

Our ref: ML/GML23150/VAL1 Rev0

Date: 23rd August 2024

EMAIL (SCANNED)

Morro Partnership Ltd
Jessup House
2 Station Court
Girton Road
Cannock
Staffs WS11 0EJ

and

EMH Housing & Regeneration Ltd
Memorial House
Stenson Road
Coalville
Leics LE67 4JP

For the attention of Mr M. Laird

Dear Mitchel,

GML23150: Validation of Hotspots (WS01 & WS04) at the Land off Sapcote Road, Burbage

Geo-Matters Ltd were instructed by Morro Partnerships Ltd (hereafter referred to as 'the Client') to undertake validation of WS01 & WS04 at the subject site.

Report Status

This letter report provides a summary of validation works undertaken by ourselves in Aug 2024. This letter report has been prepared for the sole use and reliance of the Client and their appointed agents (e.g. Geo-Matters Ltd). No other third party may rely upon or reproduce the content of this report without the written approval of Geo-Matters Ltd. If any unauthorised third party comes into possession of this report, they rely upon it entirely at their own risk and the authors do not owe them any warranty, duty of care or skill.

The conclusions and recommendations presented herein are considered reasonable based on the assessments of the site undertaken by Geo-Matters Ltd. However, these cannot be guaranteed to gain regulatory approval and therefore copies of this report should be sent to the appropriate regulatory authorities and / or other organisations (as appropriate) by the Client for their comments and approval prior to undertaking any irrecoverable works associated with the site.



- Georisk Management: Phase I Desk Study Tollgate Works, Sapcote Road, Burbage Ref 20109/1 dated May 2020;
- Geo-Matters Ltd: Phase II Geo-Environmental Investigation, Land off Sapcote Road, Burbage Ref: GML23150/2/1) dated Nov 2023;
- Geo-Matters Ltd: Remedial Method Statement, Land off Sapcote Road, Burbage Ref: GML23150/2/1) dated Nov 2023;

The above referenced reports must be read in conjunction with this report. This letter report does not supersede the recommendations and conclusions presented within the above referenced reports unless otherwise stated.

It is reiterated that this Letter Report has been written to further assess and validate the chemical status of soils of the resultant excavations of the identified hotspots. It does not address any other issues that may have been previously highlighted.

Site Work

Geo-Matters Ltd were asked to attend the subject site on the 1st Aug 2024 to undertake hotspot validation sampling works around WS01 & WS04 due to previously identified Benzo(a) pyrene (BaP) contamination (WS01 @ 0.9m and WS04 @ 0.1m).

These works were guided by the findings within the above referenced reports which had highlighted 2no. areas of potential concern within the initial site investigation (WS01 & WS04). These areas were to be validated through removal of the contaminated material followed by samples taken from the base and sides of the remedial excavations, allowing the relevant areas to be recorded free of contamination and fit for redevelopment.

During the validation works, Geo-Matters can confirm that soils within the validation excavations did not display any significant staining or odours and they did not contain any noticeable anthropogenic materials. Groundwater was not encountered within these excavations.

Further samples were retrieved from each excavation from the base and sides; (5no. from WS04 and 7no. from WS01 at depths consistent with the previously identified contamination i.e. from 0.1 – 1.0m begl for confirmatory laboratory analysis to ensure all previously identified contamination has been removed. It can clearly be seen from the photos that the excavations were taken down beyond the soils of concern at the site.

The soil samples were placed in appropriate laboratory supplied sampling vessels and were stored in coolboxes pending dispatch to the laboratory. The environmental analysis was scheduled by Geo-Matters Ltd and carried out by a UKAS / MCERTS accredited laboratory.

Sampling Regime

The samples taken during the intrusive investigation will be analysed for a range of contaminants in accordance with NHBC Standards Chapter 4.1 'Land Quality – managing ground conditions' and CLR 8 'Potential Contaminants for the Assessment of Land' (withdrawn but used for reference purposes where applicable). The soil samples will be analysed for the following parameters of concern: PAHs. If samples are observed to display visual or olfactory evidence of



contamination (e.g. evidence of hydrocarbon staining) they shall be scheduled for appropriate additional analysis including TPH (screen or CWG).

Chemical Test Results

The laboratory results have been reviewed against a combined set of Tier 1 Screening Values (T1SVs) with reference to the proposed residential end-use with private gardens.

