



VERIFICATION REPORT - SOIL COVER LAYER

DEVELOPMENT AT WATTS CLOSE, SOUTH
TOTTENHAM, LONDON, N15 5DY

KONFORM LTD

IN SUPPORT OF PLANNING APPLICATION REF.:
HGY/2022/0035 - CONDITION 8

IAN BAILEY
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Report Title:	Verification Report - Soil Cover Layer – Watts Close
Report Reference No:	LQ1147-R1

Prepared For:	Konform Ltd, Craycombe, Parsonage Lane, Sawbridgeworth CM21 0ND
Project Reference No:	LQ1147

Prepared by:	Kalex Limited The Mill House Albury Road Little Hadham Ware, SG11 2DQ Tel: 01279 771353
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1. INTRODUCTION

1.1 Appointment

Kalex Ltd was commissioned by Konform Ltd to prepare a Verification Report for the provision of a clean soil cover layer at a redevelopment site at Watts Close, South Tottenham, London, N15 5DY, (the site, see **Site Location Plan**, appended).

This report is to verify the placement of clean cover using re-used and imported soils for gardens and soft landscaping.

Report limitations are in **Appendix 01**.

1.2 Background

The site underwent redevelopment in 2023 into 6 houses and 12 apartments with outside private gardens, shared amenity space and soft landscaping (see **Proposed Development Plan**, appended).

Planning permission reference HGY/2022/0035 was granted by Haringey Council in 2022 and Conditions 8 and 9 relate to contamination, as reproduced below.

Condition 8 Land Contamination

Before development commences other than for investigative work:

- a. Using the information already submitted on the Phase 1 Land Contamination Assessment with reference EES 20.109.1 V 3 prepared by Ecologia Ltd dated 15th September 2021, chemical analyses on samples of the near surface soil in order to determine whether any contaminants are present and to provide an assessment of classification for waste disposal purposes shall be conducted. The site investigation must be comprehensive enough to enable; a risk assessment to be undertaken, refinement of the Conceptual Model, and the development of a Method Statement detailing any additional remediation requirements where necessary.
- b. The risk assessment and refined Conceptual Model shall be submitted, along with the site investigation report, to the Local Planning Authority which shall be submitted to, and approved in writing by, the Local Planning Authority prior to that remediation being carried out on site.
- c. Where remediation of contamination on the site is required, completion of the remediation detailed in the method statement shall be carried out and;
- d. A report that provides verification that the required works have been carried out, shall be submitted to, and approved in writing by the Local Planning Authority before the development is occupied.

Condition 9 Unexpected Contamination

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall be implemented as approved.

1.3 Previous Environmental Assessment Reports

Reports previously submitted to Haringey Council are summarised in **Table1-1** below.



Table 1-1 – Previous reports

Title	Date	Author
Ph 1 Land Contamination Assessment, ref. EES 21.080.1	November 2021	Ecologia
Ph2 Geo Environmental Assessment, ref. EES 21.080.2	November 2021	Ecologia
Remediation Strategy, ref. EES 21.080.3	March 2022	Ecologia
Supplementary Site Investigation Report, ref. 27.2.23- Watts Close, Tottenham	February 2023	The Brownfield Consultancy

1.4 Aims and Objectives

Haringey Council previously refused an application to discharge Condition 8 and 9 due to a lack of information within submitted reports, and a lack of information on how contaminants in the communal and garden areas have been mitigated. Konform instructed Kalex to assist with the discharge of these planning conditions by providing the additional information required through the scope of work outlined below.

1.5 Scope of Work

The verification report is formed of several lines of evidence including evidence of material delivery to site, evidence for that material's suitability, and additional evidence in the form of site investigation and soil sampling to confirm the quality of the soil regarding contamination.

Evidence of material deliveries to site are presented in **Section 2** of this report.

The site investigation results are presented in **Section 3** of this report and the methodology is summarised below.

The investigation was undertaken in accordance with BSI (2017)¹, was completed within a single day and comprised the following:

- Ten trial pits excavated to depths up to 0.6m using hand tools;
- Trial Pits TP01 to TP10 were excavated in garden and soft landscaped areas;
- Trial pit locations are shown on the appended **Proposed Development Plan**.
- Geo-environmental assessment of the strata encountered was undertaken including an assessment of the visual and olfactory evidence of contamination;
- Representative soil samples were collected from each of the exploratory holes and transferred to a UKAS accredited laboratory for testing.
- The laboratory data was summarised and subject to Generic Quantitative Risk Assessment.

