services

Wet		Inert Spoil	x	Hardcore		Other	

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	

Extra Notes:

milk

[redacted]

HURT Hurt Plant Hire FOX BROTHERS CMP

HURT 912746

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ
Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
31/10/23	PN71 EPO	8w	X
	Driver: Ben Connor	Grab	
		Artic	

Customer: West Ranch

From: Louisa St, Openshaw

To: A1 Services.

Wet		Inert Spoil	X	Hardcore		Other	

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads		Weight in Tonnes	

Extra Notes:

Mark.

[redacted]

HURT

912747

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ

Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
31/10/23	PN71 LRO	8w	X
	Driver: Ben Connor	Grab	
		Artic	

Customer: West Church.

From: Louisa St, Openshaw

To: A1 Services

Wet		Inert Spoil	X	Hardcore		Other	

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	

Extra Notes:

muck.

[redacted]

Part of the Fox Group

HURT Hurt Plant Hire FOX BROTHERS CMP

HURT 912748

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ
Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
31/10/23	PN71 ELO	8w	X
	Driver: B. Connor	Grab	
		Artic	

Customer: Westcotch

From: Louisa St, Ogmore Vale

To: AJ Services.

Wet		Inert Spoil	X	Hardcore		Other	

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	

Extra Notes:

Muck Stand load.

[redacted]

APPENDIX C

MATERIAL TRANSFER NOTES
(IMPORTED MATERIAL)

B. J. CROWTHER [redacted] LTD

Windsor House, Windsor Street,
Oldham, OL1 4AE
Tel: 0161 652 0505
Email: info@bjcrowther.co.uk
Web: www.bjcrowther.co.uk

Bulk Excavation · Muck Away · Tipper Hire · RoRo Skips · Aggregates

DELIVERY/WASTE TRANSFER NOTE

Date 30/9/24 Time ..... Order No. 10146087

Customer/Producer WESTCHURCH

Location CHARLOCK RICHMOND

TO LOUISA ST OLDHAM

Vehicle Reg MU19 TKO Driver DAVE W

Description of Goods	Weight	
HAUL TOP SOIL OP2	1x8WH	✓
	Gross:	KG
	Tare:	KG
WRAP Recycled Aggregate Protocol Compliant	Nett:	KG

Delivered		Off site	✓	Wet		Collect Ref	

Waste Disposal Location.....

Waste Producer SIC Code .....

Classification of materials removed from site:

EWC 17 05 04	☐ Soils & Stone	EWC 17 03 02	☐ Bitumous Mixtures (Tarmac)
EWC 17 01 01	☐ Concrete	EWC 17 01 07	☐ Mixture Concrete, Brick, Tiles, Ceramics
EWC 17 01 02	☐ Bricks	EWC	☐ Other

[redacted]

Waste Carriers Licence No: CBDU40692

BJC Company SIC Code: 43120

Waste Transfer Permit No: EPR/AP3629SG

No 133652

It is essential that all the written particulars entered above should be carefully checked by the consignee since this delivery note once signed by the consignee represents total acceptance and no subsequent complaints can be accepted. It is the responsibility of the customer to supply a banksman if the vehicle is required to travel off the public highway. The customer is also responsible for any damage caused to vehicles and property. In accordance with our Terms and Conditions a charge for excessive waiting time may be made.

ROWTHER TD [redacted]

Windsor House, Windsor Street,
Oldham, OL1 4AE
Tel: 0161 652 0505
Email: info@bjcrowther.co.uk
Web: www.bjcrowther.co.uk

cavation · Muck Away · Tipper Hire · RoRo Skips · Aggregates

DELIVERY/WASTE TRANSFER NOTE

1.24 Time 13.09 Order No. 104608?

ucer Weldwick homes

Her Lane Clayrock Richard

1V72 WPD Driver Mateusz

Description of Goods	Weight	
VRS or Aggr Cage only to use at Spenshaw	1x8WH	✓
	Gross:	KG
	Tare:	KG
egate Protocol Compliant	Nett:	KG

	Off site		Wet		Collect Ref	

cation.....

C Code .....

materials removed from site:

- ☐ Soils & Stone
- ☐ Concrete
- ☐ Bricks

EWC 17 03 02 ☐ Bitumous Mixtures (Tarmac)
EWC 17 01 07 ☐ Mixture Concrete, Brick, Tiles, Ceramics
EWC ..... ☐ Other

ed my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) R...

[redacted]

Code: 43120
nit No: EPR/AP3629SG

No 138551

itten particulars entered above should be carefully checked by the consignee since this delivery note once signed s total acceptance and no subsequent complaints can be accepted. It is the responsibility of the customer to supply required to travel off the public highway. The customer is also responsible for any damage caused to vehicles and h our Terms and Conditions a charge for excessive waiting time may be made.

HURT

Hurt Plant Hire

1031557

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ

Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
7.11.24	PN70 AAF	8w	✓
	Driver: JAMIEN	Grab	
		Artic	

Customer: WESTCHURCH

From: Invicta Dr

To: Louisa St

Wet		Inert Spoil		Hardcore		Other	

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil	✓	6F5		Crush	

No. of Loads	1	Weight in Tonnes	

Extra Notes:

TOP Soil

19775

[redacted]

Part of the Fox Group

HURT Hurt Plant Hire FOX BROTHERS CMP

HURT

Hurt Plant Hire

1031556

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ

Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
21.2.24	PW10 AAF	8w	
	Driver: JAMES	Grab	
		Artic	

Customer: WOSTHEAD

From: MORRISONS DC

To: LOWER ST.

Wet		Inert Spoil	✓	Hardcore		Other	

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	

Extra Notes: SUB/SOIL

[redacted]

Hurt Plant Hire

BROTHERS

HURT

1031562

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ
Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
11-11-24	PN70 AAF	8w	/
	Driver: JASON	Grab	
		Artic	

Customer: WESTHOUGHT

From: INVERNESS DR

To: LOUISA ST.

Wet		Inert Spoil	/	Hardcore		Other	

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	

Extra Notes: 1X SUB SOIL

[redacted]

HURT Hurt Plant Hire FOX BROTHERS

HURT

1031561

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ
Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
11.11.24	PW10 AAF	8w	✓
	Driver: JAMES	Grab	
		Artic	

Customer: WESTCHURCH

From: INVERNESS JR

To: LOUISA ST.

Wet		Inert Spoil		Hardcore		Other	

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil	✓	6F5		Crush	

No. of Loads	1	Weight in Tonnes	

Extra Notes:

SOIL

[redacted]

HURT Hurt Plant Hire FOX BROTHERS

HURT 1031081

Hurt Plant Hire

Hurt (Plant Hire) Limited

Sandham House, Lancashire Enterprise Business Park, Redrose Drive, Leyland, PR26 6TJ

Telephone: 01772 432475 **Email:** sales@hurtplant.co.uk **Web:** www.clivehurtplanthire.co.uk

Date:	Vehicle Reg. No:	6w	
21/10/24	PN24 CGX	8w	
	Driver:	Grab	
	Simon	Artic	

Customer: Westchurch

From: Invergreg Drive

To: Openshaw

Wet		Inert Spoil		Hardcore		Other	

Contaminated Soil		Non-Hazardous		Hazardous	

Recycled Aggregate Produced In Accordance with the Wrap Protocol

Sand		MOT		Topsoil		6F5		Crush	

No. of Loads	1	Weight in Tonnes	

Extra Notes:

Site to site

[redacted]

B. J. CROWTHER [redacted] LTD

Windsor House, Windsor Street,
Oldham, OL1 4AE
Tel: 0161 652 0505
Email: info@bjcrowther.co.uk
Web: www.bjcrowther.co.uk

Bulk Excavation Muck Away Tipper Hire RoRo Skips Aggregates

DELIVERY/WASTE TRANSFER NOTE

Date 6-9-16 Time 2:40 Order No.....

Customer/Producer West Coast Waste

Location Lawrence Dr

.....

Vehicle Reg WA16 CRX Driver Tony

Description of Goods	Weight	
Hum Top Soil	1x8WH	✓
	Gross:	KG
	Tare:	KG
WRAP Recycled Aggregate Protocol Compliant	Nett:	KG

Delivered		Off site	✓	Wet		Collect Ref	

Waste Disposal Location Lowes St.

Waste Producer SIC Code .....

Classification of materials removed from site:

EWC 17 05 04 ☐	Soils & Stone	EWC 17 03 02 ☐	Bitumous Mixtures (Tarmac)
EWC 17 01 01 ☐	Concrete	EWC 17 01 07 ☐	Mixture Concrete, Brick, Tiles, Ceramics
EWC 17 01 02 ☐	Bricks	EWC ..... ☐	Other

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) Regulations 2011

[redacted]

Waste Carriers Licence No: CBDU40692
BJC Company SIC Code: 43120
Waste Transfer Permit No: EPR/AP3629SG

No 132233

It is essential that all the written particulars entered above should be carefully checked by the consignee since this delivery note once signed by the consignee represents total acceptance and no subsequent complaints can be accepted. It is the responsibility of the customer to supply a banksman if the vehicle is required to travel off the public highway. The customer is also responsible for any damage caused to vehicles and property. In accordance with our Terms and Conditions a charge for excessive waiting time may be made.

WTHER
LTD [redacted]
Windsor House, Windsor Street,
Oldham, OL1 4AE
Tel: 0161 652 0505
Email: info@bjcrowther.co.uk
Web: www.bjcrowther.co.uk

cavation Muck Away Tipper Hire RoRo Skips Aggregates

DELIVERY/WASTE TRANSFER NOTE

19/12/25 Time 8.10-8.25 Order No 1014-086A

ducer WESTCHURCH HOMES

INVERCARG DRIVE

BREIGHMET

MULTY 0 Driver DAVE W

Description of Goods	Weight	
HAUL TOP SOIL O LOUISA ST OPENSHAWE	1x8WH	✓
	Gross:	KG
	Tare:	KG
Aggregate Protocol Compliant	Nett:	KG

	Off site	✓	Wet		Collect Ref	

l Location.....

r SIC Code .....

n of materials removed from site:

- ☐ Soils & Stone
- ☐ Concrete
- ☐ Bricks

EWC 17 03 02 ☐ Bitumous Mixtures (Tarmac)
EWC 17 01 07 ☐ Mixture Concrete, Brick, Tiles, Ceramics
EWC ..... ☐ Other

[redacted]

Licence No: CBD040692
SIC Code: 43120
Permit No: EPR/AP3629SG

No 132442

the written particulars entered above should be carefully checked by the consignee since this delivery note once signed presents total acceptance and no subsequent complaints can be accepted. It is the responsibility of the customer to supply ehicle is required to travel off the public highway. The customer is also responsible for any damage caused to vehicles and nce with our Terms and Conditions a charge for excessive waiting time may be made.

B. J. CROWTHER [redacted] LTD

Windsor House, Windsor Street,
Oldham, OL1 4AE
Tel: 0161 652 0505
Email: info@bjcrowther.co.uk
Web: www.bjcrowther.co.uk

Bulk Excavation Muck Away Tipper Hire RoRo Skips Aggregates

DELIVERY/WASTE TRANSFER NOTE

Date 6.9.24 Time 13.00 Order No.....

Customer/Producer Westchurch Homes

Location Alverton Drive Golcar

.....

Vehicle Reg MN12 UKD Driver Nathan

Description of Goods		Weight	
Subsoil bringing only to Lowson St Oldham	1x8WH	~	
	Gross:		KG
	Tare:		KG
WRAP Recycled Aggregate Protocol Compliant	Nett:		KG

Delivered		Off site	~	Wet		Collect Ref	

Waste Disposal Location.....

Waste Producer SIC Code .....

Classification of materials removed from site:

EWC 17 05 04 ☐ Soils & Stone
EWC 17 01 01 ☐ Concrete
EWC 17 01 02 ☐ Bricks
EWC 17 03 02 ☐ Bitumous Mixtures (Tarmac)
EWC 17 01 07 ☐ Mixture Concrete, Brick, Tiles, Ceramics
EWC ..... ☐ Other

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) Regulations 2011

[redacted]

Waste Carriers Licence No: CBDU40692
BJC Company SIC Code: 43120
Waste Transfer Permit No: EPR/AP3629SG

No 132482

It is essential that all the written particulars entered above should be carefully checked by the consignee since this delivery note once signed by the consignee represents total acceptance and no subsequent complaints can be accepted. It is the responsibility of the customer to supply a banksman if the vehicle is required to travel off the public highway. The customer is also responsible for any damage caused to vehicles and property. In accordance with our Terms and Conditions a charge for excessive waiting time may be made.

B. J. CROWTHER [redacted] LTD

Windsor House, Windsor Street,
Oldham, OL1 4AE
Tel: 0161 652 0505
Email: info@bjcrowther.co.uk
Web: www.bjcrowther.co.uk

Bulk Excavation · Muck Away · Tipper Hire · RoRo Skips · Aggregates

DELIVERY/WASTE TRANSFER NOTE

Date 6.9.24 Time (Order No

Customer/Producer Westclock Homes

Location Inverurie Drive
Bolton

Vehicle Reg MA71 CAD Driver MALCOLM

Description of Goods	Weight	
1x6.30yc hardcore only to Louisa St. Openshaw	1x8WH	✓
	Gross:	KG
	Tare:	KG
WRAP Recycled Aggregate Protocol Compliant	Nett:	KG

Delivered		Off site	✓	Wet		Collect Ref	

Waste Disposal Location

Waste Producer SIC Code

Classification of materials removed from site:

EWC 17 05 04	☐ Soils & Stone	EWC 17 03 02	☐ Bitumous Mixtures (Tarmac)
EWC 17 01 01	☐ Concrete	EWC 17 01 07	☐ Mixture Concrete, Brick, Tiles, Ceramics
EWC 17 01 02	☐ Bricks	EWC	☐ Other

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) Regulations 2011

[redacted]

BJC Company SIC Code: 43120
Waste Transfer Permit No: EPR/AP3629SG

No 132481

It is essential that all the written particulars entered above should be carefully checked by the consignee since this delivery note once signed by the consignee represents total acceptance and no subsequent complaints can be accepted. It is the responsibility of the customer to supply a banksman if the vehicle is required to travel off the public highway. The customer is also responsible for any damage caused to vehicles and property. In accordance with our Terms and Conditions a charge for excessive waiting time may be made.

B. J. CROWTHER [redacted] LTD

Windsor House, Windsor Street,
Oldham, OL1 4AE
Tel: 0161 652 0505
Email: info@bjcrowther.co.uk
Web: www.bjcrowther.co.uk

Bulk Excavation Muck Away Tipper Hire RoRo Skips Aggregates

DELIVERY/WASTE TRANSFER NOTE

Date 2.9.24 Time 09.45 Order No 1020 18-10

Customer/Producer Westwell

Location Windsor Drive Bolton

Vehicle Reg MW21 WRD Driver Aaron

Description of Goods	Weight	
1 subsoil hauled only to Louisa St Openshaw	1x8WH	
	Gross:	KG
	Tare:	KG
WRAP Recycled Aggregate Protocol Compliant	Nett:	KG

Delivered		Off site	✓	Wet		Collect Ref	

Waste Disposal Location .....

Waste Producer SIC Code .....

Classification of materials removed from site:

EWC 17 05 04 ☐ Soils & Stone
EWC 17 01 01 ☐ Concrete
EWC 17 01 02 ☐ Bricks
EWC 17 03 02 ☐ Bitumous Mixtures (Tarmac)
EWC 17 01 07 ☐ Mixture Concrete, Brick, Tiles, Ceramics
EWC ..... ☐ Other

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) Regulations 2011

[redacted]

Waste Carriers Licence No: CBDU40692
BJC Company SIC Code: 43120
Waste Transfer Permit No: EPR/AP3629SG

No 132459

It is essential that all the written particulars entered above should be carefully checked by the consignee since this delivery note once signed by the consignee represents total acceptance and no subsequent complaints can be accepted. It is the responsibility of the customer to supply a banksman if the vehicle is required to travel off the public highway. The customer is also responsible for any damage caused to vehicles and property. In accordance with our Terms and Conditions a charge for excessive waiting time may be made.

B. J. CROWTHER LTD

Windsor House, Windsor Street,
Oldham, OL1 4AE
Tel: 0161 652 0505
Email: info@bjcrowther.co.uk
Web: www.bjcrowther.co.uk

Bulk Excavation Muck Away Tipper Hire RoRo Skips Aggregates

DELIVERY/WASTE TRANSFER NOTE

Date 2.9.24 Time 11.30 Order No. 10220-093B

Customer/Producer West Church

Location Inverbery Drive Bolton

Vehicle Reg MV22 UPO Driver Marcin

Description of Goods	Weight	
Topsoil haulage only to Lovisas St Openshaw	1x8WH	
	Gross:	KG
	Tare:	KG
WRAP Recycled Aggregate Protocol Compliant	Nett:	KG

Delivered		Off site		Wet		Collect Ref	

Waste Disposal Location.....

Waste Producer SIC Code .....

Classification of materials removed from site:

EWC 17 05 04 ☐	Soils & Stone	EWC 17 03 02 ☐	Bitumous Mixtures (Tarmac)
EWC 17 01 01 ☐	Concrete	EWC 17 01 07 ☐	Mixture Concrete, Brick, Tiles, Ceramics
EWC 17 01 02 ☐	Bricks	EWC ..... ☐	Other

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) Regulations 2011

[redacted]

Waste Carriers Licence No: CBDU40692
BJC Company SIC Code: 43120
Waste Transfer Permit No: EPR/AP3629SG

No 132460

It is essential that all the written particulars entered above should be carefully checked by the consignee since this delivery note once signed by the consignee represents total acceptance and no subsequent complaints can be accepted. It is the responsibility of the customer to supply a banksman if the vehicle is required to travel off the public highway. The customer is also responsible for any damage caused to vehicles and property. In accordance with our Terms and Conditions a charge for excessive waiting time may be made.

APPENDIX D

SOURCE CHEMICAL TESTING RESULTS & REPORTING

CONSULTING
ENGINEERS
Geotechnical
Environmental
Ecology
Geology
Drainage
Mining

Earth Environmental &
Geotechnical Ltd
Houldsworth Mill Business &
Arts Centre
Houldsworth Street
Stockport
SK5 6DA

Tel: 0161 975 6088

www.earthenvironmental.co.uk
info@earthenvironmental.co.uk

Bath
Studio 3
Tollbridge Studios
Toll Bridge Road
Bath
BA1 7DE
Tel: 01225 858833

Cardiff
12 Cathedral Road
Cardiff
CF11 9LJ
Tel: 0292 2362615

Edinburgh
Hudson House
8 Albany Street
Edinburgh
EH1 3QB
Tel: 0131 5641789

Wilton
Wilton Centre
Redcar
TS10 4RF
Tel: 01642 438125

Reading
Suite 18
Wyvols Court
Swallowfield
Reading
RG7 1WY
Tel: 01183 734000

Earth Environmental &
Geotechnical Ltd
Registered Office:
Mentor House, Ainsworth Street,
Blackburn, Lancashire, BB1 6AY

OUR REF: A5882-24 15th March 2024
YOUR REF:

15th March 2024

Mr. Paul Sinclair
Westchurch Homes Ltd
31 Stamford Street
Altrincham
Cheshire
WA14 1ES

By Email (paul.sinclair@westchurchhomes.co.uk)

Dear Paul,

Inverbeg Drive, Bolton
Stockpile Chemical Testing

Background and Terms of Reference

This report provides a summary of the validation of the site won and stockpiled material

This report should be read in conjunction with a Betts Ground Investigation Report (Report No. 20WCH012/GI) dated November 2021.