A summary of the test results is shown in the table overleaf and chemical test certificates are enclosed.

Laboratory analysis

Determinand	No. of samples analysed	Maximum Concentration (mg/kg)	Acceptance Criteria (mg/kg) ^b	No. exceeding threshold
<i>Organics</i>				
Benzo(a)Pyrene	12	<0.1	2.2	0

^b LQM 'S4UL' values (at 1% SOM for organics) for a residential end use with gardens / plant uptake (Copyright Land Quality Management Ltd reproduced with permission; Publication Number S4UL3676 All Rights Reserved); and

* Contaminants all recorded below laboratory limits of detection.

Organics

PAH

The significance of the PAH laboratory results have been assessed using the T1SV for benzo(a)pyrene. This is considered, in terms of toxicity, to present the greatest hazard to human health. The T1SV of 2.2mg/kg was not exceeded in any of the soil samples. On this basis, no residual risks have been identified from these determinants within the remedial excavations.

General Contaminants

Visual, Olfactory and Field Measurements

No other significant visual or olfactory evidence of any potential contamination (such as petroleum hydrocarbons) was noted within the additional exploratory locations advanced at the site during these works.

Conclusions and Recommendations

Samples retrieved from these validation works (at appropriate depths to those where contamination was originally encountered) did not record any concentrations in excess of the T1SVs for the proposed residential end-use.

It is therefore Geo-Matters Limited professional opinion that these remedial areas are now free from significant contamination and therefore redevelopment of these areas for a residential end-use can continue without further assessment; subject to the approval of the regulatory authorities.

If any soils are imported to site, then these works must be undertaken in full compliance with all regulatory licensing procedures (i.e. U1, MMP etc), and validation of the soils prior to importation will be required, subject to the approval of the Local Authority.

Copies of this letter report should be forwarded to the Local Authority / NHBC by the Client in order to obtain necessary approvals prior to any irrevocable actions on site.



Should you have any queries or require any further information then please do not hesitate to contact us.

Yours sincerely
for Geo-Matters Ltd.

Mark Lewis BEng(Hons) CEnv MSEE FFB
Managing Director

Encs.
Site Sampling Plans
Chemical Test Certificates



DO NOT SCALE



NOTES:



Approx Exploratory Locations



Well Installations

WS01

Location of Exceedance of PAH's

GEOMATTERS
consulting engineers



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info@geo-matters.com

CLIENT:

Morro Partnerships Ltd & EMH
Housing & Regeneration Ltd

PROJECT:

Sapcote Road, Burbage

TITLE:

Soil Exceedances against
Layout Plan

SCALE@SIZE :
NTS

ISSUE:
Final

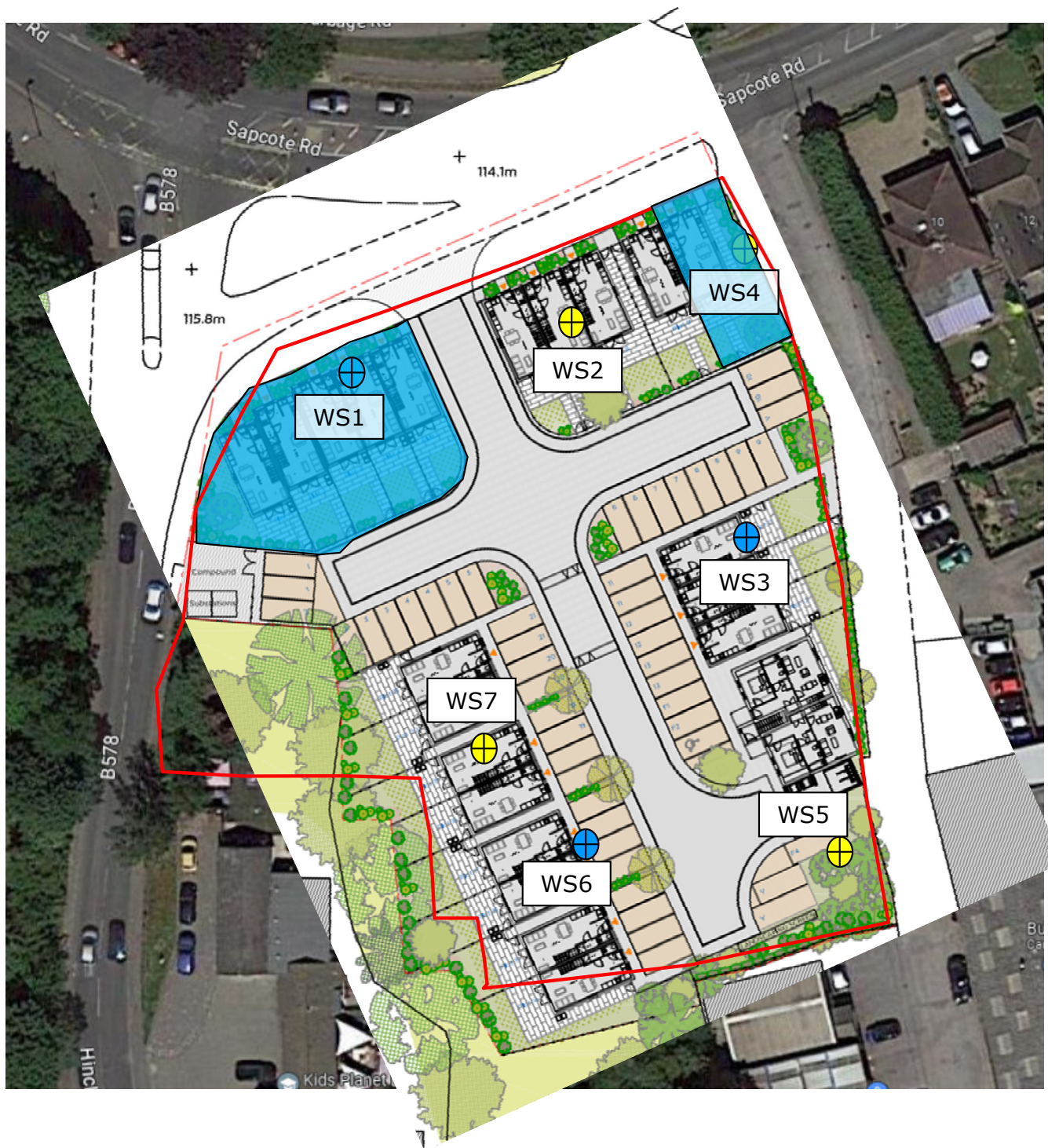
DESIGN/DRAWN :
ML

DATE:
Aug 2024

PROJECT No:
GML23150

DRAWING No:
001

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DO NOT SCALE



NOTES:



Approx Exploratory Locations



Well Installations



Areas to be remediated



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info@geo-matters.com

CLIENT:

Morro Partnerships Ltd & EMH
Housing & Regeneration Ltd

PROJECT:

Sapcote Road, Burbage

TITLE:

Soil Remediation Plan

SCALE@SIZE :
NTS

ISSUE:
Final

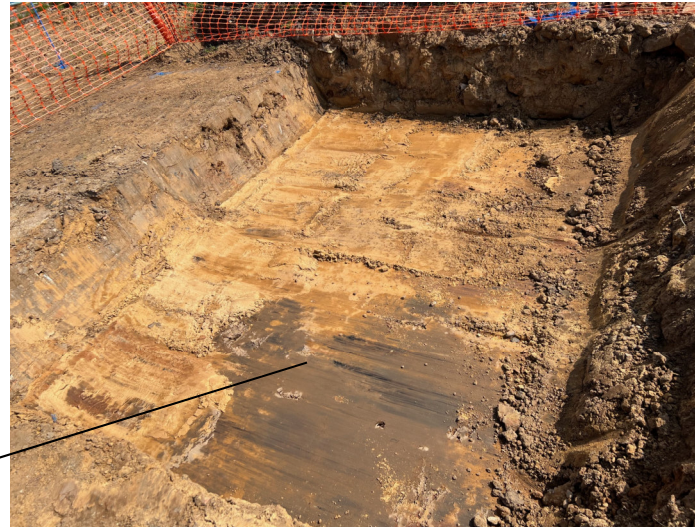
DESIGN/DRAWN :
ML

DATE:
Aug 2024

PROJECT No:
GML23150

DRAWING No:
002

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DO NOT SCALE		
NOTES:		
	Approx Exploratory Locations	
	Well Installations	
WS01	Location of Exceedance of PAH's	
GEO MATTERS consulting engineers  www.geo-matters.com info@geo-matters.com		
CLIENT: Morro Partnerships Ltd & EMH Housing & Regeneration Ltd		
PROJECT: Sapcote Road, Burbage		
TITLE: Validation Photos		
SCALE@SIZE : NTS		ISSUE: Final
DESIGN/DRAWN : ML		DATE: Aug 2024
PROJECT No: GML23150		DRAWING No: 003
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Castle Donington
Derby
DE74 2NR