¹ BS 10175:2011+A2:2017: The Standard for Investigation of potentially contaminated sites. Code of practice - Code of practice.



2. CLEAN COVER SOURCE MATERIALS

Clean cover materials were a mix of site derived natural soils and imported soils. Imported soils were sourced from the following supplier and haulage contractor.

Soil Import Source:	Freeland Horticulture Limited, Rosedale Nursery, College Road, Hextable, Kent, BR8 7LT
Haulier:	J&R Haulage Ltd, Unit 1C, Birchwood Industrial Estate, Hoe Lane, Nazeing, EN9 2RJ.

Examples of receipts for the material movements are presented in **Appendix 02 – Soil Import Receipts**.

The suppliers, Freeland Horticulture Limited, undertakes a quality control program including regular sampling and testing of their soil materials for sale. The supplier provided Konform with quality control test results for their 2023 program which confirmed that their soil materials were compliant with the British Standard (BS3882).

The most recent results of the sampling and testing of the materials delivered to site, as provided by the supplier, are presented in **Appendix 03**.

To provide additional lines of evidence of soil suitability at the site, additional sampling and testing of the site won and placed soils are presented in the following report sections.



3. SITE INVESTIGATION

3.1 Sampling Strategy

3.1.1 Fieldwork

Representative samples of the soils encountered at each exploratory hole location were recovered from to target shallow soil depths and strata types.

Dedicated containers (e.g., amber jars, vials, plastic tubs etc.) provided by the laboratory, were used for the collection of samples. To minimise the potential for cross contamination, disposable gloves were changed for each sample collected / equipment used was cleaned between each sampling event.

Loss of volatile compounds through desorption and volatilisation from the samples was limited by filling and tightly enclosing the samples in dedicated amber jars, thus ensuring minimal headspace, and storing at a low temperature (i.e., a refrigerated cool box), which further minimised biodegradation of organic compounds.

Samples were transported to the laboratory in dedicated containers maintained at a low temperature. All samples and analytical requests were recorded on the laboratory chain of custody form prior to dispatching for analysis.

3.1.2 Scheduled Testing of Soil Samples

A total of 20 soil samples were recovered from the ten exploratory hole locations during the site investigation, all of which were transferred to the laboratory in accordance with the procedures detailed above. Soil samples were tested for a refined contamination testing suite of as detailed below:

Soil Contamination Testing Parameters	
Antimony	Lead
Arsenic	Mercury
Barium	Molybdenum
Beryllium	Nickel
Cadmium	Selenium
Chromium III	Vanadium
Chromium VI	Zinc
Copper	Speciated PAH
	USEPA 16

Following receipt of the first set of test results, a selection of soil samples were re-prepared, extracted and re-analysed at the laboratory as listed below:

Soil Samples Re-Tested
TP2 - 0.50-0.60
TP7 - 0.50-0.60
TP8 - 0.40-0.45
TP8 - 0.50-0.60
TP10 - 0.45



4. INVESTIGATION RESULTS

4.1 Ground Conditions

The strata encountered across the site is summarised in **Table 4-1** below, divided into the private garden areas and public open space areas, with the laboratory tested soil samples shown in the right column.