It is understood that stockpiled subsoil and topsoil will be used on site (within garden/landscaped areas) and also used on other nearby Westchurch projects.

Site Location

The site is located south of Inverbeg Drive, Bolton, BL2 6NA.

The coordinates on the British National Grid CRS are 375076, 408854.

The proposed site is approximately 2.09 hectares in total.

Site History

The previous site investigation report indicates that the site was formerly used as a football pitch.

Scope of Work

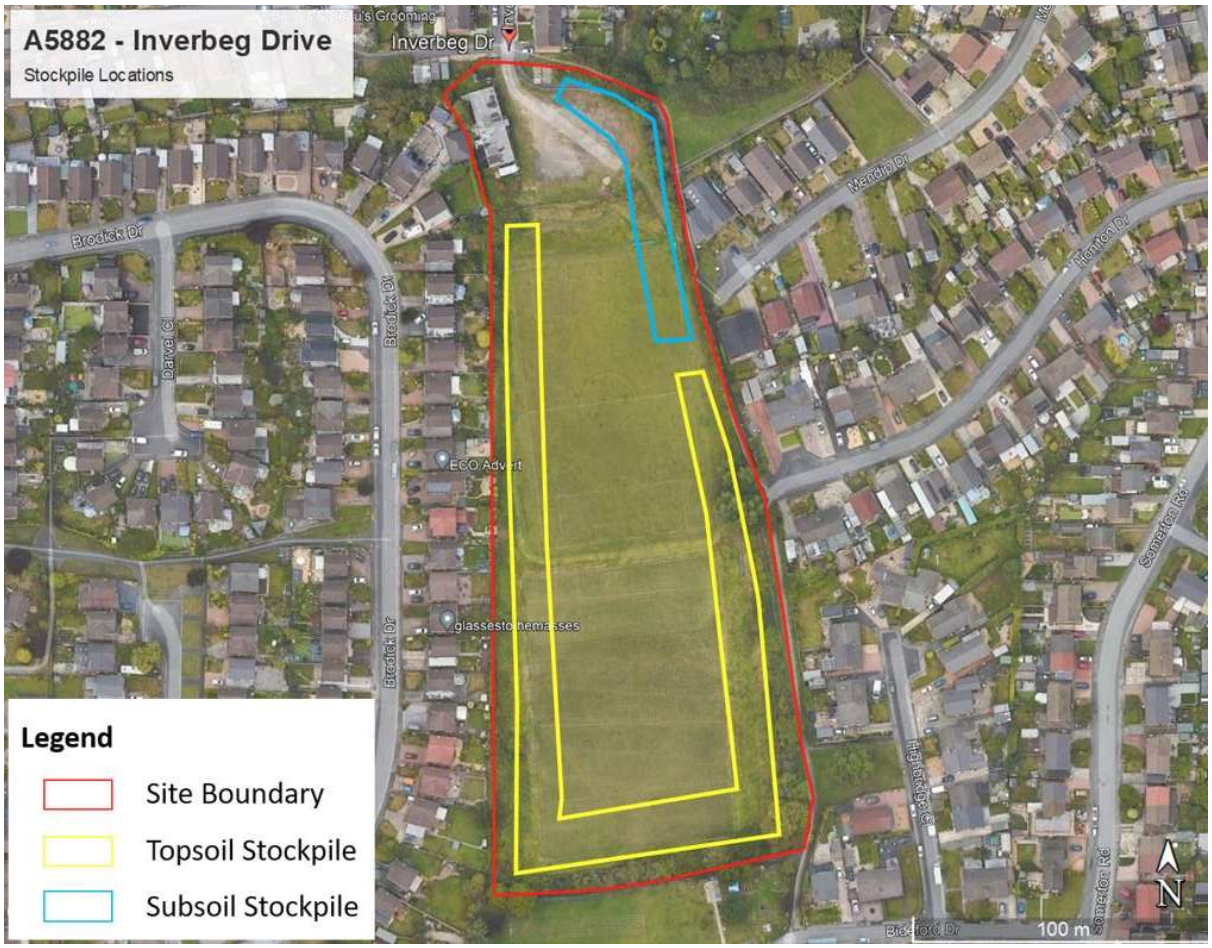
A site visit was conducted on the 1st March 2023 to recover samples of subsoil and topsoil that were provided by client whilst on site.

Twelve soil samples were taken in total.

Chemical testing has been performed by DETS, a UKAS and MCERTS accredited laboratory. Appendix A provides a copy of the testing results.

There was no visual or olfactory evidence of contamination observed during the site sampling process.

Figure 1: Stockpile Location Plan



Chemical Testing

12no. samples were obtained in total from the stockpiles, with 6no. samples of topsoil and 6no. samples of subsoil, as requested by the client.

Chemical testing has been performed for a wide range of analytes including asbestos screen, pH, total organic carbon, total sulphate, sulphide, total cyanide, arsenic, chromium, hexavalent chromium, copper, lead, selenium, zinc, cadmium, mercury, nickel, vanadium, barium, beryllium, water soluble boron, mono phenol, speciated hydrocarbons and speciated PAH's.

At a Tier I stage the long term (chronic) human health toxicity of the soil has been assessed with reference to DEFRA/Environment Agency Contaminated Land Exposure Assessment (CLEA) Soil Guideline Values (SGV) for generic site land uses, soils, and exposure.

Where Environment Agency generic guidance is absent, reference has been made to the Chartered Institute of Environmental Health (CIEH) S4ULs for human health risk assessment.

In the case of arsenic, cadmium, hexavalent chromium, lead, benzene, naphthalene, and benzo(a)pyrene DEFRA Category 4 Screening Levels have been adopted. The results have been compared to residential with plant uptake and 6% soil organic matter (SOM).

EARTH ENVIRONMENTAL & GEOTECHNICAL

Table 1 Assessment of Soil Chemical Data

Determinand	C4SL/S4UL Levels Resi w/ HP SOM 6% (mg/kg)	Topsoil 1	Topsoil 2	Topsoil 3	Topsoil 4	Topsoil 5	Topsoil 6	Subsoil 1	Subsoil 2	Subsoil 3	Subsoil 4	Subsoil 5	Subsoil 6	Exceedances
Metals														
Arsenic	37	18	18	16	17	21	18	6	6	8	8	6	7	0
Beryllium	1.7	0.7	0.7	0.9	0.7	0.8	0.7	1.1	1.1	1.3	1.3	1	0.9	0
Boron	290	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0
Cadmium	11	0.3	0.3	0.3	0.3	0.4	0.3	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0
Chromium	910	19	23	22	18	20	20	17	17	19	20	18	16	0
Chromium VI	21	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Copper	2400	30	30	32	30	33	30	21	24	27	25	22	21	0
Lead	200	93	80	64	87	83	78	16	15	16	15	11	11	0
Inorganic Mercury	40	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0
Nickel	130	12	15	17	11	13	12	20	20	22	21	17	18	0
Selenium	250	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Vanadium	410	21	23	22	22	23	21	21	19	20	23	18	19	0
Zinc	3700	78	77	74	76	79	73	52	47	54	51	41	46	0
Petroleum Hydrocarbons														
Benzene	0.20	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0
Toluene	130	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0
Ethylbenzene	47	<0.002	<0.002	0.005	<0.002	0.005	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	0
o-xylenes	60	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0
m-xylenes	59	<0.002	<0.002	< 0.002	0.006	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	0.003	0
p-xylenes	56	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0
Aliphatic EC >5-6	42	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0
Aliphatic EC >6-8	100	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aliphatic EC >8-10	27	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aliphatic EC >10-12	130	< 2	< 2	< 2	< 2	< 2	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0
Aliphatic EC >12-16	1100	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0
Aliphatic EC >16-21	65000	< 3	< 3	< 3	< 3	< 3	< 10	< 10	< 10	< 10	< 10	< 10	< 10	0
Aliphatic EC >21-35	65000	< 10	< 10	< 10	< 10	< 10	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0
Aromatic EC >5-7	70	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0
Aromatic EC >7-8	130	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0
Aromatic EC >8-10	34	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aromatic EC >10-12	74	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aromatic EC >12-16	140	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aromatic EC >16-21	260	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0
Aromatic EC >21-35	1100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	0

Polycyclic Aromatic Hydrocarbons														
Naphthalene	2.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Acenaphthylene	170	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Acenaphthene	210	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Fluorene	170	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Phenanthrene	95	< 0.1	0.15	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Anthracene	2400	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Fluoranthene	280	< 0.1	0.28	0.14	< 0.1	0.20	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Pyrene	620	< 0.1	0.27	< 0.1	< 0.1	0.17	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(a)anthracene	7.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Chrysene	15	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(a)pyrene	5.0	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(b)fluoranthene	2.6	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(k)fluoranthene	77	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Indeno(1,2,3-cd)pyrene	27	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Dibenz(a,h)anthracene	0.24	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(ghi)perylene	320	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Phenols														
Phenol	120	3.6	< 2	< 2	3.4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Asbestos														
	<0.001%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

Notes for Table 1

All units in mg/kg.

Concentrations in **red** above assessment criteria for residential end use criteria with plant uptake

Based on the above table, no samples tested from soil stockpiles contain concentrations of contaminants in exceedance of the screening criteria relevant to residential end use with plant uptake.

No asbestos fibres or fragments were identified in the samples taken.

Conclusions & Recommendations

For the samples collected from the imported soil cover material (topsoil stockpile and subsoil), all concentrations of potential contaminants of concern are less than soil assessment criteria for the long-term protection of human health for a residential end use.

The stockpiles are therefore suitable for use.

Should you have any queries regarding the contents of this report, please feel free to contact me at any time.

Yours Sincerely,



Adam Czarnecki
Director
For and on behalf of Earth Environmental & Geotechnical Ltd

Appendix A Soil Chemical Testing Results
Appendix B Soil Assessment Criteria
Appendix C Site Photographs

APPENDIX A

SOIL CHEMICAL TESTING RESULTS

APPENDIX B

SOIL ASSESSMENT CRITERIA

Assessment Criteria for Imported Soils in Garden Areas

Inorganic Compounds	Assessment Criteria - Residential with Homegrown Produce (mg/kg)		
Arsenic	37		
Cadmium	22		
Chromium (III)	910		
Chromium (VI)	6		
Lead	200		
Inorganic Mercury	40		
Nickel	130		
Selenium	250		
Copper	2400		
Zinc	3700		
Organic Compounds	**1% SOM**	**2.5% SOM**	**6% SOM**
Naphthalene	2.3	5.6	13
Acenaphthene	210	510	1100
Acenaphthylene	170	420	920
Fluorene	170	400	860
Phenanthrene	95	220	440
Anthracene	2400	5400	11000
Fluoranthene	280	560	890
Pyrene	620	1200	2000
Benzo(a)anthracene	7.2	11	13
Chrysene	15	22	27
Benzo(b)fluoranthene	2.6	3.3	3.7
Benzo(k)fluoranthene	77	93	100
Benzo(a)pyrene	5.0	5.,0	5.0
Dibenz (a, h) anthracene	0.24	0.28	0.3
Indeno(1,2,3-cd) pyrene	27	36	41
Benzo (g, h, i) perylene	320	340	350
Benzene	0.2	0.41	0.87
Toluene	130	290	660
Ethylbenzene	47	110	260
o-Xylene	60	140	330
m-Xylene	59	140	320
p-Xylene	56	130	310
TPH Fractions	**1% SOM**	**2.5% SOM**	**6% SOM**
Aliphatic EC 5-6	42	78	160
Aliphatic EC >6-8	100	230	530
Aliphatic EC >8-10	27	65	150
Aliphatic EC >10-12	130 (48) [vap]	330 (118) [vap]	760 (283) [vap]
Aliphatic EC >12-16	1100 (24) [sol]	2400 (59) [sol]	4,300 (142) [sol]
Aliphatic EC >16-35	65,000 (8.48) [f, sol]	92,000 (21) [f, sol]	110,000 [f]
Aliphatic EC >35-44	65,000 (8.48) [f, sol]	92,000 (21) [f, sol]	110,000 [f]
Aromatic EC 5-7	70	140	300
Aromatic EC >7-8	130	290	660

	Assessment Criteria - Residential with Homegrown Produce (mg/kg)		
TPH Fractions	**1% SOM**	**2.5% SOM**	**6% SOM**
Aromatic EC>8-10	34	83	190
Aromatic EC >10-12	74	180	380
Aromatic EC >12-16	140	330	660
Aromatic EC >16-21	260[f]	540[f]	930[f]
Aromatic EC >21-35	1,100[f]	1,500[f]	1,700[f]
Aromatic EC >35-44	1,100[f]	1,500[f]	1,700[f]
Asbestos Fibres	< 0.001%		

APPENDIX C

SITE PHOTOGRAPHS

Earth Environmental & Geotechnical Ltd **Tel:** 0161 975 6088 **Email**: info@earthenvironmental.co.uk **Web**: www.earthenvironmental.co.uk	**SITE PHOTOGRAPHS**
Job No.: A5882/24	**Site:** Inverbeg Drive, Bolton
Plate 1 General View	**Plate 2 General View**
	
Date: 1st March 2024	**Date:** 1st March 2024
Plate 3 General View	
	
Date: 1st March 2024	

Ross Page
Earth Environmental & Geotechnical Ltd
Houldsworth Mill Business Centre
Houldsworth Street
Reddish
Stockport
Cheshire
SK5 6DA

Normec DETS Limited
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 24-02363

Site Reference:	Inverbeg Drive
Project / Job Ref:	A5882
Order No:	A5882/RP/01
Sample Receipt Date:	06/03/2024
Sample Scheduled Date:	06/03/2024
Report Issue Number:	1
Reporting Date:	12/03/2024

Authorised by:

[redacted]

Kevin Old
Operations Director

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 24-02363	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 1	Topsoil 2	Topsoil 3	Topsoil 4	Topsoil 5
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/01	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 12/03/2024	**DETS Sample No**	702548	702549	702550	702551	702552

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
pH	pH Units	N/a	MCERTS	6.0	5.9	6.6	6.2	6.4
Total Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Complex Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	< 200	MCERTS	683	537	338	463	509
Total Sulphate as SO_4	%	< 0.02	MCERTS	0.07	0.05	0.03	0.05	0.05
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	37	15	12	22	16
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.04	0.01	0.01	0.02	0.02
Sulphide	mg/kg	< 5	NONE	< 5	< 5	5	13	< 5
Organic Matter (SOM)	%	< 0.1	MCERTS	7.5	6.4	5.3	7	6.2
Arsenic (As)	mg/kg	< 2	MCERTS	18	18	16	17	21
Barium (Ba)	mg/kg	< 2.5	MCERTS	90	95	125	90	99
Beryllium (Be)	mg/kg	< 0.5	MCERTS	0.7	0.7	0.9	0.7	0.8
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	0.3	0.3	0.3	0.3	0.4
Chromium (Cr)	mg/kg	< 2	MCERTS	19	23	22	18	20
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Copper (Cu)	mg/kg	< 4	MCERTS	30	30	32	30	33
Lead (Pb)	mg/kg	< 3	MCERTS	93	80	64	87	83
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	12	15	17	11	13
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Vanadium (V)	mg/kg	< 1	MCERTS	21	23	22	22	23
Zinc (Zn)	mg/kg	< 3	MCERTS	78	77	74	76	79
Total Phenols (monohydric)	mg/kg	< 2	NONE	3.6	< 2	< 2	3.4	< 2

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)
~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 24-02363	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 6	Sub 1	Sub 2	Sub 3	Sub 4
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/01	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 12/03/2024	**DETS Sample No**	702553	702554	702555	702556	702557

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
pH	pH Units	N/a	MCERTS	6.5	5.2	5.9	5.6	5.8
Total Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Complex Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	< 200	MCERTS	527	< 200	< 200	< 200	< 200
Total Sulphate as SO_4	%	< 0.02	MCERTS	0.05	< 0.02	< 0.02	< 0.02	< 0.02
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	11	23	14	19	21
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.01	0.02	0.01	0.02	0.02
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter (SOM)	%	< 0.1	MCERTS	6.2	2.2	1.8	3.7	2.2
Arsenic (As)	mg/kg	< 2	MCERTS	18	6	6	8	8
Barium (Ba)	mg/kg	< 2.5	MCERTS	90	159	136	155	162
Beryllium (Be)	mg/kg	< 0.5	MCERTS	0.7	1.1	1.1	1.3	1.3
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	0.3	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	20	17	17	19	20
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Copper (Cu)	mg/kg	< 4	MCERTS	30	21	24	27	25
Lead (Pb)	mg/kg	< 3	MCERTS	78	16	15	16	15
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	12	20	20	22	21
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Vanadium (V)	mg/kg	< 1	MCERTS	21	21	19	20	23
Zinc (Zn)	mg/kg	< 3	MCERTS	73	52	47	54	51
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)
~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 24-02363	**~Date Sampled**	01/03/24	01/03/24			
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied			
~Site Reference: Inverbeg Drive	**~TP / BH No**	Sub 5	Sub 6			
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied			
~Order No: A5882/RP/01	**~Depth (m)**	None Supplied	None Supplied			
Reporting Date: 12/03/2024	**DETS Sample No**	702558	702559			

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Not Detected			
pH	pH Units	N/a	MCERTS	6.2	6.0			
Total Cyanide	mg/kg	< 1	NONE	< 1	< 1			
Complex Cyanide	mg/kg	< 1	NONE	< 1	< 1			
Free Cyanide	mg/kg	< 1	NONE	< 1	< 1			
Total Sulphate as SO_4	mg/kg	< 200	MCERTS	< 200	< 200			
Total Sulphate as SO_4	%	< 0.02	MCERTS	< 0.02	< 0.02			
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	10	14			
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.01	0.01			
Sulphide	mg/kg	< 5	NONE	< 5	< 5			
Organic Matter (SOM)	%	< 0.1	MCERTS	1.7	1.6			
Arsenic (As)	mg/kg	< 2	MCERTS	6	7			
Barium (Ba)	mg/kg	< 2.5	MCERTS	140	129			
Beryllium (Be)	mg/kg	< 0.5	MCERTS	1	0.9			
W/S Boron	mg/kg	< 1	NONE	< 1	< 1			
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	< 0.2	< 0.2			
Chromium (Cr)	mg/kg	< 2	MCERTS	18	16			
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2			
Copper (Cu)	mg/kg	< 4	MCERTS	22	21			
Lead (Pb)	mg/kg	< 3	MCERTS	11	11			
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1			
Nickel (Ni)	mg/kg	< 3	MCERTS	17	18			
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2			
Vanadium (V)	mg/kg	< 1	MCERTS	18	19			
Zinc (Zn)	mg/kg	< 3	MCERTS	41	46			
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2			