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Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 24-08962

Site Reference: Burbage

Project / Job Ref: GML 23150

Order No: ML/GML23150/002

Sample Receipt Date: 06/08/2024

Sample Scheduled Date: 06/08/2024

Report Issue Number: 1

Reporting Date: 12/08/2024

Authorised by:

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.



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Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410



Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 24-08962	~Date Sampled	01/08/24	01/08/24	01/08/24	01/08/24	01/08/24
Geo-Matters Limited	~Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Burbage	~TP / BH No	Val 'N' WS1	Val 'E' WS1	Val 'E2' WS1	Val 'S' WS1	Val 'W' WS1
~Project / Job Ref: GML 23150	~Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: ML/GML23150/002	~Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 12/08/2024	DETS Sample No	730823	730824	730825	730826	730827

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 customer and can affect the validity of results



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Tel : 01622 850410



Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 24-08962	~Date Sampled	01/08/24	01/08/24	01/08/24	01/08/24	01/08/24
Geo-Matters Limited	~Time Sampled	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Site Reference: Burbage	~TP / BH No	Val 'W2' WS1	Val 'B' WS1	Val 'N' WS4	Val 'E' WS4	Val 'S' WS4
~Project / Job Ref: GML 23150	~Additional Refs	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
~Order No: ML/GML23150/002	~Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Reporting Date: 12/08/2024	DETS Sample No	730828	730829	730830	730831	730832

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 customer and can affect the validity of results



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Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 24-08962	~Date Sampled	01/08/24	01/08/24			
Geo-Matters Limited	~Time Sampled	None Supplied	None Supplied			
~Site Reference: Burbage	~TP / BH No	Val 'W' WS4	Val 'B' WS4			
~Project / Job Ref: GML 23150	~Additional Refs	None Supplied	None Supplied			
~Order No: ML/GML23150/002	~Depth (m)	None Supplied	None Supplied			
Reporting Date: 12/08/2024	DETS Sample No	730833	730834			

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		

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Soil Analysis Certificate - Sample Descriptions

DETS Report No: 24-08962	
Geo-Matters Limited	
~Site Reference: Burbage	
~Project / Job Ref: GML 23150	
~Order No: ML/GML23150/002	
Reporting Date: 12/08/2024	

DETS Sample No	~TP / BH No	~Additional Refs	~Depth (m)	Moisture Content (%)	Sample Matrix Description
730823	Val 'N' WS1	None Supplied	None Supplied	9.7	Brown sandy clay
730824	Val 'E' WS1	None Supplied	None Supplied	6.9	Brown clayey sand
730825	Val 'E2' WS1	None Supplied	None Supplied	5.2	Brown clayey sand
730826	Val 'S' WS1	None Supplied	None Supplied	8.6	Brown sandy clay
730827	Val 'W' WS1	None Supplied	None Supplied	6.3	Brown sand
730828	Val 'W2' WS1	None Supplied	None Supplied	6.9	Brown clayey sand
730829	Val 'B' WS1	None Supplied	None Supplied	6	Brown clayey sand
730830	Val 'N' WS4	None Supplied	None Supplied	4.5	Brown sand
730831	Val 'E' WS4	None Supplied	None Supplied	7.2	Brown sandy clay
730832	Val 'S' WS4	None Supplied	None Supplied	5.3	Brown clayey sand
730833	Val 'W' WS4	None Supplied	None Supplied	5	Brown clayey sand
730834	Val 'B' WS4	None Supplied	None Supplied	7.7	Brown clayey sand

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

Insufficient Sample ^{i/s}

Unsuitable Sample ^{u/s}

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Soil Analysis Certificate - Methodology & Miscellaneous Information	
DETS Report No: 24-08962	
Geo-Matters Limited	
~Site Reference: Burbage	
~Project / Job Ref: GML 23150	
~Order No: ML/GML23150/002	
Reporting Date: 12/08/2024	

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