Table 4-1 – Soil Descriptions

Public Open Space			
Trial Pit Ref.	Depth	Strata description	Sample Depth (m)
TP1	0 - 0.2m	Brown sandy CLAY (topsoil)	0.05
TP1	0.2 - 0.45m	Grey brown sandy gravelly clay with gravel of mixed stone, rare fragment of brick, concrete, plastic.	0.45
TP6 TP6	0.0 - 0.45	Brown sandy gravelly CLAY with gravel of flint, mixed stone and concrete.	0.35
			0.45
TP9	0.0 - 0.05	Organic mulch.	0.05
TP9	0.05 - 0.45	Orange brown sandy gravelly CLAY with gravel of flint.	0.45
TP10	0.0 - 0.05	Organic mulch.	
TP10	0.05 - 0.2	Brown sandy gravelly CLAY with gravel of flint, mixed stone and concrete.	
TP10	0.2 - 0.45	Grey brown clayey sandy GRAVEL of mixed stone and concrete.	0.35
			0.45
Private Gardens			
Trial Pit Ref	Depth	Strata description	Samples Depth (m)
TP2	0.0 - 0.6m	Brown sandy CLAY (topsoil) with rare gravel of mixed stone and concrete.	0.45
			0.50-0.60
TP3	0.0 - 0.6m	Brown sandy CLAY (topsoil) with rare gravel of mixed stone and concrete.	0.1
			0.50-0.60
TP4	0.0 - 0.6m	Brown sandy CLAY (topsoil) with rare gravel of mixed stone and concrete.	0.4
			0.50-0.60
TP5	0.0 - 0.6m	Brown sandy CLAY (topsoil) with rare gravel of brick, mixed stone and concrete.	0.15
			0.50-0.60
TP7	0 - 0.2m	Brown sandy CLAY (topsoil)	0.2
TP7	0.2 - 0.6m	Grey brown sandy gravelly clay with gravel of mixed stone, rare fragment of brick, concrete, plastic.	0.50-0.60
TP8	0.0 - 0.6m	Brown sandy CLAY (topsoil) with rare gravel of mixed stone and concrete.	0.40-0.45
			0.50-0.60



4.1.1 Visual and Olfactory Evidence of Contamination

There was no visual or olfactory evidence of contamination noted during the trial pitting (e.g. hydrocarbons, Solvents etc).

4.1.1 Groundwater Occurrence

Groundwater was not encountered in any of the trial pits.

4.1.2 Photographic Record

A series of trial pit photographs is presented in **Appendix 04**.

4.2 Laboratory Testing Results

This data is summarised in **Appendix 05** and the laboratory certificates are in **Appendix 06**.



5. GENERIC QUANTITATIVE RISK ASSESSMENT

5.1 Introduction

This section comprises a generic assessment of the analytical results, through comparison of the measured concentrations of contaminants against appropriate Generic Assessment Criteria (GAC) in relation to the development.

Asbestos does not have GAC and each site is assessed individually for this soil contaminant.

For the other contaminants, if the concentrations recorded on site are lower than the GAC it is generally accepted that the contaminants in question are present at acceptable concentrations and not putting human health at significant risk, so long as the humans make normal use of the site. Concentrations above the GAC indicate that soil contaminant concentrations need to be considered further.

GAC selected for this assessment are as follows:

- LQM/CIEH Suitable for Use Levels (S4ULs) –derived following CLEA technical guidance and using the Environment Agency's CLEA UK model, with updated toxicological and exposure parameters and land uses following the publication of the draft C4SLs.
- Category 4 Screening Levels (DEFRA) are used in isolation for the assessment of lead concentrations in soil.

The GAC are derived according to several typical land uses:

- Residential (with and without vegetable growth);
- Allotments;
- Commercial/Industrial;
- Public Open Space residential (POS1);
- Public Open space park (POS2).

The completed development at the site is a combination of private garden areas and public open space. We have applied the most conservative GAC to the entire data set to provide a comprehensive assessment – residential including vegetable growth. This data is summarised in **Appendix 04**.

5.2 Asbestos Containing Material

No asbestos was observed in the site soils during the site investigation. 20 representative samples of soil were screened for asbestos, of which fibres were not detected in any sample.

5.3 Metals and PAHs

With respect to the GAC for the residential end use scenario with homegrown produce, five soil samples exceeded the GAC for lead and two samples exceeded the GAC for the PAH Dibenzo(a,h)anthracene, as detailed in the table below.



Residential with homegrown produce

Contaminant	Units	No. Samples	Mean	Max	Samples with concentration >GAC	Human Health GAC
Lead	mg/kg	20	120	470	TP2 0.50-0.60, TP7 0.50-0.60, TP8 0.40-0.45, TP8 0.5-0.60, TP10 0.45	200
dibenz(a,h)anthracene	mg/kg	20	0.12	0.32	TP8 0.40-0.45 TP10 0.45	0.28

Histograms and box plots have been created in accordance with the CL:AIRE (2020) guidance², copies of which are presented in **Appendix 07**. The guidance emphasises the importance of a comprehensive understanding of the dataset in the context of the CSM to enhance decision making by all stakeholders and promote transparent, reasonable, and justified decisions in regard of land contamination.