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)
~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 24-02363	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 1	Topsoil 2	Topsoil 3	Topsoil 4	Topsoil 5
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/01	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 12/03/2024	**DETS Sample No**	702548	702549	702550	702551	702552

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	0.15	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	0.28	0.14	< 0.1	0.20
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	0.27	< 0.1	< 0.1	0.17
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 24-02363	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 6	Sub 1	Sub 2	Sub 3	Sub 4
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/01	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 12/03/2024	**DETS Sample No**	702553	702554	702555	702556	702557

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 24-02363	~Date Sampled	01/03/24	01/03/24			
Earth Environmental & Geotechnical Ltd	~Time Sampled	None Supplied	None Supplied			
~Site Reference: Inverbeg Drive	~TP / BH No	Sub 5	Sub 6			
~Project / Job Ref: A5882	~Additional Refs	None Supplied	None Supplied			
~Order No: A5882/RP/01	~Depth (m)	None Supplied	None Supplied			
Reporting Date: 12/03/2024	DETS Sample No	702558	702559			

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6			

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 24-02363	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 1	Topsoil 2	Topsoil 3	Topsoil 4	Topsoil 5
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/01	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 12/03/2024	**DETS Sample No**	702548	702549	702550	702551	702552

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 24-02363	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 6	Sub 1	Sub 2	Sub 3	Sub 4
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/01	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 12/03/2024	**DETS Sample No**	702553	702554	702555	702556	702557

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42

~ Sample details provided by the customer

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Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 24-02363	**~Date Sampled**	01/03/24	01/03/24			
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied			
~Site Reference: Inverbeg Drive	**~TP / BH No**	Sub 5	Sub 6			
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied			
~Order No: A5882/RP/01	**~Depth (m)**	None Supplied	None Supplied			
Reporting Date: 12/03/2024	**DETS Sample No**	702558	702559			

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01	< 0.01			
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05	< 0.05			
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2			
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2			
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3			
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3			
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10	< 10			
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21	< 21			
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01	< 0.01			
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05	< 0.05			
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2			
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2			
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2			
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	< 3	< 3			
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	< 10	< 10			
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21	< 21			
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42	< 42			

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 24-02363	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 1	Topsoil 2	Topsoil 3	Topsoil 4	Topsoil 5
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/01	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 12/03/2024	**DETS Sample No**	702548	702549	702550	702551	702552

Determinand	Unit	RL	Accreditation					
Benzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	5	< 2	5
p & m-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	6	< 2
o-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 24-02363	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 6	Sub 1	Sub 2	Sub 3	Sub 4
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/01	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 12/03/2024	**DETS Sample No**	702553	702554	702555	702556	702557

Determinand	Unit	RL	Accreditation					
Benzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	3	< 2	< 2	< 2
p & m-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	3	< 2	< 2	< 2
o-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 24-02363	**~Date Sampled**	01/03/24	01/03/24			
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied			
~Site Reference: Inverbeg Drive	**~TP / BH No**	Sub 5	Sub 6			
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied			
~Order No: A5882/RP/01	**~Depth (m)**	None Supplied	None Supplied			
Reporting Date: 12/03/2024	**DETS Sample No**	702558	702559			

Determinand	Unit	RL	Accreditation					
Benzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2			
Toluene : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5			
Ethylbenzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2			
p & m-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	3			
o-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2			
MTBE : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5			

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 24-02363	
Earth Environmental & Geotechnical Ltd	
~Site Reference: Inverbeg Drive	
~Project / Job Ref: A5882	
~Order No: A5882/RP/01	
Reporting Date: 12/03/2024	

DETS Sample No	~TP / BH No	~Additional Refs	~Depth (m)	Moisture Content (%)	Sample Matrix Description
702548	Topsoil 1	None Supplied	None Supplied	39.5	Brown loamy sand with vegetation
702549	Topsoil 2	None Supplied	None Supplied	28.7	Brown loamy sand with vegetation
702550	Topsoil 3	None Supplied	None Supplied	27	Brown loamy sand with vegetation
702551	Topsoil 4	None Supplied	None Supplied	38.2	Brown loamy sand with vegetation
702552	Topsoil 5	None Supplied	None Supplied	30.4	Brown loamy sand with stones and vegetation
702553	Topsoil 6	None Supplied	None Supplied	30.8	Brown loamy sand with stones and vegetation
702554	Sub 1	None Supplied	None Supplied	16.1	Light brown sandy clay with stones
702555	Sub 2	None Supplied	None Supplied	16	Light brown sandy clay
702556	Sub 3	None Supplied	None Supplied	14.2	Light brown sandy clay with stones
702557	Sub 4	None Supplied	None Supplied	17.5	Light brown sandy clay with stones
702558	Sub 5	None Supplied	None Supplied	15.3	Grey sandy clay with stones
702559	Sub 6	None Supplied	None Supplied	12.9	Grey sandy clay with stones

Moisture content is part of procedure E003 & is not an accredited test
Insufficient Sample I/S
Unsuitable Sample U/S
~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 24-02363
Earth Environmental & Geotechnical Ltd
~Site Reference: Inverbeg Drive
~Project / Job Ref: A5882
~Order No: A5882/RP/01
Reporting Date: 12/03/2024

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D	TOC (Total Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried
AR As Received
~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

List of HWOL Acronyms and Operators
DETS Report No: 24-02363
Earth Environmental & Geotechnical Ltd
~Site Reference: Inverbeg Drive
~Project / Job Ref: A5882
~Order No: A5882/RP/01
Reporting Date: 12/03/2024

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total
~	Sample details provided by the customer

Benzene - HS_1D_MS
Ethylbenzene - HS_1D_MS
MTBE - HS_1D_MS
TPH CWG - Aliphatic >C10 - C12 - EH_CU_1D_AL
TPH CWG - Aliphatic >C12 - C16 - EH_CU_1D_AL
TPH CWG - Aliphatic >C16 - C21 - EH_CU_1D_AL
TPH CWG - Aliphatic >C21 - C34 - EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C6 - HS_1D_MS_AL
TPH CWG - Aliphatic >C6 - C8 - HS_1D_MS_AL
TPH CWG - Aliphatic >C8 - C10 - EH_CU_1D_AL
TPH CWG - Aliphatic C5 - C34 - HS_1D_MS+EH_CU_1D_AL
TPH CWG - Aromatic >C10 - C12 - EH_CU_1D_AR
TPH CWG - Aromatic >C12 - C16 - EH_CU_1D_AR
TPH CWG - Aromatic >C16 - C21 - EH_CU_1D_AR
TPH CWG - Aromatic >C21 - C35 - EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C35 - HS_1D_MS+EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C7 - HS_1D_MS_AR
TPH CWG - Aromatic >C7 - C8 - HS_1D_MS_AR
TPH CWG - Aromatic >C8 - C10 - EH_CU_1D_AR
TPH CWG - Total >C5 - C35 - HS_1D_MS+EH_CU_1D_Total
Toluene - HS_1D_MS
m & p-xylene - HS_1D_MS
o-Xylene - HS_1D_MS

CONSULTING
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Earth Environmental &
Geotechnical Ltd
Houldsworth Mill Business &
Arts Centre
Houldsworth Street
Stockport
SK5 6DA

Tel: 0161 975 6088

www.earthenvironmental.co.uk
info@earthenvironmental.co.uk

Bath
Studio 3
Tollbridge Studios
Toll Bridge Road
Bath
BA1 7DE
Tel: 01225 858833

Cardiff
12 Cathedral Road
Cardiff
CF11 9LJ
Tel: 0292 2362615

Edinburgh
Hudson House
8 Albany Street
Edinburgh
EH1 3QB
Tel: 0131 5641789

Wilton
Wilton Centre
Redcar
TS10 4RF
Tel: 01642 438125

Reading
Suite 18
Wyvols Court
Swallowfield
Reading
RG7 1WY
Tel: 01183 734000

Earth Environmental &
Geotechnical Ltd
Registered Office:
Mentor House, Ainsworth Street,
Blackburn, Lancashire, BB1 6AY

OUR REF: A5882-24 5th June 2024
YOUR REF:

5th June 2024

Mr. Paul Sinclair
Westchurch Homes Ltd
31 Stamford Street
Altrincham
Cheshire
WA14 1ES

By Email (paul.sinclair@westchurchhomes.co.uk)

Dear Paul,

Inverbeg Drive, Bolton
Stockpile Chemical Testing

Background and Terms of Reference

This report provides a summary of the validation of the site won and stockpiled material.

This report should be read in conjunction with a Betts Ground Investigation Report (Report No. 20WCH012/GI) dated November 2021.

It is understood that stockpiled subsoil and topsoil will be used on site (within garden/landscaped areas) and also used on other nearby Westchurch projects.

Site Location

The site is located south of Inverbeg Drive, Bolton, BL2 6NA.

The proposed site is approximately 2.09 hectares in total.

Site History

The previous site investigation report indicates that the site was formerly used as a football pitch.

Scope of Work

A site visit was conducted on the 25th April 2024 to recover samples of subsoil and topsoil.

Twelve soil samples were taken in total.

Chemical testing has been performed by DETS, a UKAS and MCERTS accredited laboratory. Appendix A provides a copy of the testing results.

There was no visual or olfactory evidence of contamination observed during the site sampling process.

Figure 1: Stockpile Location Plan



Chemical Testing

12no. samples were obtained in total from the stockpiles, with 6no. samples of topsoil and 6no. samples of subsoil, as requested by the client.

Chemical testing has been performed for a wide range of analytes including asbestos screen, pH, total organic carbon, total sulphate, sulphide, total cyanide, arsenic, chromium, hexavalent chromium, copper, lead, selenium, zinc, cadmium, mercury, nickel, vanadium, barium, beryllium, water soluble boron, mono phenol, speciated hydrocarbons and speciated PAH's.

At a Tier I stage the long term (chronic) human health toxicity of the soil has been assessed with reference to DEFRA/Environment Agency Contaminated Land Exposure Assessment (CLEA) Soil Guideline Values (SGV) for generic site land uses, soils, and exposure.

Where Environment Agency generic guidance is absent, reference has been made to the Chartered Institute of Environmental Health (CIEH) S4ULs for human health risk assessment.

In the case of arsenic, cadmium, hexavalent chromium, lead, benzene, naphthalene, and benzo(a)pyrene DEFRA Category 4 Screening Levels have been adopted. The results have been compared to residential with plant uptake and 6% soil organic matter (SOM).

EARTH ENVIRONMENTAL & GEOTECHNICAL

Table 1 Assessment of Soil Chemical Data

Determinand	C4SL/S4UL Levels Resi w/ HP SOM 6% (mg/kg)	Topsoil 7	Topsoil 8	Topsoil 9	Topsoil 10	Topsoil 11	Topsoil 12	Subsoil 7	Subsoil 8	Subsoil 9	Subsoil 10	Subsoil 11	Subsoil 12	Exceedances
Metals														
Arsenic	37	15	17	17	16	18	14	7	5	6	8	7	9	0
Beryllium	1.7	0.8	0.9	0.9	0.9	0.9	0.8	0.9	1	1	1.3	1	1.1	0
Boron	290	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0
Cadmium	11	0.4	0.4	0.4	0.3	0.4	0.4	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0
Chromium	910	20	22	23	18	21	20	19	19	23	22	21	22	0
Chromium VI	21	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Copper	2400	34	42	39	34	38	34	28	32	26	30	32	32	0
Lead	200	80	86	78	82	85	75	19	14	15	16	16	22	0
Inorganic Mercury	40	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0
Nickel	130	15	15	15	15	15	14	26	32	31	36	33	29	0
Selenium	250	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Vanadium	410	24	24	24	22	24	21	21	21	26	28	23	25	0
Zinc	3700	76	85	75	69	83	74	70	75	70	79	78	74	0
Petroleum Hydrocarbons														
Benzene	0.20	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Toluene	130	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	0
Ethylbenzene	47	3	< 2	< 2	< 2	4	3	< 2	< 2	< 2	< 2	< 2	< 2	0
o-xylenes	60	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
p&m-xylenes	59	4	< 2	< 2	< 2	4	3	< 2	< 2	< 2	< 2	2	< 2	0
Aliphatic EC >5-6	42	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0
Aliphatic EC >6-8	100	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0
Aliphatic EC >8-10	27	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aliphatic EC >10-12	130	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aliphatic EC >12-16	1100	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0
Aliphatic EC >16-21	65000	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0
Aliphatic EC >21-35	65000	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	0
Aromatic EC >5-7	70	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0
Aromatic EC >7-8	130	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0
Aromatic EC >8-10	34	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aromatic EC >10-12	74	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aromatic EC >12-16	140	3	3	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aromatic EC >16-21	260	8	7	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0
Aromatic EC >21-35	1100	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	18	< 10	0

Determinand	C4SL/S4UL Levels Resi w/ HP SOM 6% (mg/kg)	Topsoil 7	Topsoil 8	Topsoil 9	Topsoil	Topsoil	Topsoil	Subsoil 7	Subsoil 8	Subsoil 9	Subsoil	Subsoil	Subsoil	Exceedances
Polycyclic Aromatic Hydrocarbons														
Naphthalene	15	0.19	0.17	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Acenaphthylene	170	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Acenaphthene	210	< 0.1	0.18	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Fluorene	170	< 0.1	0.13	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Phenanthrene	95	0.80	1.28	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Anthracene	2400	0.14	0.17	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Fluoranthene	280	1.57	1.39	< 0.1	< 0.1	0.14	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Pyrene	620	1.43	1.29	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(a)anthracene	7.2	0.74	0.39	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Chrysene	15	0.77	0.40	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(a)pyrene	5.0	0.67	0.19	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(b)fluoranthene	2.6	0.68	0.21	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(k)fluoranthene	77	0.28	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Indeno(1,2,3-cd)pyrene	27	0.34	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Dibenz(a,h)anthracene	0.24	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(ghi)perylene	320	0.25	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Phenols														
Phenol	120	3.6	< 2	< 2	3.4	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Asbestos														
	<0.001%	ND	ND	ND	ND	ND	ND	Detected	ND	ND	ND	ND	ND	

Notes for Table 1

All units in mg/kg.

Concentrations in **red** above assessment criteria for residential end use criteria with plant uptake

Based on the above table, no samples tested from soil stockpiles contain concentrations of contaminants in exceedance of the screening criteria relevant to residential end use with plant uptake.

Asbestos fibres were identified in Subsoil 7 in the form of amosite as fibre bundles.

The mass concentration of asbestos has been measured as 0.002%.

Conclusions & Recommendations

For the samples collected from the imported soil cover material (topsoil stockpile and subsoil), all concentrations of potential contaminants of concern are less than soil assessment criteria for the long-term protection of human health for a residential end use.

However, asbestos fibres are present in one of the subsoil samples and this material should not be used in gardens or landscaped areas.

Should you have any queries regarding the contents of this report, please feel free to contact me at any time.

Yours Sincerely,

Adam Czarnecki

Adam Czarnecki
Director
For and on behalf of Earth Environmental & Geotechnical Ltd

Appendix A Soil Chemical Testing Results
Appendix B Soil Assessment Criteria
Appendix C Site Photographs

APPENDIX A

SOIL CHEMICAL TESTING RESULTS

APPENDIX B

SOIL ASSESSMENT CRITERIA

Assessment Criteria for Imported Soils in Garden Areas

Inorganic Compounds	Assessment Criteria - Residential with Homegrown Produce (mg/kg)		
Arsenic	37		
Cadmium	22		
Chromium (III)	910		
Chromium (VI)	6		
Lead	200		
Inorganic Mercury	40		
Nickel	130		
Selenium	250		
Copper	2400		
Zinc	3700		
Organic Compounds	**1% SOM**	**2.5% SOM**	**6% SOM**
Naphthalene	15	36	85
Acenaphthene	210	510	1100
Acenaphthylene	170	420	920
Fluorene	170	400	860
Phenanthrene	95	220	440
Anthracene	2400	5400	11000
Fluoranthene	280	560	890
Pyrene	620	1200	2000
Benzo(a)anthracene	7.2	11	13
Chrysene	15	22	27
Benzo(b)fluoranthene	2.6	3.3	3.7
Benzo(k)fluoranthene	77	93	100
Benzo(a)pyrene	5.0	5.0	5.0
Dibenz (a, h) anthracene	0.24	0.28	0.3
Indeno(1,2,3-cd) pyrene	27	36	41
Benzo (g, h, i) perylene	320	340	350
Benzene	0.2	0.41	0.87
Toluene	130	290	660
Ethylbenzene	47	110	260
o-Xylene	60	140	330
m-Xylene	59	140	320
p-Xylene	56	130	310
TPH Fractions	**1% SOM**	**2.5% SOM**	**6% SOM**
Aliphatic EC 5-6	42	78	160
Aliphatic EC >6-8	100	230	530
Aliphatic EC >8-10	27	65	150
Aliphatic EC >10-12	130 (48) [vap]	330 (118) [vap]	760 (283) [vap]
Aliphatic EC >12-16	1100 (24) [sol]	2400 (59) [sol]	4,300 (142) [sol]
Aliphatic EC >16-35	65,000 (8.48) [f, sol]	92,000 (21) [f, sol]	110,000 [f]
Aliphatic EC >35-44	65,000 (8.48) [f, sol]	92,000 (21) [f, sol]	110,000 [f]
Aromatic EC 5-7	70	140	300
Aromatic EC >7-8	130	290	660

	Assessment Criteria - Residential with Homegrown Produce (mg/kg)		
TPH Fractions	**1% SOM**	**2.5% SOM**	**6% SOM**
Aromatic EC>8-10	34	83	190
Aromatic EC >10-12	74	180	380
Aromatic EC >12-16	140	330	660
Aromatic EC >16-21	260[f]	540[f]	930[f]
Aromatic EC >21-35	1,100[f]	1,500[f]	1,700[f]
Aromatic EC >35-44	1,100[f]	1,500[f]	1,700[f]
Asbestos Fibres	< 0.001%		

APPENDIX C

SITE PHOTOGRAPHS

Earth Environmental & Geotechnical Ltd **Tel:** 0161 975 6088 **Email:** info@earthenvironmental.co.uk **Web:** www.earthenvironmental.co.uk	**SITE PHOTOGRAPHS** EARTH ENVIRONMENTAL & GEOTECHNICAL
Job No.: A5882/24	**Site:** Inverbeg Drive, Bolton
Plate 1 General View	**Plate 2 General View**
	
Date: 25th April 2024	**Date:** 25th April 2024
Plate 3 General View	**Plate 4 General View**
	