The guidance uses two-way confidence intervals and graphical summaries to evaluate the data and establish if the dataset is adequate to answer the question posed for the site. For planning scenarios, the aim of the assessment is to determine if we can confidently say that the mean concentration is below the critical concentration.

Both the lead dataset and the dibenz(a,h)anthracene dataset did not have a normal distribution and log values were used for the box plots.

- For lead, the mean, 95% confidence interval and 99% confidence interval are all below the critical concentration.
- For dibenz(a,h)anthracene the mean, 95% confidence interval and 99% confidence interval are all below the critical concentration.

As such, we can confidently conclude that the mean concentrations of both lead and dibenz(a,h)anthracene in the shallow soil across the site are below the critical concentration.

In conclusion, despite some samples detecting concentrations exceeding the GAC, as a population, the 95% and 99% confidence intervals are below the critical concentration.

As such, the concentrations of lead and dibenz(a,h)anthracene detected in the shallow soil across the site would not be considered a potential risk to human health in the context of the site use.

5.4 Undiscovered Contamination

Konform confirmed that during the course of the redevelopment works, there were no occurrences of additional contamination discovery and a confirmation statement is in **Appendix 08**.

² CL:AIRE, 2020. Professional Guidance: Comparing Soil Contamination Data with a Critical Concentration. CL:AIRE, Buckinghamshire. ISBN 978-1-905046-35-5.



6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

A cover system has been applied in private gardens and shared soft landscaped areas using a combination of naturally occurring and imported soils.

Soil quality data was provided by the supplier to confirm the materials' compliance with the relevant British Standard and Konform undertook a soil sampling exercise of the placed soils to confirm suitability.

Statistical assessment of the soil laboratory data in accordance with current guidance determines that the concentrations detected in the data population as a whole are below the GAC, thus determining the materials appropriate for their end use in a residential setting including the growth of homegrown produce.

6.2 Recommendations

This report should be submitted to Haringey Council in support of Conditions 8 and 9 of Planning permission reference HGY/2022/0035 for the site.

Building Control will likely require copies of the report for their comment and approval.



Site Location Plan



Copyright reserved

All dimensions to be checked on site before work commences.
Figured dimensions to be taken in preference to scaled dimensions.
If in doubt please ask.

Site Boundary Line

P1 First Issue 23/08/22

Revision	Description	Date
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STATUS