Date: 25th April 2024	**Date:** 25th April 2024

Ross Page
Earth Environmental & Geotechnical Ltd
Houldsworth Mill Business Centre
Houldsworth Street
Reddish
Stockport
Cheshire
SK5 6DA

Normec DETS Limited
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 24-04550

Site Reference:	Inverbeg Drive
Project / Job Ref:	A5882
Order No:	A5882/RP/02
Sample Receipt Date:	29/04/2024
Sample Scheduled Date:	29/04/2024
Report Issue Number:	1
Reporting Date:	03/05/2024

Authorised by:

[redacted]
Kevin Old
Operations Director

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 24-04550	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 7	Topsoil 8	Topsoil 9	Topsoil 10	Topsoil 11
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 03/05/2024	**DETS Sample No**	711959	711960	711961	711962	711963

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Sample Matrix (S)	Material Type	N/a	NONE					
Asbestos Type (S)	PLM Result	N/a	ISO17025					
pH	pH Units	N/a	MCERTS	6.8	6.5	6.6	6.2	6.5
Total Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Complex Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	< 200	MCERTS	581	631	579	492	1066
Total Sulphate as SO_4	%	< 0.02	MCERTS	0.06	0.06	0.06	0.05	0.11
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	68	76	26	16	273
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.07	0.08	0.03	0.02	0.27
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	7
Organic Matter (SOM)	%	< 0.1	MCERTS	5.7	5.9	6.7	6.8	7.1
Arsenic (As)	mg/kg	< 2	MCERTS	15	17	17	16	18
Barium (Ba)	mg/kg	< 2.5	MCERTS	107	112	120	121	124
Beryllium (Be)	mg/kg	< 0.5	MCERTS	0.8	0.9	0.9	0.9	0.9
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	0.4	0.4	0.4	0.3	0.4
Chromium (Cr)	mg/kg	< 2	MCERTS	20	22	23	18	21
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Copper (Cu)	mg/kg	< 4	MCERTS	34	42	39	34	38
Lead (Pb)	mg/kg	< 3	MCERTS	80	86	78	82	85
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	15	15	15	15	15
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Vanadium (V)	mg/kg	< 1	MCERTS	24	24	24	22	24
Zinc (Zn)	mg/kg	< 3	MCERTS	76	85	75	69	83
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	2

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)
~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

4480

Soil Analysis Certificate						
DETS Report No: 24-04550	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 12	Subsoil 7	Subsoil 8	Subsoil 9	Subsoil 10
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 03/05/2024	**DETS Sample No**	711964	711965	711966	711967	711968

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Detected	Not Detected	Not Detected	Not Detected
Sample Matrix (S)	Material Type	N/a	NONE		Amosite present as fibre bundles			
Asbestos Type (S)	PLM Result	N/a	ISO17025		Amosite			
pH	pH Units	N/a	MCERTS	6.4	6.5	7.8	6.5	6.3
Total Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Complex Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	< 200	MCERTS	560	1932	417	652	532
Total Sulphate as SO_4	%	< 0.02	MCERTS	0.06	0.19	0.04	0.07	0.05
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	51	833	121	252	199
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.05	0.83	0.12	0.25	0.20
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter (SOM)	%	< 0.1	MCERTS	6.2	2.4	2.8	1.9	2.4
Arsenic (As)	mg/kg	< 2	MCERTS	14	7	5	6	8
Barium (Ba)	mg/kg	< 2.5	MCERTS	107	134	101	181	174
Beryllium (Be)	mg/kg	< 0.5	MCERTS	0.8	0.9	1	1	1.3
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	0.4	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	20	19	19	23	22
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Copper (Cu)	mg/kg	< 4	MCERTS	34	28	32	26	30
Lead (Pb)	mg/kg	< 3	MCERTS	75	19	14	15	16
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	14	26	32	31	36
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Vanadium (V)	mg/kg	< 1	MCERTS	21	21	21	26	28
Zinc (Zn)	mg/kg	< 3	MCERTS	74	70	75	70	79
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)
~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

4480

Soil Analysis Certificate						
DETS Report No: 24-04550	**~Date Sampled**	01/03/24	01/03/24			
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied			
~Site Reference: Inverbeg Drive	**~TP / BH No**	Subsoil 11	Subsoil 12			
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied			
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied	None Supplied			
Reporting Date: 03/05/2024	**DETS Sample No**	711969	711970			

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Not Detected			
Sample Matrix (S)	Material Type	N/a	NONE					
Asbestos Type (S)	PLM Result	N/a	ISO17025					
pH	pH Units	N/a	MCERTS	7.4	7.4			
Total Cyanide	mg/kg	< 1	NONE	< 1	< 1			
Complex Cyanide	mg/kg	< 1	NONE	< 1	< 1			
Free Cyanide	mg/kg	< 1	NONE	< 1	< 1			
Total Sulphate as SO_4	mg/kg	< 200	MCERTS	616	1438			
Total Sulphate as SO_4	%	< 0.02	MCERTS	0.06	0.14			
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	256	615			
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.26	0.61			
Sulphide	mg/kg	< 5	NONE	< 5	< 5			
Organic Matter (SOM)	%	< 0.1	MCERTS	2.7	2.4			
Arsenic (As)	mg/kg	< 2	MCERTS	7	9			
Barium (Ba)	mg/kg	< 2.5	MCERTS	123	151			
Beryllium (Be)	mg/kg	< 0.5	MCERTS	1	1.1			
W/S Boron	mg/kg	< 1	NONE	< 1	< 1			
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	< 0.2	< 0.2			
Chromium (Cr)	mg/kg	< 2	MCERTS	21	22			
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2			
Copper (Cu)	mg/kg	< 4	MCERTS	32	32			
Lead (Pb)	mg/kg	< 3	MCERTS	16	22			
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1			
Nickel (Ni)	mg/kg	< 3	MCERTS	33	29			
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2			
Vanadium (V)	mg/kg	< 1	MCERTS	23	25			
Zinc (Zn)	mg/kg	< 3	MCERTS	78	74			
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2			

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)
~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 24-04550	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 7	Topsoil 8	Topsoil 9	Topsoil 10	Topsoil 11
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 03/05/2024	**DETS Sample No**	711959	711960	711961	711962	711963

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	0.19	0.17	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	0.18	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	0.13	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.80	1.28	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	0.14	0.17	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	1.57	1.39	< 0.1	< 0.1	0.14
Pyrene	mg/kg	< 0.1	MCERTS	1.43	1.29	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.74	0.39	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	0.77	0.40	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.68	0.21	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.28	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.67	0.19	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.34	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.25	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	7.9	5.8	< 1.6	< 1.6	< 1.6

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 24-04550	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 12	Subsoil 7	Subsoil 8	Subsoil 9	Subsoil 10
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 03/05/2024	**DETS Sample No**	711964	711965	711966	711967	711968

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 24-04550	**~Date Sampled**	01/03/24	01/03/24			
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied			
~Site Reference: Inverbeg Drive	**~TP / BH No**	Subsoil 11	Subsoil 12			
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied			
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied	None Supplied			
Reporting Date: 03/05/2024	**DETS Sample No**	711969	711970			

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6			

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 24-04550	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 7	Topsoil 8	Topsoil 9	Topsoil 10	Topsoil 11
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 03/05/2024	**DETS Sample No**	711959	711960	711961	711962	711963

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	3	3	< 2	< 2	< 2
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	8	7	< 3	< 3	< 3
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42

~ Sample details provided by the customer

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Unit 1, Rose Lane Industrial Estate
Rose Lane
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Maidstone
Kent ME17 2JN
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Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 24-04550	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 12	Subsoil 7	Subsoil 8	Subsoil 9	Subsoil 10
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 03/05/2024	**DETS Sample No**	711964	711965	711966	711967	711968

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 24-04550	**~Date Sampled**	01/03/24	01/03/24			
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied			
~Site Reference: Inverbeg Drive	**~TP / BH No**	Subsoil 11	Subsoil 12			
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied			
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied	None Supplied			
Reporting Date: 03/05/2024	**DETS Sample No**	711969	711970			

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01	< 0.01			
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05	< 0.05			
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2			
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2			
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3			
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3			
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10	< 10			
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21	< 21			
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01	< 0.01			
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05	< 0.05			
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2			
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2			
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2			
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	< 3	< 3			
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	18	< 10			
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21	< 21			
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42	< 42			

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 24-04550	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 7	Topsoil 8	Topsoil 9	Topsoil 10	Topsoil 11
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 03/05/2024	**DETS Sample No**	711959	711960	711961	711962	711963

Determinand	Unit	RL	Accreditation					
Benzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene : HS_1D_MS	ug/kg	< 2	MCERTS	3	< 2	< 2	< 2	4
p & m-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	4	< 2	< 2	< 2	4
o-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 24-04550	**~Date Sampled**	01/03/24	01/03/24	01/03/24	01/03/24	01/03/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	Topsoil 12	Subsoil 7	Subsoil 8	Subsoil 9	Subsoil 10
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 03/05/2024	**DETS Sample No**	711964	711965	711966	711967	711968

Determinand	Unit	RL	Accreditation					
Benzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene : HS_1D_MS	ug/kg	< 2	MCERTS	3	< 2	< 2	< 2	< 2
p & m-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	3	< 2	< 2	< 2	< 2
o-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 24-04550	**~Date Sampled**	01/03/24	01/03/24			
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied			
~Site Reference: Inverbeg Drive	**~TP / BH No**	Subsoil 11	Subsoil 12			
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied			
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied	None Supplied			
Reporting Date: 03/05/2024	**DETS Sample No**	711969	711970			

Determinand	Unit	RL	Accreditation					
Benzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2			
Toluene : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5			
Ethylbenzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2			
p & m-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	2	< 2			
o-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2			
MTBE : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5			

~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 24-04550	
Earth Environmental & Geotechnical Ltd	
~Site Reference: Inverbeg Drive	
~Project / Job Ref: A5882	
~Order No: A5882/RP/02	
Reporting Date: 03/05/2024	

DETS Sample No	~TP / BH No	~Additional Refs	~Depth (m)	Moisture Content (%)	Sample Matrix Description
$ 711959	Topsoil 7	None Supplied	None Supplied	20.8	Brown loamy sand with vegetation
$ 711960	Topsoil 8	None Supplied	None Supplied	22.5	Brown loamy sand with vegetation
$ 711961	Topsoil 9	None Supplied	None Supplied	20.5	Brown loamy sand with stones
$ 711962	Topsoil 10	None Supplied	None Supplied	21.3	Brown loamy sand with stones
$ 711963	Topsoil 11	None Supplied	None Supplied	23.6	Brown loamy sand with vegetation
$ 711964	Topsoil 12	None Supplied	None Supplied	22.4	Brown loamy sand with stones
$ 711965	Subsoil 7	None Supplied	None Supplied	5.1	Brown sandy clay
$ 711966	Subsoil 8	None Supplied	None Supplied	4.4	Brown sandy clay
$ 711967	Subsoil 9	None Supplied	None Supplied	4.3	Brown sandy clay
$ 711968	Subsoil 10	None Supplied	None Supplied	7.2	Brown sandy clay with stones
$ 711969	Subsoil 11	None Supplied	None Supplied	6.7	Brown sandy clay with stones
$ 711970	Subsoil 12	None Supplied	None Supplied	3.9	Brown sandy clay

Moisture content is part of procedure E003 & is not an accredited test
Insufficient Sample I/S
Unsuitable Sample U/S
~ Sample details provided by the customer

$ samples exceeded recommended holding times

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 24-04550
Earth Environmental & Geotechnical Ltd
~Site Reference: Inverbeg Drive
~Project / Job Ref: A5882
~Order No: A5882/RP/02
Reporting Date: 03/05/2024

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D	TOC (Total Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried
AR As Received
~ Sample details provided by the customer

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

List of HWOL Acronyms and Operators
DETS Report No: 24-04550
Earth Environmental & Geotechnical Ltd
~Site Reference: Inverbeg Drive
~Project / Job Ref: A5882
~Order No: A5882/RP/02
Reporting Date: 03/05/2024

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total
~	Sample details provided by the customer

Benzene - HS_1D_MS
Ethylbenzene - HS_1D_MS
MTBE - HS_1D_MS
TPH CWG - Aliphatic >C10 - C12 - EH_CU_1D_AL
TPH CWG - Aliphatic >C12 - C16 - EH_CU_1D_AL
TPH CWG - Aliphatic >C16 - C21 - EH_CU_1D_AL
TPH CWG - Aliphatic >C21 - C34 - EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C6 - HS_1D_MS_AL
TPH CWG - Aliphatic >C6 - C8 - HS_1D_MS_AL
TPH CWG - Aliphatic >C8 - C10 - EH_CU_1D_AL
TPH CWG - Aliphatic C5 - C34 - HS_1D_MS+EH_CU_1D_AL
TPH CWG - Aromatic >C10 - C12 - EH_CU_1D_AR
TPH CWG - Aromatic >C12 - C16 - EH_CU_1D_AR
TPH CWG - Aromatic >C16 - C21 - EH_CU_1D_AR
TPH CWG - Aromatic >C21 - C35 - EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C35 - HS_1D_MS+EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C7 - HS_1D_MS_AR
TPH CWG - Aromatic >C7 - C8 - HS_1D_MS_AR
TPH CWG - Aromatic >C8 - C10 - EH_CU_1D_AR
TPH CWG - Total >C5 - C35 - HS_1D_MS+EH_CU_1D_Total
Toluene - HS_1D_MS
m & p-xylene - HS_1D_MS
o-Xylene - HS_1D_MS

Ross Page
Earth Environmental & Geotechnical Ltd
Houldsworth Mill Business Centre
Houldsworth Street
Reddish
Stockport
Cheshire
SK5 6DA

Normec DETS Limited
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 24-05885

Site Reference:	Inverbeg Drive
Project / Job Ref:	A5882
Order No:	A5882/RP/02
Sample Receipt Date:	29/05/2024
Sample Scheduled Date:	29/05/2024
Report Issue Number:	1
Reporting Date:	05/06/2024

Authorised by:

[redacted]

Steve Knight
Customer Support Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

UKAS TESTING
4480

Soil Analysis Certificate						
DETS Report No: 24-05885	**~Date Sampled**	01/03/24				
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied				
~Site Reference: Inverbeg Drive	**~TP / BH No**	Subsoil 7				
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied				
~Order No: A5882/RP/02	**~Depth (m)**	None Supplied				
Reporting Date: 05/06/2024	**DETS Sample No**	717919				

Determinand	Unit	RL	Accreditation					
Asbestos Quantification (S)	%	< 0.001	ISO17025	0.002				

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)
~Sample details provided by customer and can affect the validity of results

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 24-05885
Earth Environmental & Geotechnical Ltd
~Site Reference: Inverbeg Drive
~Project / Job Ref: A5882
~Order No: A5882/RP/02
Reporting Date: 05/06/2024

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
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Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
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Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D	TOC (Total Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
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Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
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Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
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Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
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Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried
AR As Received
~Sample details provided by customer and can affect the validity of results

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
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Maidstone
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Tel : 01622 850410

UKAS TESTING
4480

List of HWOL Acronyms and Operators
DETS Report No: 24-05885
Earth Environmental & Geotechnical Ltd
~Site Reference: Inverbeg Drive
~Project / Job Ref: A5882
~Order No: A5882/RP/02
Reporting Date: 05/06/2024

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total
~	Sample details provided by customer and can affect the validity of results

Det - Acronym

CONSULTING
ENGINEERS
Geotechnical
Environmental
Ecology
Geology
Drainage
Mining

Earth Environmental &
Geotechnical Ltd
Houldsworth Mill Business &
Arts Centre
Houldsworth Street
Stockport
SK5 6DA

Tel: 0161 975 6088

www.earthenvironmental.co.uk
info@earthenvironmental.co.uk

Bath
Studio 3
Tollbridge Studios
Toll Bridge Road
Bath
BA1 7DE
Tel: 01225 858833

Cardiff
12 Cathedral Road
Cardiff
CF11 9LJ
Tel: 0292 2362615

Edinburgh
Hudson House
8 Albany Street
Edinburgh
EH1 3QB
Tel: 0131 5641789

Wilton
Wilton Centre
Redcar
TS10 4RF
Tel: 01642 438125

Reading
Suite 18
Wyvols Court
Swallowfield
Reading
RG7 1WY
Tel: 01183 734000

Earth Environmental &
Geotechnical Ltd
Registered Office:
Mentor House, Ainsworth Street,
Blackburn, Lancashire, BB1 6AY

OUR REF: A5882-24 1st August 2024
YOUR REF:

1st August 2024

Mr. Paul Sinclair
Westchurch Homes Ltd
31 Stamford Street
Altrincham
Cheshire
WA14 1ES

By Email (paul.sinclair@westchurchhomes.co.uk)

Dear Paul,

Inverbeg Drive, Bolton
Stockpile Chemical Testing

Background and Terms of Reference

This report provides a summary of the validation of the site won and stockpiled material.

This report should be read in conjunction with a Betts Ground Investigation Report (Report No. 20WCH012/GI) dated November 2021.

It is understood that stockpiled subsoil and topsoil will be used on site (within garden/landscaped areas) and also used on other nearby Westchurch Homes projects.

Site Location

The site is located south of Inverbeg Drive, Bolton, BL2 6NA.

The proposed site is approximately 2.09 hectares in total.

Site History

The previous site investigation report indicates that the site was formerly used as a football pitch.

Scope of Work

A site visit was conducted on the 22nd July 2024 to recover samples of subsoil and topsoil for environmental testing.

Eleven soil samples were taken in total.

Chemical testing has been performed by DETS, a UKAS and MCERTS accredited laboratory. Appendix A provides a copy of the testing results.

There was no visual or olfactory evidence of contamination observed during the site sampling process.

Figure 1: Stockpile Location Plan



Chemical Testing

11no. samples were obtained in total from the stockpiles, with 5no. samples of topsoil and 6no. samples of subsoil.

Chemical testing has been performed for a wide range of analytes including asbestos screen, pH, total organic carbon, total sulphate, sulphide, total cyanide, arsenic, chromium, hexavalent chromium, copper, lead, selenium, zinc, cadmium, mercury, nickel, vanadium, barium, beryllium, water soluble boron, mono phenol, speciated hydrocarbons and speciated PAH's.

At a Tier I stage the long term (chronic) human health toxicity of the soil has been assessed with reference to DEFRA/Environment Agency Contaminated Land Exposure Assessment (CLEA) Soil Guideline Values (SGV) for generic site land uses, soils, and exposure.

Where Environment Agency generic guidance is absent, reference has been made to the Chartered Institute of Environmental Health (CIEH) S4ULs for human health risk assessment.

In the case of arsenic, cadmium, hexavalent chromium, lead, benzene, naphthalene, and benzo(a)pyrene DEFRA Category 4 Screening Levels have been adopted. The results have been compared to residential with plant uptake and 6% soil organic matter (SOM).

EARTH ENVIRONMENTAL & GEOTECHNICAL

Table 1: Assessment of Soil Chemical Data

Determinand	C4SL/S4UL Levels Resi w/ HP SOM 1% (mg/kg)	SP01 Subsoil	SP02 Subsoil	SP03 Topsoil	SP03 Topsoil	SP04 Subsoil	SP04 Subsoil	SP05 Topsoil	SP06 Subsoil	SP06 Subsoil	SP07 Topsoil	SP07 Topsoil	Exceedances
Metals													
Arsenic	37	9	7	6	7	13	12	12	11	11	15	13	0
Beryllium	1.7	0.6	0.6	0.8	0.8	0.9	0.8	0.7	0.8	0.8	0.7	0.7	0
Boron	290	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0
Cadmium	11	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0
Chromium	910	15	15	17	17	16	15	15	16	15	18	18	0
Chromium VI	21	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Copper	2400	19	20	20	21	27	27	23	24	19	26	25	0
Lead	200	27	14	14	16	41	38	51	32	20	62	57	0
Inorganic Mercury	40	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0
Nickel	130	13	13	21	23	15	15	12	21	21	12	11	0
Selenium	250	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Vanadium	410	20	16	19	20	22	21	19	20	19	20	19	0
Zinc	3700	57	46	59	58	55	52	57	91	53	66	59	0
Petroleum Hydrocarbons													
Benzene	0.20	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0
Toluene	130	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.011	< 0.005	< 0.005	0.267	< 0.005	0
Ethylbenzene	47	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.012	< 0.002	0
o-xylenes	60	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0
p&m-xylenes	59	< 0.002	< 0.002	0.003	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0
Aliphatic EC >5-6	42	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0
Aliphatic EC >6-8	100	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0
Aliphatic EC >8-10	27	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aliphatic EC >10-12	130	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aliphatic EC >12-16	1100	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0
Aliphatic EC >16-21	65000	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0
Aliphatic EC >21-35	65000	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	0
Aromatic EC >5-7	70	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0
Aromatic EC >7-8	130	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.27	< 0.05	0
Aromatic EC >8-10	34	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aromatic EC >10-12	74	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aromatic EC >12-16	140	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0
Aromatic EC >16-21	260	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	0
Aromatic EC >21-35	1100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	0

Determinand	C4SL/S4UL Levels Resi w/ HP SOM 1% (mg/kg)	SP01 Subsoil	SP02 Subsoil	SP03 Topsoil	SP03 Topsoil	SP04 Subsoil	SP04 Subsoil	SP05 Topsoil	SP06 Subsoil	SP06 Subsoil	SP07 Topsoil	SP07 Topsoil	Exceedances
Polycyclic Aromatic Hydrocarbons													
Naphthalene	2.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Acenaphthylene	170	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Acenaphthene	210	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Fluorene	170	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Phenanthrene	95	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Anthracene	2400	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Fluoranthene	280	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.11	0.17	0.19	0
Pyrene	620	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.16	0.18	0
Benzo(a)anthracene	7.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Chrysene	15	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(a)pyrene	5.0	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(b)fluoranthene	2.6	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(k)fluoranthene	77	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Indeno(1,2,3-cd)pyrene	27	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Dibenz(a,h)anthracene	0.24	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Benzo(ghi)perylene	320	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0
Phenols													
Phenol	120	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	0

Notes for Table 1

All units in mg/kg.

Concentrations in **red** above assessment criteria for residential end use criteria with plant uptake

Based on the above table, no samples tested from the soil stockpiles contain concentrations of contaminants in exceedance of the screening criteria relevant to residential end use with plant uptake.

Asbestos fibres were not identified in any of samples taken during this investigation.

Conclusions & Recommendations

For the samples collected from the imported soil cover material (topsoil and subsoil), all concentrations of potential contaminants of concern are less than soil assessment criteria for the long-term protection of human health for a residential end use.

The materials are therefore suitable for use in the proposed development.

Should you have any queries regarding the contents of this report, please feel free to contact me at any time.

Yours Sincerely,



Adam Czarnecki
Director
For and on behalf of Earth Environmental & Geotechnical Ltd

Appendix A Soil Chemical Testing Results
Appendix B Soil Assessment Criteria
Appendix C Site Photographs

APPENDIX A

SOIL CHEMICAL TESTING RESULTS

APPENDIX B

SOIL ASSESSMENT CRITERIA

Assessment Criteria for Imported Soils in Garden Areas

Inorganic Compounds	Assessment Criteria - Residential with Homegrown Produce (mg/kg)		
Arsenic	37		
Cadmium	22		
Chromium (III)	910		
Chromium (VI)	6		
Lead	200		
Inorganic Mercury	40		
Nickel	130		
Selenium	250		
Copper	2400		
Zinc	3700		
Organic Compounds	**1% SOM**	**2.5% SOM**	**6% SOM**
Naphthalene	15	36	85
Acenaphthene	210	510	1100
Acenaphthylene	170	420	920
Fluorene	170	400	860
Phenanthrene	95	220	440
Anthracene	2400	5400	11000
Fluoranthene	280	560	890
Pyrene	620	1200	2000
Benzo(a)anthracene	7.2	11	13
Chrysene	15	22	27
Benzo(b)fluoranthene	2.6	3.3	3.7
Benzo(k)fluoranthene	77	93	100
Benzo(a)pyrene	5.0	5.0	5.0
Dibenz (a, h) anthracene	0.24	0.28	0.3
Indeno(1,2,3-cd) pyrene	27	36	41
Benzo (g, h, i) perylene	320	340	350
Benzene	0.2	0.41	0.87
Toluene	130	290	660
Ethylbenzene	47	110	260
o-Xylene	60	140	330
m-Xylene	59	140	320
p-Xylene	56	130	310
TPH Fractions	**1% SOM**	**2.5% SOM**	**6% SOM**
Aliphatic EC 5-6	42	78	160
Aliphatic EC >6-8	100	230	530
Aliphatic EC >8-10	27	65	150
Aliphatic EC >10-12	130 (48) [vap]	330 (118) [vap]	760 (283) [vap]
Aliphatic EC >12-16	1100 (24) [sol]	2400 (59) [sol]	4,300 (142) [sol]
Aliphatic EC >16-35	65,000 (8.48) [f, sol]	92,000 (21) [f, sol]	110,000 [f]
Aliphatic EC >35-44	65,000 (8.48) [f, sol]	92,000 (21) [f, sol]	110,000 [f]
Aromatic EC 5-7	70	140	300
Aromatic EC >7-8	130	290	660

	Assessment Criteria - Residential with Homegrown Produce (mg/kg)		
TPH Fractions	**1% SOM**	**2.5% SOM**	**6% SOM**
Aromatic EC>8-10	34	83	190
Aromatic EC >10-12	74	180	380
Aromatic EC >12-16	140	330	660
Aromatic EC >16-21	260[f]	540[f]	930[f]
Aromatic EC >21-35	1,100[f]	1,500[f]	1,700[f]
Aromatic EC >35-44	1,100[f]	1,500[f]	1,700[f]
Asbestos Fibres	< 0.001%		

APPENDIX C

SITE PHOTOGRAPHS

Earth Environmental & Geotechnical Ltd **Tel:** 0161 975 6088 **Email**: info@earthenvironmental.co.uk **Web**: www.earthenvironmental.co.uk	**SITE PHOTOGRAPHS** EARTH ENVIRONMENTAL & GEOTECHNICAL
Job No.: A5882/24	**Site:** Inverbeg Drive, Bolton
Plate 1 View of stockpile	**Plate 2** View of stockpile
	
Date: 22nd July 2024	**Date:** 22nd July 2024
Plate 3 View of stockpile	**Plate 4** View of stockpile
	
Date: 22nd July 2024	**Date:** 22nd July 2024

Alex Horne
Earth Environmental & Geotechnical Ltd
Houldsworth Mill Business Centre
Houldsworth Street
Reddish
Stockport
Cheshire
SK5 6DA

Normec DETS Limited
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

UKAS TESTING
4480

DETS Report No: 24-08485

Site Reference:	Inverbeg Drive
Project / Job Ref:	A5882
Order No:	A5882/AH/01
Sample Receipt Date:	25/07/2024
Sample Scheduled Date:	26/07/2024
Report Issue Number:	1
Reporting Date:	01/08/2024

Authorised by:

[redacted]

Steve Knight
Customer Support Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 24-08485	**~Date Sampled**	22/07/24	22/07/24	22/07/24	22/07/24	22/07/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	SP01 (Subsoil)	SP02 (Subsoil)	SP03 (Topsoil)	SP03 (Topsoil)	SP04 (Subsoil)
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/AH/01	**~Depth (m)**	0.10	0.10	0.10	0.20	0.10
Reporting Date: 01/08/2024	**DETS Sample No**	728561	728562	728563	728564	728565

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
pH	pH Units	N/a	MCERTS	7.5	7.1	8.1	7.5	6.7
Total Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Complex Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	< 200	MCERTS	1057	657	797	1170	623
Total Sulphate as SO_4	%	< 0.02	MCERTS	0.11	0.07	0.08	0.12	0.06
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	249	212	216	253	92
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.25	0.21	0.22	0.25	0.09
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter (SOM)	%	< 0.1	MCERTS	3.1	2	2.4	2.3	5.2
Arsenic (As)	mg/kg	< 2	MCERTS	9	7	6	7	13
Barium (Ba)	mg/kg	< 2.5	MCERTS	78	56	132	168	105
Beryllium (Be)	mg/kg	< 0.5	MCERTS	0.6	0.6	0.8	0.8	0.9
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	15	15	17	17	16
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Copper (Cu)	mg/kg	< 4	MCERTS	19	20	20	21	27
Lead (Pb)	mg/kg	< 3	MCERTS	27	14	14	16	41
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	13	13	21	23	15
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Vanadium (V)	mg/kg	< 1	MCERTS	20	16	19	20	22
Zinc (Zn)	mg/kg	< 3	MCERTS	57	46	59	58	55
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)
~Sample details provided by customer and can affect the validity of results
(n) Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 24-08485	**~Date Sampled**	22/07/24	22/07/24	22/07/24	22/07/24	22/07/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	SP04 (Subsoil)	SP05 (Topsoil)	SP06 (Subsoil)	SP06 (Subsoil)	SP07 (Topsoil)
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/AH/01	**~Depth (m)**	0.20	0.10	0.10	0.20	0.10
Reporting Date: 01/08/2024	**DETS Sample No**	728566	728567	728568	728569	728570

Determinand	Unit	RL	Accreditation		(n)	(n)		(n)
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
pH	pH Units	N/a	MCERTS	7.1	6.9	7.3	7.0	6.9
Total Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Complex Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	< 200	MCERTS	755	948	529	329	450
Total Sulphate as SO_4	%	< 0.02	MCERTS	0.08	0.09	0.05	0.03	0.05
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	117	152	88	41	36
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.12	0.15	0.09	0.04	0.04
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter (SOM)	%	< 0.1	MCERTS	4.9	6.2	4.1	3.3	6.8
Arsenic (As)	mg/kg	< 2	MCERTS	12	12	11	11	15
Barium (Ba)	mg/kg	< 2.5	MCERTS	101	89	135	214	92
Beryllium (Be)	mg/kg	< 0.5	MCERTS	0.8	0.7	0.8	0.8	0.7
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	15	15	16	15	18
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Copper (Cu)	mg/kg	< 4	MCERTS	27	23	24	19	26
Lead (Pb)	mg/kg	< 3	MCERTS	38	51	32	20	62
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	15	12	21	21	12
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Vanadium (V)	mg/kg	< 1	MCERTS	21	19	20	19	20
Zinc (Zn)	mg/kg	< 3	MCERTS	52	57	91	53	66
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)
~Sample details provided by customer and can affect the validity of results

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 24-08485	**~Date Sampled**	22/07/24				
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied				
~Site Reference: Inverbeg Drive	**~TP / BH No**	SP07 (Topsoil)				
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied				
~Order No: A5882/AH/01	**~Depth (m)**	0.20				
Reporting Date: 01/08/2024	**DETS Sample No**	728571				

Determinand	**Unit**	**RL**	**Accreditation**	(n)				
Asbestos Screen (S)	N/a	N/a	**ISO17025**	Not Detected				
pH	pH Units	N/a	**MCERTS**	6.5				
Total Cyanide	mg/kg	< 1	NONE	< 1				
Complex Cyanide	mg/kg	< 1	NONE	< 1				
Free Cyanide	mg/kg	< 1	NONE	< 1				
Total Sulphate as SO_4	mg/kg	< 200	**MCERTS**	600				
Total Sulphate as SO_4	%	< 0.02	**MCERTS**	0.06				
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	**MCERTS**	32				
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	**MCERTS**	0.03				
Sulphide	mg/kg	< 5	NONE	< 5				
Organic Matter (SOM)	%	< 0.1	**MCERTS**	6.1				
Arsenic (As)	mg/kg	< 2	**MCERTS**	13				
Barium (Ba)	mg/kg	< 2.5	**MCERTS**	84				
Beryllium (Be)	mg/kg	< 0.5	**MCERTS**	0.7				
W/S Boron	mg/kg	< 1	NONE	< 1				
Cadmium (Cd)	mg/kg	< 0.2	**MCERTS**	< 0.2				
Chromium (Cr)	mg/kg	< 2	**MCERTS**	18				
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2				
Copper (Cu)	mg/kg	< 4	**MCERTS**	25				
Lead (Pb)	mg/kg	< 3	**MCERTS**	57				
Mercury (Hg)	mg/kg	< 1	**MCERTS**	< 1				
Nickel (Ni)	mg/kg	< 3	**MCERTS**	11				
Selenium (Se)	mg/kg	< 2	**MCERTS**	< 2				
Vanadium (V)	mg/kg	< 1	**MCERTS**	19				
Zinc (Zn)	mg/kg	< 3	**MCERTS**	59				
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2				

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C. The Method Description page describes if the test is performed on the dried or as-received portion
Subcontracted analysis (S)
~Sample details provided by customer and can affect the validity of results

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 24-08485	**~Date Sampled**	22/07/24	22/07/24	22/07/24	22/07/24	22/07/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	SP01 (Subsoil)	SP02 (Subsoil)	SP03 (Topsoil)	SP03 (Topsoil)	SP04 (Subsoil)
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/AH/01	**~Depth (m)**	0.10	0.10	0.10	0.20	0.10
Reporting Date: 01/08/2024	**DETS Sample No**	728561	728562	728563	728564	728565

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6

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Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

4480

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 24-08485	**~Date Sampled**	22/07/24	22/07/24	22/07/24	22/07/24	22/07/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	SP04 (Subsoil)	SP05 (Topsoil)	SP06 (Subsoil)	SP06 (Subsoil)	SP07 (Topsoil)
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/AH/01	**~Depth (m)**	0.20	0.10	0.10	0.20	0.10
Reporting Date: 01/08/2024	**DETS Sample No**	728566	728567	728568	728569	728570

Determinand	Unit	RL	Accreditation					
					(n)	(n)		(n)
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.11	0.17
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.16
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6

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Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

4480

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 24-08485	**~Date Sampled**	22/07/24				
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied				
~Site Reference: Inverbeg Drive	**~TP / BH No**	SP07 (Topsoil)				
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied				
~Order No: A5882/AH/01	**~Depth (m)**	0.20				
Reporting Date: 01/08/2024	**DETS Sample No**	728571				

Determinand	Unit	RL	Accreditation	(n)				
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1				
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1				
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1				
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1				
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1				
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1				
Fluoranthene	mg/kg	< 0.1	MCERTS	0.19				
Pyrene	mg/kg	< 0.1	MCERTS	0.18				
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1				
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1				
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1				
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1				
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1				
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1				
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1				
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1				
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6				

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Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 24-08485	**~Date Sampled**	22/07/24	22/07/24	22/07/24	22/07/24	22/07/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	SP01 (Subsoil)	SP02 (Subsoil)	SP03 (Topsoil)	SP03 (Topsoil)	SP04 (Subsoil)
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/AH/01	**~Depth (m)**	0.10	0.10	0.10	0.20	0.10
Reporting Date: 01/08/2024	**DETS Sample No**	728561	728562	728563	728564	728565

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42

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Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 24-08485	**~Date Sampled**	22/07/24	22/07/24	22/07/24	22/07/24	22/07/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	SP04 (Subsoil)	SP05 (Topsoil)	SP06 (Subsoil)	SP06 (Subsoil)	SP07 (Topsoil)
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/AH/01	**~Depth (m)**	0.20	0.10	0.10	0.20	0.10
Reporting Date: 01/08/2024	**DETS Sample No**	728566	728567	728568	728569	728570

Determinand	Unit	RL	Accreditation		(n)	(n)		(n)
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	0.27
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42

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Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 24-08485	**~Date Sampled**	22/07/24				
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied				
~Site Reference: Inverbeg Drive	**~TP / BH No**	SP07 (Topsoil)				
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied				
~Order No: A5882/AH/01	**~Depth (m)**	0.20				
Reporting Date: 01/08/2024	**DETS Sample No**	728571				

Determinand	Unit	RL	Accreditation	(n)				
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01				
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05				
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2				
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2				
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3				
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3				
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10				
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21				
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01				
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05				
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2				
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2				
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2				
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	< 3				
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	< 10				
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21				
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42				

~Sample details provided by customer and can affect the validity of results

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Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 24-08485	**~Date Sampled**	22/07/24	22/07/24	22/07/24	22/07/24	22/07/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	SP01 (Subsoil)	SP02 (Subsoil)	SP03 (Topsoil)	SP03 (Topsoil)	SP04 (Subsoil)
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/AH/01	**~Depth (m)**	0.10	0.10	0.10	0.20	0.10
Reporting Date: 01/08/2024	**DETS Sample No**	728561	728562	728563	728564	728565

Determinand	Unit	RL	Accreditation					
Benzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	3	< 2	< 2
o-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5

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Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 24-08485	**~Date Sampled**	22/07/24	22/07/24	22/07/24	22/07/24	22/07/24
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Inverbeg Drive	**~TP / BH No**	SP04 (Subsoil)	SP05 (Topsoil)	SP06 (Subsoil)	SP06 (Subsoil)	SP07 (Topsoil)
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A5882/AH/01	**~Depth (m)**	0.20	0.10	0.10	0.20	0.10
Reporting Date: 01/08/2024	**DETS Sample No**	728566	728567	728568	728569	728570

Determinand	Unit	RL	Accreditation		(n)	(n)		(n)
Benzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	11	< 5	< 5	267
Ethylbenzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	12
p & m-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE : HS_1D_MS	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5

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Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 24-08485	**~Date Sampled**	22/07/24				
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied				
~Site Reference: Inverbeg Drive	**~TP / BH No**	SP07 (Topsoil)				
~Project / Job Ref: A5882	**~Additional Refs**	None Supplied				
~Order No: A5882/AH/01	**~Depth (m)**	0.20				
Reporting Date: 01/08/2024	**DETS Sample No**	728571				