Preliminary

PROJECT

Watts Close

DRAWING

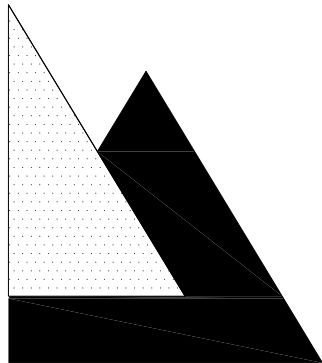
Site Location Plan

DRAWN BY RC	CHECKED BY CB	DATE August'22
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SCALE (@ A3) 1 : 1250	PROJECT NUMBER 22015
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DRAWING NUMBER WAT - DAR - XX - XX - DR - A - 0101	REV P1
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Project Identifier	Originator	Zone	Level	Type	Discipline	Number	Revision
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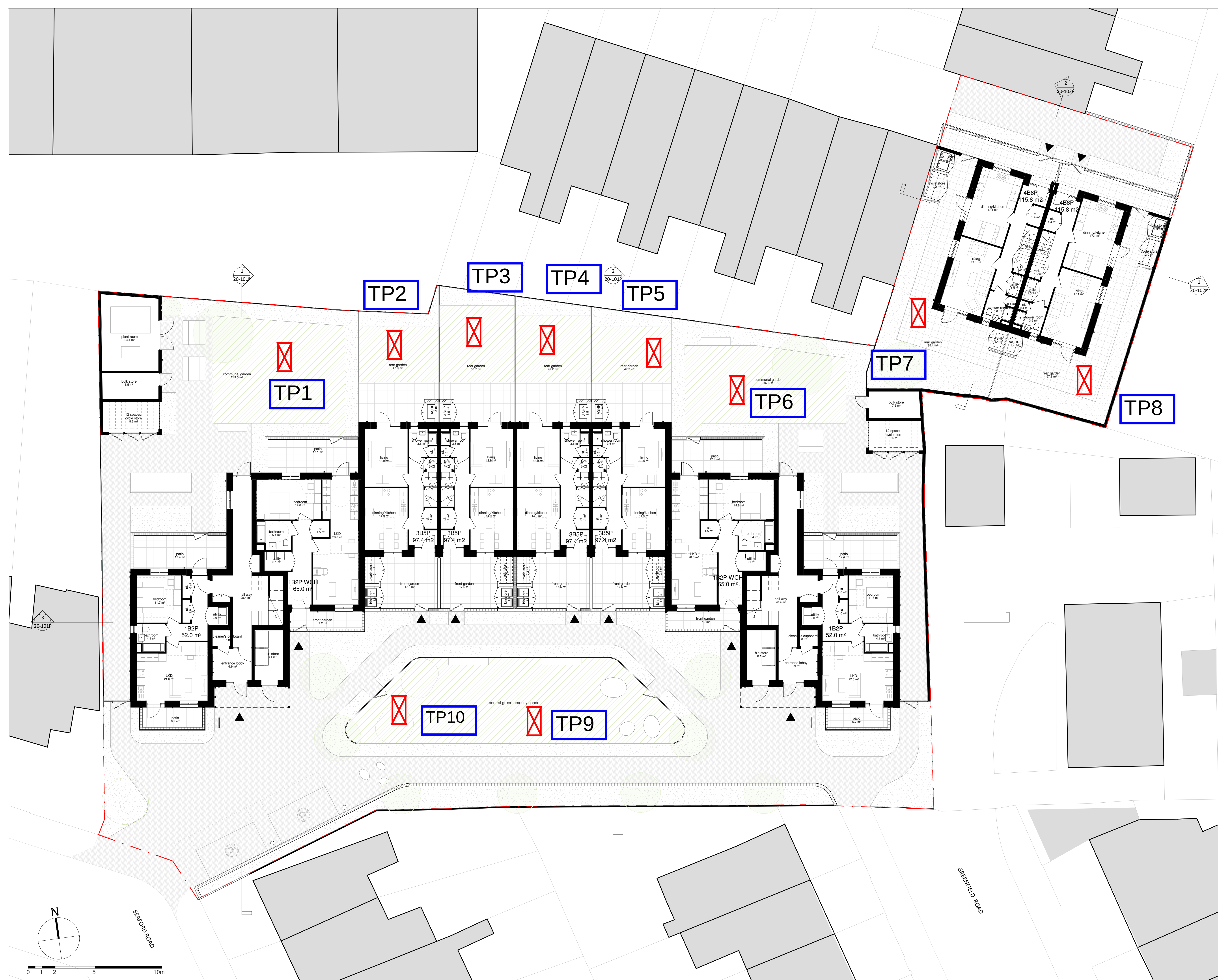
Delta Architects
1 Batemans Row
London
EC2A 3HH

T 020 7613 5702

www.deltaarchitects.co.uk



Proposed Development Plan



- Notes
- Do not scale from this drawing.
 - Verify all dimensions on site.
 - Any discrepancy to be reported to the architect for clarification.
 - Drawing and specifications to be read in conjunction with information from all other design consultants and contractors.
 - Drawings and specifications to be read in conjunction with Designer's Hazard and Environment Assessment Record in accordance with current CDM regulations.

----- Application boundary

11/11/21

rev details date

project
Watts Close Haringey - N15

drawing
GA Floor Plan - Ground Floor Plan

job no 21095	series no 10	drawing no 001	rev -
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status
Planning

date 11/11/21	scale @ A1 1 : 125	scale @ A3 1 : 250
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newground
ARCHITECTS
48-50 Weston Street, London, SE1 3QJ
www.newgroundarchitects.com
+44 (0)20 74904959



Appendix 01 – Report Limitations



Limitations and Use of this Report

IMPORTANT: This section should be read before reliance is placed on any of the opinions, advice, recommendations or conclusions set out in this report.

This report has been prepared for the purpose of providing advice to the client pursuant to its appointment of Kalex Limited (Kalex) to act as a consultant.

Save for the client no duty is undertaken or warranty or representation made to any party in respect of the opinions, advice, recommendations or conclusions herein set out.

All work carried out in preparing this report has used, and is based upon, our professional knowledge and understanding of the current relevant English and European Community standards, approved codes of practice, technology and legislation.

Changes in the above may cause the opinion, advice, recommendations or conclusions set out in this report to become inappropriate or incorrect. However, in giving its opinions, advice, recommendations and conclusions, Kalex has considered pending changes to environmental legislation and regulations of which it is currently aware. Following delivery of this report, we will have no obligation to advise the client of any such changes, or of their repercussions.

Kalex acknowledges that it is being retained, in part, because of its knowledge and experience with respect to environmental matters. Kalex will consider and analyse all information provided to it in the context of our knowledge and experience and all other relevant information known to us. To the extent that the information provided to us is not inconsistent or incompatible therewith, Kalex shall be entitled to rely upon and assume, without independent verification, the accuracy and completeness of such information.

The content of this report represents the professional opinion of experienced environmental consultants. Kalex does not provide specialist legal advice and the advice of lawyers may be required.

In the summary and recommendations sections of this report, Kalex has set out our key findings and provided a summary and overview of our advice, opinions and recommendations. However, other parts of this report will often indicate the limitations of the information obtained by Kalex and therefore any advice, opinions or recommendations set out in the executive summary, summary and recommendations sections ought not to be relied upon unless they are considered in the context of the whole report.

The assessments made in this report are based on the ground conditions as revealed by walkover survey and/or intrusive investigations, together with the results of any field or laboratory testing or chemical analysis undertaken and other relevant data which may have been obtained including previous site investigations. In any event, ground contamination often exists as small discrete areas of contamination (hot spots) and there can be no certainty that any or all such areas have been located and/or sampled.

There may be special conditions appertaining to the site which have not been taken into account in the report. The assessment may be subject to amendment in light of additional information becoming available.

Where any data supplied by the client or from other sources, including that from previous site investigations, have been used it has been assumed that the information is correct. No responsibility can be accepted by Kalex for inaccuracies within the data supplied by other parties.

Whilst the report may express an opinion on possible ground conditions between or beyond trial pit or borehole locations, or on the possible presence of features based on either visual, verbal or published evidence this is for guidance only and no liability can be accepted for the accuracy thereof.

Comments on groundwater conditions are based on observations made at the time of the investigation unless otherwise stated. Groundwater conditions may vary due to seasonal or other effects.

This report is prepared and written in the context of the agreed scope of work and should not be used in a different context. Furthermore, new information, improved practices and changes in legislation may necessitate a reinterpretation of the report in whole or part after its original submission.

The copyright in the written materials shall remain the property of Kalex but with a royalty-free perpetual license



to the client deemed to be granted on payment in full to Kalex by the client of the outstanding amounts.

These terms apply in addition to the Kalex standard terms of engagement (or in addition to another written contract which may be in place instead thereof) unless specifically agreed in writing (In the event of a conflict between these terms and the said standard terms of engagement the said standard terms of engagement shall prevail). In the absence of such a written contract the standard terms of engagement will apply.

Kalex maintains adequate insurance cover for public liability and professional indemnity. However, we are unable to accept liability for asbestos related matters. Our work must not be taken as sufficient to identify the presence or absence of asbestos in or on the ground. In placing a contract with us the client accepts the restriction on asbestos. If we find or strongly suspect asbestos is or may be present in or on the ground we will inform the client and advise specialist investigation. The client agrees that they shall not bring any claim personally against any director / employee or consultant to us in respect of loss or damage suffered by the client arising out of this contract.



Appendix 02 – Soil Import Receipts

Freeland

HORTICULTURE LIMITED

College Road
Hextable
Kent
BR8 7LT

Tel: 01322 619161

Fax: 01322 619135

E-mail: enquiries@freelandhorticulture.co.uk

ORDER NOTE

Customer / Delivery Address

Delivery to.

J + R

collect

Customer Order No.

Delivery Ticket No.

Vehicle Registration No.

Driver.

Delivery Date & Time Required.

Special Instructions.

Qty. Unit Description

12^m TOPSOIL

Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

All trading takes place on Freeland Horticulture
Ltd Conditions of Sales; copies of which are
available on request.

Registered in England:
Rosedale Nursery, College Road,
Hextable, Kent BR8 7LT
Company Registration No: 4015968

Site Copy - White

Haulier Copy - Blue

Customer Copy - Pink

Freeland

HORTICULTURE LIMITED

Rosedale Nursery
College Road
Hextable
Kent
BR8 7LT

Tel: 01322 619161
Fax: 01322 619135

E-mail: enquiries@freelandhorticulture.co.uk

ORDER NOTE

Customer / Delivery Address

Delivery to. **J. + 12**

collect

Customer Order No.