Determinand	Unit	RL	Accreditation	(n)				
Benzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2				
Toluene : HS_1D_MS	ug/kg	< 5	MCERTS	27				
Ethylbenzene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2				
p & m-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2				
o-xylene : HS_1D_MS	ug/kg	< 2	MCERTS	< 2				
MTBE : HS_1D_MS	ug/kg	< 5	MCERTS	< 5				

~Sample details provided by customer and can affect the validity of results

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Maidstone
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Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 24-08485	
Earth Environmental & Geotechnical Ltd	
~Site Reference: Inverbeg Drive	
~Project / Job Ref: A5882	
~Order No: A5882/AH/01	
Reporting Date: 01/08/2024	

DETS Sample No	~TP / BH No	~Additional Refs	~Depth (m)	Moisture Content (%)	Sample Matrix Description
728561	SP01 (Subsoil)	None Supplied	0.10	13.4	Brown sandy clay
728562	SP02 (Subsoil)	None Supplied	0.10	11.6	Brown sandy clay
728563	SP03 (Topsoil)	None Supplied	0.10	15.1	Brown clay
728564	SP03 (Topsoil)	None Supplied	0.20	15.4	Brown clay
728565	SP04 (Subsoil)	None Supplied	0.10	18.9	Brown clay
728566	SP04 (Subsoil)	None Supplied	0.20	19.2	Brown clay
728567	SP05 (Topsoil)	None Supplied	0.10	26.7	Brown clay with vegetation
728568	SP06 (Subsoil)	None Supplied	0.10	16.6	Brown clay with vegetation
728569	SP06 (Subsoil)	None Supplied	0.20	12.7	Brown clay
728570	SP07 (Topsoil)	None Supplied	0.10	29.1	Brown clay with vegetation
728571	SP07 (Topsoil)	None Supplied	0.20	28	Brown clay with vegetation

Moisture content is part of procedure E003 & is not an accredited test

Insufficient Sample I/S

Unsuitable Sample U/S

~Sample details provided by customer and can affect the validity of results

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Soil Analysis Certificate - Methodology & Miscellaneous Information

DETS Report No: 24-08485

Earth Environmental & Geotechnical Ltd

~Site Reference: Inverbeg Drive

~Project / Job Ref: A5882

~Order No: A5882/AH/01

Reporting Date: 01/08/2024

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D	TOC (Total Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried
AR As Received

~Sample details provided by customer and can affect the validity of results

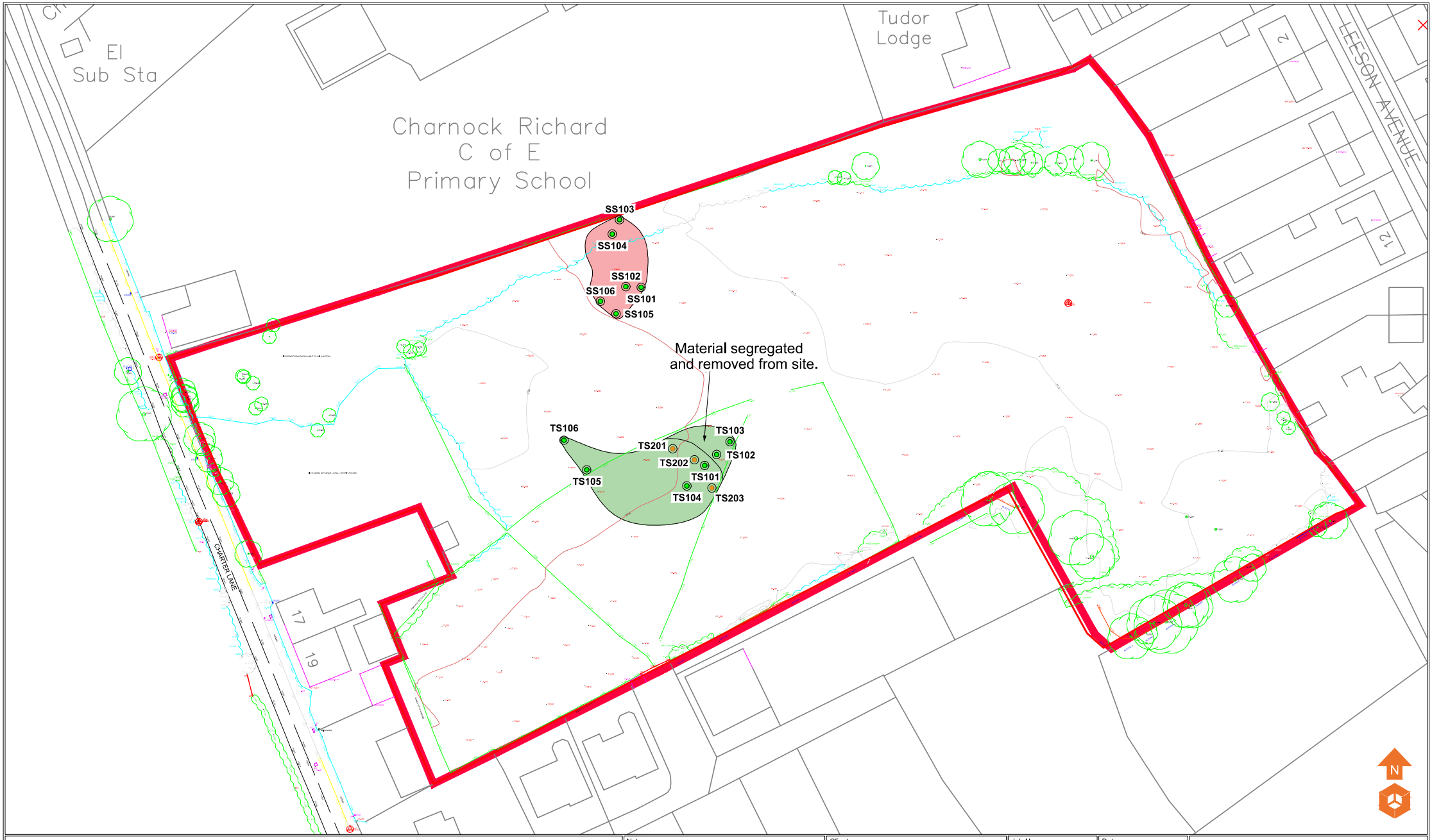
Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

4480

List of HWOL Acronyms and Operators
DETS Report No: 24-08485
Earth Environmental & Geotechnical Ltd
~Site Reference: Inverbeg Drive
~Project / Job Ref: A5882
~Order No: A5882/AH/01
Reporting Date: 01/08/2024

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total
~	Sample details provided by customer and can affect the validity of results

Benzene - HS_1D_MS
Ethylbenzene - HS_1D_MS
MTBE - HS_1D_MS
TPH CWG - Aliphatic >C10 - C12 - EH_CU_1D_AL
TPH CWG - Aliphatic >C12 - C16 - EH_CU_1D_AL
TPH CWG - Aliphatic >C16 - C21 - EH_CU_1D_AL
TPH CWG - Aliphatic >C21 - C34 - EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C6 - HS_1D_MS_AL
TPH CWG - Aliphatic >C6 - C8 - HS_1D_MS_AL
TPH CWG - Aliphatic >C8 - C10 - EH_CU_1D_AL
TPH CWG - Aliphatic C5 - C34 - HS_1D_MS+EH_CU_1D_AL
TPH CWG - Aromatic >C10 - C12 - EH_CU_1D_AR
TPH CWG - Aromatic >C12 - C16 - EH_CU_1D_AR
TPH CWG - Aromatic >C16 - C21 - EH_CU_1D_AR
TPH CWG - Aromatic >C21 - C35 - EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C35 - HS_1D_MS+EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C7 - HS_1D_MS_AR
TPH CWG - Aromatic >C7 - C8 - HS_1D_MS_AR
TPH CWG - Aromatic >C8 - C10 - EH_CU_1D_AR
TPH CWG - Total >C5 - C35 - HS_1D_MS+EH_CU_1D_Total
Toluene - HS_1D_MS
m & p-xylene - HS_1D_MS
o-Xylene - HS_1D_MS



Location Symbols

- Approximate Sample Location (E3P May 2024)
- Approximate Delineation Sample Location (E3P June 2024)

Notes:

Client: Westchurch Homes

Job No: 17-114

Date: 21.05.2024

Drawing No: 029

Scale: NTS

Phase	Issue	Date	Drawn	Checked
P1	REVB	21.06.2024	EB	JS
P1	REVA	21.05.2024	EB	NS

Job Title: Charter Lane, Charnock Richard

Drawing Title: Stockpile Sample Plan

e3p
Environmental Engineering Partnership Ltd
Taylor Road, Trafford Park
Urmston, Manchester, M41 7JQ
Tel: 0161 707 9612
E-mail: info@e3p.co.uk
Website: www.e3p.co.uk

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eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-18973-1
Initial Date of Issue:	27-Jun-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	jsheridan@e3p.co.uk
Project	Charter Lane
Quotation No.:	Q23-31421
Order No.:	008526
No. of Samples:	3
Turnaround (Wkdays):	5
Date Approved:	27-Jun-2024
Approved By:	[redacted]
Details:	David Smith, Technical Director

Date Received:	15-Jun-2024
Date Instructed:	15-Jun-2024
Results Due:	20-Jun-2024

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: Charter Lane

Client: E3P				**Chemtest Job No.:**		24-18973	24-18973	24-18973
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1821535	1821536	1821537
				Client Sample ID.:		TS201	TS202	TS203
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		14-Jun-2024	14-Jun-2024	14-Jun-2024
				Time Sampled:		12:00	12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**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
Moisture		N	2030	%	0.020	35	28	28
Soil Colour		N	2040		N/A	Brown	Brown	Brown
Other Material		N	2040		N/A	Roots	Roots	Roots
Soil Texture		N	2040		N/A	Clay	Clay	Clay
pH at 20C		M	2010		4.0	8.9	9.4	8.0
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	< 0.010	0.022	0.13
Total Sulphur		U	2175	%	0.010	0.066	0.050	0.081
Cyanide (Total)		M	2300	mg/kg	0.50	1.8	0.80	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	3.9	3.0	3.2
Sulphate (Total)		U	2430	%	0.010	0.24	0.17	0.17
Arsenic		M	2455	mg/kg	0.5	18	13	13
Cadmium		M	2455	mg/kg	0.10	0.27	0.13	0.13
Chromium		M	2455	mg/kg	0.5	37	27	39
Copper		M	2455	mg/kg	0.50	54	40	37
Mercury		M	2455	mg/kg	0.05	0.13	0.09	0.15
Nickel		M	2455	mg/kg	0.50	33	24	31
Lead		M	2455	mg/kg	0.50	69	50	46
Selenium		M	2455	mg/kg	0.25	1.2	0.82	0.74
Zinc		M	2455	mg/kg	0.50	110	72	150
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	12	27	8.1
Total Organic Carbon		M	2625	%	0.20	7.2	15	4.7
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	1.1	< 1.0	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	21	6.4	8.4
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	31	29	26
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	210	160	140
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	46	40	37
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	310	230	220
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Charter Lane

Client: E3P				**Chemtest Job No.:**		24-18973	24-18973	24-18973
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1821535	1821536	1821537
				Client Sample ID.:		TS201	TS202	TS203
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		14-Jun-2024	14-Jun-2024	14-Jun-2024
				Time Sampled:		12:00	12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	0.35	< 0.10	< 0.10
Pyrene		M	2800	mg/kg	0.10	0.30	< 0.10	< 0.10
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Chrysene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
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 <30°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	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
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.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
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	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
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 EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°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.

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

APPENDIX E

INVERBEG DRIVE ASBESTOS REMOVAL REPORT

EARTH ENVIRONMENTAL & GEOTECHNICAL

CONSULTING ENGINEERS
Geotechnical
Environmental
Ecology
Geology
Drainage
Mining

Earth Environmental & Geotechnical Ltd
Houldsworth Mill Business & Arts Centre
Houldsworth Street
Stockport
SK5 6DA

Tel: 0161 975 6088

www.earthenvironmental.co.uk
info@earthenvironmental.co.uk

Bath
Kingsbury House
Kingsbury Square
Melksham
Near Bath
SN12 6HL
Tel: 01225 434237

Edinburgh
Hudson House
8 Albany Street
Edinburgh
EH1 3QB
Tel: 0131 5641789

Middlesbrough
Wilton Centre
Redcar
TS10 4RF
Tel: 01642 438125

Reading
200 Brook Drive
Green Park
Reading
RG2 6UB
Tel: 011890 253229

Earth Environmental & Geotechnical Ltd
Registered Office:
Mentor House, Ainsworth Street, Blackburn, Lancashire, BB1 6AY
Registered in England
No: 8436152

OUR REF: A5882-24 16th June 2024

16th June 2024

Mr. Paul Sinclair
Westchurch Homes Ltd
31 Stamford Street
Altrincham
Cheshire
WA14 1ES

By Email (paul.sinclair@westchurchhomes.co.uk)

Dear Paul,

Soil Contamination Removal Letter Report
Inverbeg Drive, Bolton

Background

Chemical sampling was undertaken in stockpiles at Inverbeg Drive, Bolton in order to identify any possible contaminants. One sample was reported to contain asbestos.

Previous Reporting

This report should be read in conjunction with the following report previously prepared by Earth Environmental & Geotechnical Ltd:

- Inverbeg Drive, Bolton Stockpile Chemical Testing (A5882-24 5th June 2024)

Fieldwork

A site visit was conducted on the 25th April 2024 to recover samples of subsoil and topsoil.

Twelve soil samples were taken in total.

Chemical testing has been performed by DETS, a UKAS and MCERTS accredited laboratory.

12no. samples were obtained in total from the stockpiles, with 6no. samples of topsoil and 6no. samples of subsoil, as requested by the client.

Chemical testing has been performed for a wide range of analytes including asbestos screen, pH, total organic carbon, total sulphate, sulphide, total cyanide, arsenic, chromium, hexavalent chromium, copper, lead, selenium, zinc, cadmium, mercury, nickel, vanadium, barium, beryllium, water soluble boron, mono phenol, speciated hydrocarbons and speciated PAH's.

Based on the chemical testing results, no samples tested from soil stockpiles contain concentrations of contaminants in exceedance of the screening criteria relevant to residential end use with plant uptake.

Asbestos fibres were identified in Subsoil 7 in the form of amosite as fibre bundles, see Figure 1 for location.

The mass concentration of asbestos has been measured as 0.002%.

Figure 1: Stockpile Location Plan



Due to the presence of asbestos the stockpile was ordered to be removed from the in the correct manner and the appropriate precautions taken when doing so.

The full report can be found in Appendix A.

Stockpile Removal

The affected stockpile was removed from the site on 8th July 2024 by B. J. Crowler Ltd for safe disposal and/or treatment off site.

Evidence of the stockpile removal can be found in Appendix B.

Conclusions

As the affected stockpile was safely and effectively removed from site and the remaining stockpiles recorded no exceedances of potentially harmful chemicals therefore the site and the remaining stockpiles are deemed safe for use.

Yours Sincerely,

Adam Czarnecki
Director

For and on behalf of Earth Environmental & Geotechnical Ltd

Enclosed: *Appendix A – Previous Report*
Appendix B – Stockpile Removal Photographs

APPENDIX A

PREVIOUS REPORT

APPENDIX B

STOCKPILE REMOVAL PHOTOGRAPHS

Earth Environmental & Geotechnical Ltd

Tel: 0161 975 6088
Email: info@earthenvironmental.co.uk
Web: www.earthenvironmental.co.uk

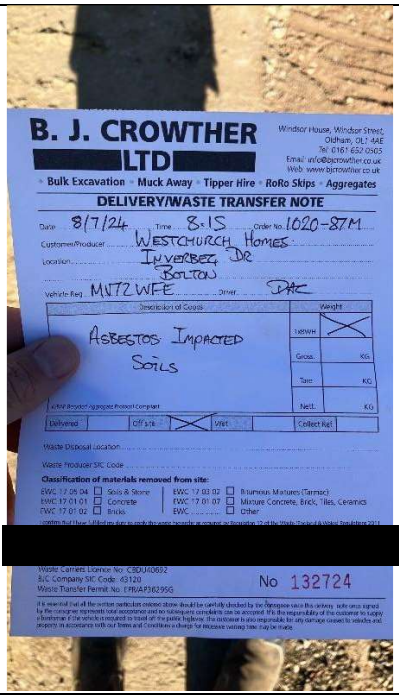
SITE PHOTOGRAPHS

EARTH ENVIRONMENTAL & GEOTECHNICAL

Job No.: A5882/24

Site: Inverbeg Drive, Bolton

Plate 1 Load 1 Removal



Date: 8th July 2024

Plate 2 Load 1 Removal



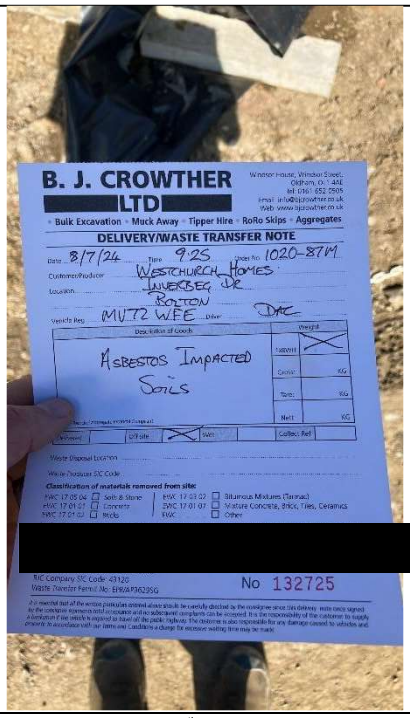
Date: 8th July 2024

Plate 3 Load 1 Removal



Date: 8th July 2024

Plate 4 Load 2 Removal



Date: 8th July 2024

Earth Environmental & Geotechnical Ltd

Tel: 0161 975 6088
Email: info@earthenvironmental.co.uk
Web: www.earthenvironmental.co.uk