Delivery Ticket No.

215063

Vehicle Registration No.

GN69XND

Driver:

Paul

Special Instructions.

Delivery Date & Time Required.

7-9-23

Qty. Unit Description

12^m TOPSOIL

Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

All trading takes place on Freeland Horticulture
Ltd Conditions of Sales; copies of which are
available on request.

Registered in England:
Rosedale Nursery, College Road,
Hextable, Kent BR8 7LT
Company Registration No: 4015968

Site Copy - White

Haulier Copy - Blue

Customer Copy - Pink

Freeland

HORTICULTURE LIMITED

Hextable
Kent
BR8 7LT

Tel: 01322 619161
Fax: 01322 619135

E-mail: enquiries@freelandhorticulture.co.uk

ORDER NOTE

Customer / Delivery Address

Delivery to.

J + R

collect

Customer Order No.

Delivery Ticket No.

Vehicle Registration No.

Driver.

Delivery Date & Time Required.

Special Instructions.

Qty.

Unit

Description

12

TOP SOIL

Customer Signature:

Freeland Company:

All trading takes place on Freeland Horticulture Ltd Conditions of Sales; copies of which are available on request.

Registered in England:
Rosedale Nursery, College Road,
Hextable, Kent BR8 7LT
Company Registration No: 4015968

Freeland Horticulture - White

Handier Copy - Blue

Customer Copy - Pink

Freeland

HORTICULTURE LIMITED

College Road
Hextable
Kent
BR8 7LT

Tel: 01322 619161
Fax: 01322 619135

E-mail: enquiries@freelandhorticulture.co.uk

ORDER NOTE

Customer / Delivery Address

Delivery to. J + R

collect

Customer Order No.

Delivery Ticket No.

215568

Vehicle Registration No.

JA67MUN

Driver.

Kern

Special Instructions.

Delivery Date & Time Required.

13-9-23

Qty. Unit Description

Qty.	Unit	Description
14	m	TOPSOIL

Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

All trading takes place on Freeland Horticulture
Ltd Conditions of Sales; copies of which are
available on request.

Registered in England:
Rosedale Nursery, College Road,
Hextable, Kent BR8 7LT
Company Registration No: 4015968

Order Copy - White

Haulier Copy - Blue

Customer Copy - Pink



College Road
Hextable
Kent
BR8 7LT

Tel: 01322 619161
Fax: 01322 619135

E-mail: enquiries@freelandhorticulture.co.uk

ORDER NOTE

Customer / Delivery Address

Delivery to. **J + R**

collect

Customer Order No.

Delivery Ticket No.

215892

Vehicle Registration No.

GN69XK6

Driver.

Peter

Delivery Date & Time Required.

Special Instructions.

15-9-23

Qty. Unit Description

11	M	TOPSOIL
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Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

All trading takes place on Freeland Horticulture
Ltd Conditions of Sales; copies of which are
available on request.

Registered in England:
Rosedale Nursery, College Road,
Hextable, Kent BR8 7LT
Company Registration No: 4015968

Site Copy - White

Haulier Copy - Blue

Customer Copy - Pink



Rosedale Nursery
College Road
Hextable
Kent
BR8 7LT

Tel: 01322 619161
Fax: 01322 619135

E-mail: enquiries@freelandhorticulture.co.uk

ORDER NOTE

Customer / Delivery Address

Delivery to. *J + R*

collect

Customer Order No.

Delivery Ticket No.

216180

Vehicle Registration No.

GPF6SVY4

Driver.

Tony

Special Instructions.

Delivery Date & Time Required.

19/4/23

Qty. Unit Description

<i>12^h</i>		<i>TOPSOIL</i>
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Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

[Signature]
JR HAULAGE

All trading takes place on Freeland Horticulture
Ltd Conditions of Sales; copies of which are
available on request.