SITE PHOTOGRAPHS

EARTH ENVIRONMENTAL & GEOTECHNICAL

Job No.: A5882/24

Site: Inverbeg Drive, Bolton

Plate 5 Load 2 Removal



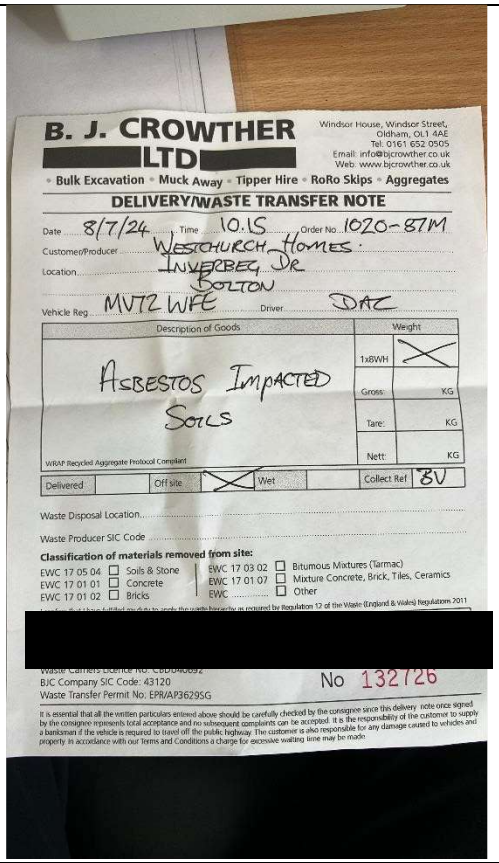
Date: 8th July 2024

Plate 6 Load 2 Removal



Date: 8th July 2024

Plate 7 Load 3 Removal


B. J. CROWTHER LTD

Windsor House, Windsor Street, Oldham, OL1 4AE
Tel: 0161 652 0505
Email: info@bjcrowther.co.uk
Web: www.bjcrowther.co.uk

• Bulk Excavation • Muck Away • Tipper Hire • RoRo Skips • Aggregates

DELIVERY/WASTE TRANSFER NOTE

Date 8/7/24 Time 10.15 Order No. 1020-87M
Customer/Producer WESTCHURCH HOMES
Location INVERBEG DR BOLTON
Vehicle Reg MV72 WFE Driver DAC

Description of Goods	Weight
ASBESTOS IMPACTED SOILS	1x8WH ☒
	Gross KG
	Tare: KG
	Nett: KG

WRAP Recycled Aggregate Protocol Compliant

Delivered ☐ Off site ☒ Wet ☐ Collect Ref BV

Waste Disposal Location
Waste Producer SIC Code

Classification of materials removed from site:

EWC 17 05 04 ☐ Soils & Stone
EWC 17 01 01 ☐ Concrete
EWC 17 01 02 ☐ Bricks
EWC 17 03 02 ☐ Bitumous Mixtures (Tarmac)
EWC 17 01 07 ☐ Mixture Concrete, Brick, Tiles, Ceramics
EWC ..... ☐ Other

[redacted]

BJC Company SIC Code: 43120
Waste Transfer Permit No. EPR/AP3629SG

No 132726

It is essential that all the written particulars entered above should be carefully checked by the consignee since this delivery note once signed by the consignee represents total acceptance and no subsequent complaints can be accepted. It is the responsibility of the customer to supply a banksman if the vehicle is required to travel off the public highway. The customer is also responsible for any damage caused to vehicles and property in accordance with our Terms and Conditions a charge for excessive waiting time may be made

Date: 8th July 2024

Plate 8 Load 3 Removal



Date: 8th July 2024

Earth Environmental & Geotechnical Ltd

Tel: *0161 975 6088*
Email: *info@earthenvironmental.co.uk*
Web: *www.earthenvironmental.co.uk*

SITE PHOTOGRAPHS

EARTH ENVIRONMENTAL & GEOTECHNICAL

Job No.: *A5882/24*

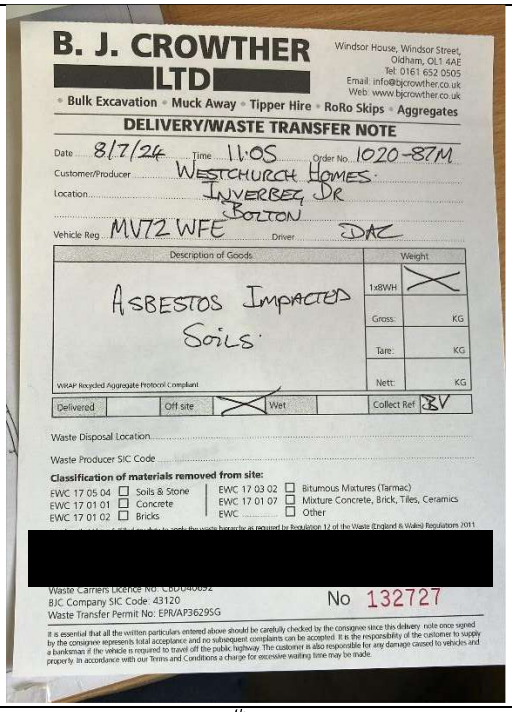
Site: *Inverbeg Drive, Bolton*

Plate 9 *Load 3 Removal*



Date: *8th July 2024*

Plate 10 *Load 4 Removal*



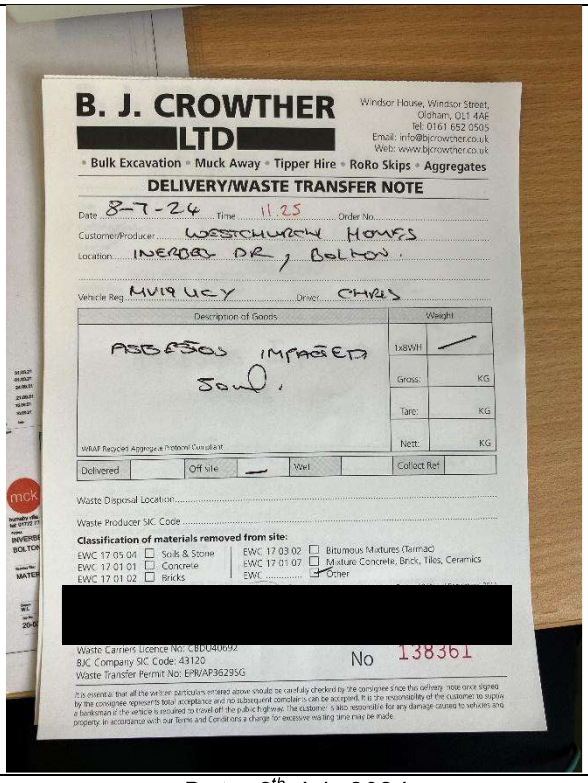
Date: *8th July 2024*

Plate 11 *Load 4 Removal*



Date: *8th July 2024*

Plate 12 *Load 5 Removal*



Date: *8th July 2024*

Earth Environmental & Geotechnical Ltd

Tel: 0161 975 6088
Email: info@earthenvironmental.co.uk
Web: www.earthenvironmental.co.uk

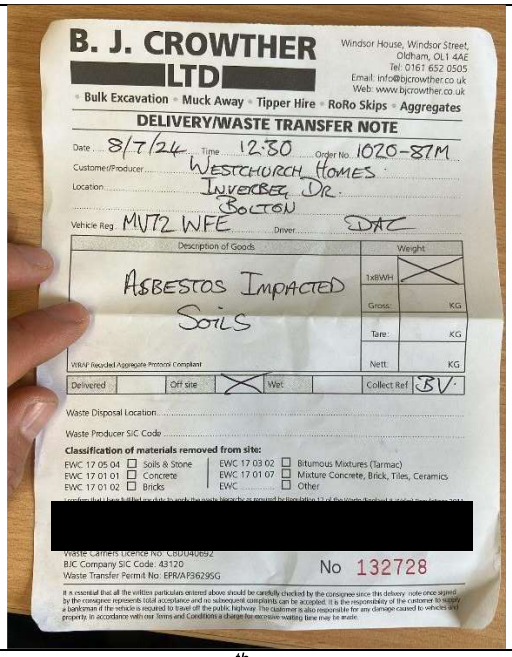
SITE PHOTOGRAPHS

EARTH ENVIRONMENTAL & GEOTECHNICAL

Job No.: A5882/24

Site: Inverbeg Drive, Bolton

Plate 13 Load 6 Removal



B. J. CROWTHER [redacted] LTD

Windsor House, Windsor Street, Oldham, OL1 4AE
Tel: 0161 652 0505
Email: info@bjcrowther.co.uk
Web: www.bjcrowther.co.uk

Bulk Excavation • Muck Away • Tipper Hire • RoRo Skips • Aggregates

DELIVERY/WASTE TRANSFER NOTE

Date 8/7/24 Time 12:30 Order No. 1020-87M
Customer/Producer WESTCHURCH HOMES
Location INVERBEG DR. BOLTON
Vehicle Reg. MV72 WFE Driver DAC

Description of Goods	Weight
ASBESTOS IMPACTED SOILS	1x8WH ☒ Gross: KG Tare: KG Nett: KG

WRAP Recycled Aggregate Protocol Compliant

Delivered ☐ Off site ☒ Wet ☐ Collect Ref BV

Waste Disposal Location
Waste Producer SIC Code

Classification of materials removed from site:

EWC 17 05 04 ☐ Soils & Stone
EWC 17 01 01 ☐ Concrete
EWC 17 01 02 ☐ Bricks
EWC 17 03 02 ☐ Bitumous Mixtures (Tarmac)
EWC 17 01 07 ☐ Mixture Concrete, Brick, Tiles, Ceramics
EWC ☐ Other

[redacted]

Waste Carriers Licence No: CBDU40892
BJC Company SIC Code: 43120
Waste Transfer Permit No: EPR/AP3629SG

No 132728

It is essential that all the written particulars entered above should be carefully checked by the consignee since this delivery note once signed by the consignee represents total acceptance and no subsequent complaints can be accepted. It is the responsibility of the customer to supply a banksman if the vehicle is required to travel off the public highway. The customer is also responsible for any damage caused to vehicles and property in accordance with our Terms and Conditions a charge for excessive waiting time may be made.

Date: 8th July 2024

Plate 14 Load 6 Removal



Date: 8th July 2024

Plate 15 Load 6 Removal



Date: 8th July 2024

APPENDIX F

ON-SITE CHEMICAL TESTING RESULTS

Normec DETS

UKAS TESTING
4480

Luke Glover
Earth Environmental & Geotechnical Ltd
Houldsworth Mill Business Centre
Houldsworth Street
Reddish
Stockport
Cheshire
SK5 6DA

Normec DETS Limited
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 25-04671

Site Reference:	Louisa Street
Project / Job Ref:	A4755
Order No:	A4755/CL/03
Sample Receipt Date:	02/05/2025
Sample Scheduled Date:	02/05/2025
Report Issue Number:	1
Reporting Date:	09/05/2025

Authorised by:

[redacted]
Steve Knight
Customer Support Manager

Dates of laboratory activities for each tested analyte are available upon request.

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 25-04671	**~Date Sampled**	01/05/25	01/05/25	01/05/25	01/05/25	01/05/25
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Louisa Street	**~TP / BH No**	AP01 (HP01)	AP02 (HP02)	AP03 (HP03)	AP04 (HP04)	AP05 (HP05)
~Project / Job Ref: A4755	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A4755/CL/03	**~Depth (m)**	0.10	0.35	0.20	0.40	0.25
Reporting Date: 09/05/2025	**DETS Sample No**	774781	774782	774783	774784	774785

Determinand	Unit	RL	Accreditation					(n)
Asbestos Screen [S]	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
pH	pH Units	N/a	MCERTS	7.6	7.2	7.6	6.9	6.8
Total Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Complex Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	< 200	MCERTS	893	1079	638	2617	1759
Total Sulphate as SO_4	%	< 0.02	MCERTS	0.09	0.11	0.06	0.26	0.18
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	327	461	94	848	715
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.33	0.46	0.09	0.85	0.71
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter (SOM)	%	< 0.1	MCERTS	5.1	3.4	6	3.3	2.7
Arsenic (As)	mg/kg	< 2	MCERTS	10	6	12	6	6
Barium (Ba)	mg/kg	< 2.5	MCERTS	104.0	74.5	123.0	101.0	66.7
Beryllium (Be)	mg/kg	< 0.5	MCERTS	0.8	1	0.7	0.9	0.9
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	0.3	< 0.2	0.3	0.4	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	16	20	16	22	19
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Copper (Cu)	mg/kg	< 4	MCERTS	41	26	49	94	28
Lead (Pb)	mg/kg	< 3	MCERTS	83	26	128	33	26
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	18	29	13	30	25
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Vanadium (V)	mg/kg	< 1	MCERTS	19	20	20	20	19
Zinc (Zn)	mg/kg	< 3	MCERTS	77	60	89	161	56
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 25-04671	**~Date Sampled**	01/05/25				
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied				
~Site Reference: Louisa Street	**~TP / BH No**	AP06 (HP06)				
~Project / Job Ref: A4755	**~Additional Refs**	None Supplied				
~Order No: A4755/CL/03	**~Depth (m)**	0.15				
Reporting Date: 09/05/2025	**DETS Sample No**	774786				

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected				
pH	pH Units	N/a	MCERTS	7.6				
Total Cyanide	mg/kg	< 1	NONE	< 1				
Complex Cyanide	mg/kg	< 1	NONE	< 1				
Free Cyanide	mg/kg	< 1	NONE	< 1				
Total Sulphate as SO_4	mg/kg	< 200	MCERTS	1381				
Total Sulphate as SO_4	%	< 0.02	MCERTS	0.14				
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	541				
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.54				
Sulphide	mg/kg	< 5	NONE	< 5				
Organic Matter (SOM)	%	< 0.1	MCERTS	3.7				
Arsenic (As)	mg/kg	< 2	MCERTS	8				
Barium (Ba)	mg/kg	< 2.5	MCERTS	89.5				
Beryllium (Be)	mg/kg	< 0.5	MCERTS	0.8				
W/S Boron	mg/kg	< 1	NONE	< 1				
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	0.2				
Chromium (Cr)	mg/kg	< 2	MCERTS	17				
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2				
Copper (Cu)	mg/kg	< 4	MCERTS	36				
Lead (Pb)	mg/kg	< 3	MCERTS	58				
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1				
Nickel (Ni)	mg/kg	< 3	MCERTS	19				
Selenium (Se)	mg/kg	< 2	MCERTS	< 2				
Vanadium (V)	mg/kg	< 1	MCERTS	19				
Zinc (Zn)	mg/kg	< 3	MCERTS	70				
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2				

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 25-04671	~Date Sampled	01/05/25	01/05/25	01/05/25	01/05/25	01/05/25
Earth Environmental & Geotechnical Ltd	~Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Louisa Street	~TP / BH No	AP01 (HP01)	AP02 (HP02)	AP03 (HP03)	AP04 (HP04)	AP05 (HP05)
~Project / Job Ref: A4755	~Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A4755/CL/03	~Depth (m)	0.10	0.35	0.20	0.40	0.25
Reporting Date: 09/05/2025	DETS Sample No	774781	774782	774783	774784	774785

Determinand	Unit	RL	Accreditation					(n)
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.19	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.12	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.15	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.60	0.16	0.92	0.75	0.46
Anthracene	mg/kg	< 0.1	MCERTS	0.12	< 0.1	0.24	0.15	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	1.17	< 0.1	1.54	0.56	0.48
Pyrene	mg/kg	< 0.1	MCERTS	1.10	< 0.1	1.45	0.48	0.47
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.51	< 0.1	0.68	0.19	0.21
Chrysene	mg/kg	< 0.1	MCERTS	0.65	< 0.1	0.66	0.26	0.23
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.58	< 0.1	0.67	0.19	0.17
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.26	< 0.1	0.24	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.52	< 0.1	0.52	0.17	0.15
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.30	< 0.1	0.32	< 0.1	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.30	< 0.1	0.30	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	6.1	< 1.6	7.5	3.2	2.2

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

4480

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 25-04671	~Date Sampled	01/05/25				
Earth Environmental & Geotechnical Ltd	~Time Sampled	None Supplied				
~Site Reference: Louisa Street	~TP / BH No	AP06 (HP06)				
~Project / Job Ref: A4755	~Additional Refs	None Supplied				
~Order No: A4755/CL/03	~Depth (m)	0.15				
Reporting Date: 09/05/2025	DETS Sample No	774786				

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1				
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1				
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1				
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1				
Phenanthrene	mg/kg	< 0.1	MCERTS	0.94				
Anthracene	mg/kg	< 0.1	MCERTS	0.16				
Fluoranthene	mg/kg	< 0.1	MCERTS	1.28				
Pyrene	mg/kg	< 0.1	MCERTS	1.19				
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.45				
Chrysene	mg/kg	< 0.1	MCERTS	0.62				
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.52				
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.25				
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.49				
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.30				
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1				
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.27				
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	6.5				

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 25-04671	**~Date Sampled**	01/05/25	01/05/25	01/05/25	01/05/25	01/05/25
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Louisa Street	**~TP / BH No**	AP01 (HP01)	AP02 (HP02)	AP03 (HP03)	AP04 (HP04)	AP05 (HP05)
~Project / Job Ref: A4755	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A4755/CL/03	**~Depth (m)**	0.10	0.35	0.20	0.40	0.25
Reporting Date: 09/05/2025	**DETS Sample No**	774781	774782	774783	774784	774785

Determinand	Unit	RL	Accreditation					(n)
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	3	< 3	6	4	< 3
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 25-04671	~Date Sampled	01/05/25				
Earth Environmental & Geotechnical Ltd	~Time Sampled	None Supplied				
~Site Reference: Louisa Street	~TP / BH No	AP06 (HP06)				
~Project / Job Ref: A4755	~Additional Refs	None Supplied				
~Order No: A4755/CL/03	~Depth (m)	0.15				
Reporting Date: 09/05/2025	DETS Sample No	774786				

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01				
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05				
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2				
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2				
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3				
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3				
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10				
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21				
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01				
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05				
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2				
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2				
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2				
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	4				
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	10				
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21				
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42				

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 25-04671	**~Date Sampled**	01/05/25	01/05/25	01/05/25	01/05/25	01/05/25
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Louisa Street	**~TP / BH No**	AP01 (HP01)	AP02 (HP02)	AP03 (HP03)	AP04 (HP04)	AP05 (HP05)
~Project / Job Ref: A4755	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A4755/CL/03	**~Depth (m)**	0.10	0.35	0.20	0.40	0.25
Reporting Date: 09/05/2025	**DETS Sample No**	774781	774782	774783	774784	774785

Determinand	Unit	RL	Accreditation					(n)
Benzene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene : HS_1D_MS	µg/kg	< 5	MCERTS	< 5	< 5	< 5	6	< 5
Ethylbenzene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2	< 2	< 2	3	< 2
p & m-xylene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2	< 2	5	12	< 2
o-xylene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2	< 2	< 2	4	< 2
MTBE : HS_1D_MS	µg/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5

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4480

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 25-04671	~Date Sampled	01/05/25				
Earth Environmental & Geotechnical Ltd	~Time Sampled	None Supplied				
~Site Reference: Louisa Street	~TP / BH No	AP06 (HP06)				
~Project / Job Ref: A4755	~Additional Refs	None Supplied				
~Order No: A4755/CL/03	~Depth (m)	0.15				
Reporting Date: 09/05/2025	DETS Sample No	774786				

Determinand	Unit	RL	Accreditation					
Benzene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2				
Toluene : HS_1D_MS	µg/kg	< 5	MCERTS	< 5				
Ethylbenzene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2				
p & m-xylene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2				
o-xylene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2				
MTBE : HS_1D_MS	µg/kg	< 5	MCERTS	< 5				

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Rose Lane
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Maidstone
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Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 25-04671	
Earth Environmental & Geotechnical Ltd	
~Site Reference: Louisa Street	
~Project / Job Ref: A4755	
~Order No: A4755/CL/03	
Reporting Date: 09/05/2025	

DETS Sample No	~TP / BH No	~Additional Refs	~Depth (m)	Moisture Content (%)	Sample Matrix Description
774781	AP01 (HP01)	None Supplied	0.10	15.6	Brown sandy clay
774782	AP02 (HP02)	None Supplied	0.35	11.4	Brown sandy clay
774783	AP03 (HP03)	None Supplied	0.20	17.7	Brown sandy loam with brick
774784	AP04 (HP04)	None Supplied	0.40	11.1	Brown sandy clay with stones
774785	AP05 (HP05)	None Supplied	0.25	12.2	Brown sandy gravel with stones
774786	AP06 (HP06)	None Supplied	0.15	12.4	Brown sandy loam with stones and vegetation

Moisture content is part of procedure E003 & is not an accredited test

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Maidstone
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Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 25-04671
Earth Environmental & Geotechnical Ltd
~Site Reference: Louisa Street
~Project / Job Ref: A4755
~Order No: A4755/CL/03
Reporting Date: 09/05/2025

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D	TOC (Total Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

4480

List of HWOL Acronyms and Operators
DETS Report No: 25-04671
Earth Environmental & Geotechnical Ltd
~Site Reference: Louisa Street
~Project / Job Ref: A4755
~Order No: A4755/CL/03
Reporting Date: 09/05/2025

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total
~	Sample details provided by customer and can affect the validity of results

Benzene - HS_1D_MS
Ethylbenzene - HS_1D_MS
MTBE - HS_1D_MS
TPH CWG - Aliphatic >C10 - C12 - EH_CU_1D_AL
TPH CWG - Aliphatic >C12 - C16 - EH_CU_1D_AL
TPH CWG - Aliphatic >C16 - C21 - EH_CU_1D_AL
TPH CWG - Aliphatic >C21 - C34 - EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C6 - HS_1D_MS_AL
TPH CWG - Aliphatic >C6 - C8 - HS_1D_MS_AL
TPH CWG - Aliphatic >C8 - C10 - EH_CU_1D_AL
TPH CWG - Aliphatic C5 - C34 - HS_1D_MS+EH_CU_1D_AL
TPH CWG - Aromatic >C10 - C12 - EH_CU_1D_AR
TPH CWG - Aromatic >C12 - C16 - EH_CU_1D_AR
TPH CWG - Aromatic >C16 - C21 - EH_CU_1D_AR
TPH CWG - Aromatic >C21 - C35 - EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C35 - HS_1D_MS+EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C7 - HS_1D_MS_AR
TPH CWG - Aromatic >C7 - C8 - HS_1D_MS_AR
TPH CWG - Aromatic >C8 - C10 - EH_CU_1D_AR
TPH CWG - Total >C5 - C35 - HS_1D_MS+EH_CU_1D_Total
Toluene - HS_1D_MS
m & p-xylene - HS_1D_MS
o-Xylene - HS_1D_MS

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Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Certificate Key

Symbol	Description
F	Filtered sample
UF	Unfiltered sample
D	Dried sample
AR	As received sample
RL	Reporting limit
~	Sample details provided by customer and can affect the validity of results
M/S	Missing Sample
n	Please note that we are MCERTS soil accredited (UK soils only) for sand, loam, and clay, and UKAS accredited for groundwater, tap water, surface water, and generated leachates. Other matrices are outside our scope of accreditation.
S	Subcontracted analysis
M	MCERTS accredited test
U	UKAS accredited test

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UKAS TESTING
4480

Luke Glover
Earth Environmental & Geotechnical Ltd
Houldsworth Mill Business Centre
Houldsworth Street
Reddish
Stockport
Cheshire
SK5 6DA

Normec DETS Limited
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 25-05093

Site Reference:	Louisa Street, Openshaw
Project / Job Ref:	A4755
Order No:	A4755/CL/04
Sample Receipt Date:	19/05/2025
Sample Scheduled Date:	20/05/2025
Report Issue Number:	1
Reporting Date:	28/05/2025

Authorised by:

[redacted]

Dave Ashworth
Technical Manager

Dates of laboratory activities for each tested analyte are available upon request.

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Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
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Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 25-05093	**~Date Sampled**	13/05/25	13/05/25	13/05/25	13/05/25	13/05/25
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Louisa Street, Openshaw	**~TP / BH No**	PL20	PL23	PL25	PL27	PL29
~Project / Job Ref: A4755	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A4755/CL/04	**~Depth (m)**	0.20	0.25	0.40	0.30	0.10
Reporting Date: 28/05/2025	**DETS Sample No**	776384	776385	776386	776387	776388

Determinand	Unit	RL	Accreditation		(n)	(n)		
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
pH	pH Units	N/a	MCERTS	7.0	6.9	6.9	7.0	7.4
Total Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Complex Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	< 200	MCERTS	578	572	656	542	679
Total Sulphate as SO_4	%	< 0.02	MCERTS	0.06	0.06	0.07	0.05	0.07
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	104	103	93	125	222
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.10	0.10	0.09	0.13	0.22
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5	< 5	< 5
Organic Matter (SOM)	%	< 0.1	MCERTS	8.5	9.4	8.4	8.2	2.6
Arsenic (As)	mg/kg	< 2	MCERTS	11	13	11	12	8
Barium (Ba)	mg/kg	< 2.5	MCERTS	128.0	134.0	132.0	129.0	66.9
Beryllium (Be)	mg/kg	< 0.5	MCERTS	0.8	0.9	0.9	0.9	0.6
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	0.3	0.3	0.3	0.3	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	24	25	26	25	15
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Copper (Cu)	mg/kg	< 4	MCERTS	38	42	41	42	19
Lead (Pb)	mg/kg	< 3	MCERTS	45	52	53	47	25
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	21	22	22	22	12
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Vanadium (V)	mg/kg	< 1	MCERTS	29	32	31	31	19
Zinc (Zn)	mg/kg	< 3	MCERTS	75	81	73	73	40
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2

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Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
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Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 25-05093	**~Date Sampled**	13/05/25	13/05/25	13/05/25		
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied		
~Site Reference: Louisa Street, Openshaw	**~TP / BH No**	PL21 (Front)	PL25 (Front)	SS01		
~Project / Job Ref: A4755	**~Additional Refs**	None Supplied	None Supplied	None Supplied		
~Order No: A4755/CL/04	**~Depth (m)**	0.40	0.20	0.30		
Reporting Date: 28/05/2025	**DETS Sample No**	776389	776390	776391		

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected		
pH	pH Units	N/a	MCERTS	7.1	6.5	7.5		
Total Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1		
Complex Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1		
Free Cyanide	mg/kg	< 1	NONE	< 1	< 1	< 1		
Total Sulphate as SO_4	mg/kg	< 200	MCERTS	463	598	613		
Total Sulphate as SO_4	%	< 0.02	MCERTS	0.05	0.06	0.06		
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	59	54	121		
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.06	0.05	0.12		
Sulphide	mg/kg	< 5	NONE	< 5	< 5	< 5		
Organic Matter (SOM)	%	< 0.1	MCERTS	5.8	7	3.5		
Arsenic (As)	mg/kg	< 2	MCERTS	13	15	11		
Barium (Ba)	mg/kg	< 2.5	MCERTS	102.0	98.8	85.4		
Beryllium (Be)	mg/kg	< 0.5	MCERTS	0.7	0.8	0.6		
W/S Boron	mg/kg	< 1	NONE	< 1	< 1	< 1		
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	0.3	0.4	0.2		
Chromium (Cr)	mg/kg	< 2	MCERTS	19	21	16		
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2		
Copper (Cu)	mg/kg	< 4	MCERTS	31	34	26		
Lead (Pb)	mg/kg	< 3	MCERTS	61	70	42		
Mercury (Hg)	mg/kg	< 1	MCERTS	< 1	< 1	< 1		
Nickel (Ni)	mg/kg	< 3	MCERTS	16	15	14		
Selenium (Se)	mg/kg	< 2	MCERTS	< 2	< 2	< 2		
Vanadium (V)	mg/kg	< 1	MCERTS	21	21	20		
Zinc (Zn)	mg/kg	< 3	MCERTS	65	68	56		
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2		

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 25-05093	~Date Sampled	13/05/25	13/05/25	13/05/25	13/05/25	13/05/25
Earth Environmental & Geotechnical Ltd	~Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Louisa Street, Openshaw	~TP / BH No	PL20	PL23	PL25	PL27	PL29
~Project / Job Ref: A4755	~Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A4755/CL/04	~Depth (m)	0.20	0.25	0.40	0.30	0.10
Reporting Date: 28/05/2025	DETS Sample No	776384	776385	776386	776387	776388

Determinand	Unit	RL	Accreditation					
					(n)	(n)		
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6

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Maidstone
Kent ME17 2JN
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Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 25-05093	**~Date Sampled**	13/05/25	13/05/25	13/05/25		
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied		
~Site Reference: Louisa Street, Openshaw	**~TP / BH No**	PL21 (Front)	PL25 (Front)	SS01		
~Project / Job Ref: A4755	**~Additional Refs**	None Supplied	None Supplied	None Supplied		
~Order No: A4755/CL/04	**~Depth (m)**	0.40	0.20	0.30		
Reporting Date: 28/05/2025	**DETS Sample No**	776389	776390	776391		

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Phenanthrene	mg/kg	< 0.1	MCERTS	0.27	< 0.1	0.39		
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Fluoranthene	mg/kg	< 0.1	MCERTS	0.41	0.15	0.49		
Pyrene	mg/kg	< 0.1	MCERTS	0.36	0.13	0.50		
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.16	< 0.1	0.18		
Chrysene	mg/kg	< 0.1	MCERTS	0.20	< 0.1	0.24		
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.20	< 0.1	0.17		
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.17	< 0.1	0.18		
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.15	< 0.1	0.13		
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1		
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.12	< 0.1	0.12		
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	2	< 1.6	2.4		

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Lenham Heath
Maidstone
Kent ME17 2JN
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Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 25-05093	**~Date Sampled**	13/05/25	13/05/25	13/05/25	13/05/25	13/05/25
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Louisa Street, Openshaw	**~TP / BH No**	PL20	PL23	PL25	PL27	PL29
~Project / Job Ref: A4755	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A4755/CL/04	**~Depth (m)**	0.20	0.25	0.40	0.30	0.10
Reporting Date: 28/05/2025	**DETS Sample No**	776384	776385	776386	776387	776388

Determinand	Unit	RL	Accreditation		(n)	(n)		
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42	< 42	< 42	< 42	< 42

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Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 25-05093	~Date Sampled	13/05/25	13/05/25	13/05/25		
Earth Environmental & Geotechnical Ltd	~Time Sampled	None Supplied	None Supplied	None Supplied		
~Site Reference: Louisa Street, Openshaw	~TP / BH No	PL21 (Front)	PL25 (Front)	SS01		
~Project / Job Ref: A4755	~Additional Refs	None Supplied	None Supplied	None Supplied		
~Order No: A4755/CL/04	~Depth (m)	0.40	0.20	0.30		
Reporting Date: 28/05/2025	DETS Sample No	776389	776390	776391		

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6 : HS_1D_MS_AL	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01		
Aliphatic >C6 - C8 : HS_1D_MS_AL	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05		
Aliphatic >C8 - C10 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2		
Aliphatic >C10 - C12 : EH_CU_1D_AL	mg/kg	< 2	MCERTS	< 2	< 2	< 2		
Aliphatic >C12 - C16 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3		
Aliphatic >C16 - C21 : EH_CU_1D_AL	mg/kg	< 3	MCERTS	< 3	< 3	< 3		
Aliphatic >C21 - C34 : EH_CU_1D_AL	mg/kg	< 10	MCERTS	< 10	< 10	< 10		
Aliphatic (C5 - C34) : HS_1D_MS+EH_CU_1D_AL	mg/kg	< 21	NONE	< 21	< 21	< 21		
Aromatic >C5 - C7 : HS_1D_MS_AR	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01		
Aromatic >C7 - C8 : HS_1D_MS_AR	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05		
Aromatic >C8 - C10 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2		
Aromatic >C10 - C12 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2		
Aromatic >C12 - C16 : EH_CU_1D_AR	mg/kg	< 2	MCERTS	< 2	< 2	< 2		
Aromatic >C16 - C21 : EH_CU_1D_AR	mg/kg	< 3	MCERTS	< 3	< 3	< 3		
Aromatic >C21 - C35 : EH_CU_1D_AR	mg/kg	< 10	MCERTS	< 10	< 10	< 10		
Aromatic (C5 - C35) : HS_1D_MS+EH_CU_1D_AR	mg/kg	< 21	NONE	< 21	< 21	< 21		
Total >C5 - C35 : HS_1D_MS+EH_CU_1D_Total	mg/kg	< 42	NONE	< 42	< 42	< 42		

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Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 25-05093	**~Date Sampled**	13/05/25	13/05/25	13/05/25	13/05/25	13/05/25
Earth Environmental & Geotechnical Ltd	**~Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Louisa Street, Openshaw	**~TP / BH No**	PL20	PL23	PL25	PL27	PL29
~Project / Job Ref: A4755	**~Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: A4755/CL/04	**~Depth (m)**	0.20	0.25	0.40	0.30	0.10
Reporting Date: 28/05/2025	**DETS Sample No**	776384	776385	776386	776387	776388

Determinand	Unit	RL	Accreditation		(n)	(n)		
Benzene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene : HS_1D_MS	µg/kg	< 5	MCERTS	< 5	7	7	7	< 5
Ethylbenzene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE : HS_1D_MS	µg/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5

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Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 25-05093	~Date Sampled	13/05/25	13/05/25	13/05/25		
Earth Environmental & Geotechnical Ltd	~Time Sampled	None Supplied	None Supplied	None Supplied		
~Site Reference: Louisa Street, Openshaw	~TP / BH No	PL21 (Front)	PL25 (Front)	SS01		
~Project / Job Ref: A4755	~Additional Refs	None Supplied	None Supplied	None Supplied		
~Order No: A4755/CL/04	~Depth (m)	0.40	0.20	0.30		
Reporting Date: 28/05/2025	DETS Sample No	776389	776390	776391		

Determinand	Unit	RL	Accreditation					
Benzene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2	< 2	< 2		
Toluene : HS_1D_MS	µg/kg	< 5	MCERTS	< 5	< 5	< 5		
Ethylbenzene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2	< 2	< 2		
p & m-xylene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2	< 2	< 2		
o-xylene : HS_1D_MS	µg/kg	< 2	MCERTS	< 2	< 2	< 2		
MTBE : HS_1D_MS	µg/kg	< 5	MCERTS	< 5	< 5	< 5		

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Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 25-05093	
Earth Environmental & Geotechnical Ltd	
~Site Reference: Louisa Street, Openshaw	
~Project / Job Ref: A4755	
~Order No: A4755/CL/04	
Reporting Date: 28/05/2025	

DETS Sample No	~TP / BH No	~Additional Refs	~Depth (m)	Moisture Content (%)	Sample Matrix Description
776384	PL20	None Supplied	0.20	22.5	Brown clay
776385	PL23	None Supplied	0.25	23.4	Brown clay with vegetation
776386	PL25	None Supplied	0.40	24.3	Brown clay with vegetation
776387	PL27	None Supplied	0.30	23.5	Brown clay
776388	PL29	None Supplied	0.10	16.6	Brown sandy clay
776389	PL21 (Front)	None Supplied	0.40	11.3	Brown sandy clay with stones
776390	PL25 (Front)	None Supplied	0.20	15.2	Brown sandy clay with stones
776391	SS01	None Supplied	0.30	16.3	Brown sandy clay with stones

Moisture content is part of procedure E003 & is not an accredited test

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Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 25-05093
Earth Environmental & Geotechnical Ltd
~Site Reference: Louisa Street, Openshaw
~Project / Job Ref: A4755
~Order No: A4755/CL/04
Reporting Date: 28/05/2025

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	Fraction Organic Carbon (FOC)	Determination of TOC by combustion analyser.	E027
Soil	D	Organic Matter (SOM)	Determination of TOC by combustion analyser.	E027
Soil	D	TOC (Total Organic Carbon)	Determination of TOC by combustion analyser.	E027
Soil	AR	Exchangeable Ammonium	Determination of ammonium by discrete analyser.	E029
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

Normec DETS Limited
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Maidstone
Kent ME17 2JN
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List of HWOL Acronyms and Operators
DETS Report No: 25-05093
Earth Environmental & Geotechnical Ltd
~Site Reference: Louisa Street, Openshaw
~Project / Job Ref: A4755
~Order No: A4755/CL/04
Reporting Date: 28/05/2025

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total
~	Sample details provided by customer and can affect the validity of results

Benzene - HS_1D_MS
Ethylbenzene - HS_1D_MS
MTBE - HS_1D_MS
TPH CWG - Aliphatic >C10 - C12 - EH_CU_1D_AL
TPH CWG - Aliphatic >C12 - C16 - EH_CU_1D_AL
TPH CWG - Aliphatic >C16 - C21 - EH_CU_1D_AL
TPH CWG - Aliphatic >C21 - C34 - EH_CU_1D_AL
TPH CWG - Aliphatic >C5 - C6 - HS_1D_MS_AL
TPH CWG - Aliphatic >C6 - C8 - HS_1D_MS_AL
TPH CWG - Aliphatic >C8 - C10 - EH_CU_1D_AL
TPH CWG - Aliphatic C5 - C34 - HS_1D_MS+EH_CU_1D_AL
TPH CWG - Aromatic >C10 - C12 - EH_CU_1D_AR
TPH CWG - Aromatic >C12 - C16 - EH_CU_1D_AR
TPH CWG - Aromatic >C16 - C21 - EH_CU_1D_AR
TPH CWG - Aromatic >C21 - C35 - EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C35 - HS_1D_MS+EH_CU_1D_AR
TPH CWG - Aromatic >C5 - C7 - HS_1D_MS_AR
TPH CWG - Aromatic >C7 - C8 - HS_1D_MS_AR
TPH CWG - Aromatic >C8 - C10 - EH_CU_1D_AR
TPH CWG - Total >C5 - C35 - HS_1D_MS+EH_CU_1D_Total
Toluene - HS_1D_MS
m & p-xylene - HS_1D_MS
o-Xylene - HS_1D_MS

Normec DETS Limited
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Certificate Key

Symbol	Description
F	Filtered sample
UF	Unfiltered sample
D	Dried sample
AR	As received sample
RL	Reporting limit
~	Sample details provided by customer and can affect the validity of results
M/S	Missing Sample
n	Please note that we are MCERTS soil accredited (UK soils only) for sand, loam, and clay, and UKAS accredited for groundwater, tap water, surface water, and generated leachates. Other matrices are outside our scope of accreditation.
S	Subcontracted analysis
M	MCERTS accredited test
U	UKAS accredited test