Registered in England:
Rosedale Nursery, College Road,
Hextable, Kent BR8 7LT
Company Registration No: 4015968

Site Copy - White

Haulier Copy - Blue

Customer Copy - Pink

J & R HAULAGE LIMITED

Environmental Protection Act 1990 Environmental Protection (Duty of Care) Regulation 1991

Vehicle Reg: GN63XNO Driver: Peter Date: 6.9.23

Client Name: KONFORM
Delivery/Collection Address: WATTS CLOSE N15 Ticket No: **117346**

(Blue copy to site)

TIME ON SITE: 9:00 TIME OFF SITE: 9:25

Signature of Producer: [Signature] (must complete) Date: _____

Print Name: GARY LANGAN (must complete)

By signing above 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

DELIVERY DETAILS

Required by Schedule 4 Part 2 of the Weights and Measure ACT 1985

12m³ of FREELANDS

GROSS : TOP SOIL

TARE : _____

NETT : _____

TICK BOX IF PER LOAD: ☐

COLLECTION DETAILS

(Description of Waste)

Inert ☐ Non Haz ☐ Haz ☐

Excavator Loaded ☐ Grab Loaded ☐

17-05-04 Soil & Stone ☐

17-01-07 Hardcore ☐

17-01-01 Concrete ☐

17-09-04 Mixed Utility Waste ☐

_____ ☐

SIC CODE

Further Info (if any):

WORKS CARRIED OUT BY: (NOTE: All loads are full eight wheeler loads unless otherwise stated.)

Full name of Collector: **J & R Haulage Limited**

Address of Company: **Unit 1C, Birchwood Industrial Estate, Hoe Lane,
Nazeing, EN9 2RJ**

Telephone No: **020 8805 1337**

Email: **info@jrhaulage.co.uk**

Waste Carriers Licence: CBDU 146504

DISPOSAL POINT (tick appropriate box)

☐ J & R Haulage Limited
Unit 1C, Birchwood Industrial Estate,
Hoe Lane, Nazeing, EN9 2RJ
EA LICENCE NO: **EPR/EB3900XJ**

☐ Full Name: _____
Address: _____

THANK YOU FOR YOUR BUSINESS.

Customers requesting or ordering vehicles to leave the public highway shall reimburse us in full respect of any loss, cost, claims or expenses we may thereby sustain whether as a result of damage to vehicles themselves or the property of customers or third parties.

J & R HAULAGE LIMITED

Environmental Protection Act 1990 Environmental Protection (Duty of Care) Regulation 1991

Vehicle Reg: GNG9XNO Driver: Peter Date: 7.9.23

Client Name: KONFORM

Delivery/Collection Address: WATTS CLOSE N15 Ticket No: **117350**
(Blue copy to site)

Signature of Producer: [Signature] (must complete) Date: _____

Print Name: CARY LANGAN (must complete)

By signing above 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

DELIVERY DETAILS ☒
Required by Schedule 4 Part 2 of the
Weights and Measure ACT 1985

COLLECTION DETAILS (Description of Waste) ☒

Inert ☒ Non Haz ☐ Haz ☐

Excavator Loaded ☒ Grab Loaded ☐

17-05-04 Soil & Stone ☒

17-01-07 Hardcore ☐

17-01-01 Concrete ☐

17-09-04 Mixed Utility Waste ☐

☐

☐

12m³ of FREELANDS
GROSS : TOP SOIL
TARE : _____
NETT : _____
TICK BOX IF PER LOAD: ☐

SIC CODE _____ Further Info (if any): _____

WORKS CARRIED OUT BY: (NOTE: All loads are full eight wheeler loads unless otherwise stated.)

Full name of Collector: J & R Haulage Limited
Address of Company: Unit 1C, Birchwood Industrial Estate, Hoe Lane,
Nazeing, EN9 2RJ
Telephone No: 020 8805 1337
Email: info@jrhaulage.co.uk

Waste Carriers Licence: CBDU 146504

DISPOSAL POINT (tick appropriate box)

☐ J & R Haulage Limited
Unit 1C, Birchwood Industrial Estate,
Hoe Lane, Nazeing, EN9 2RJ
EA LICENCE NO: EPR/EB3900XJ
☐ Full Name: _____
Address: _____

THANK YOU FOR YOUR BUSINESS.

Customers requesting or ordering vehicles to leave the site must sign this form.

J & R HAULAGE LIMITED

Environmental Protection Act 1990 Environmental Protection (Duty of Care) Regulation 1991

Vehicle Reg: GNG9XNO Driver: Peter Date: 11.9.23

Client Name: KONFORM
Delivery/Collection Address: KATTS CLOSE N15 Ticket No: **120154**
(Blue copy to site)

Signature of Producer: [Signature] (must complete) Date: _____
Print Name: GARY LANE (must complete)

By signing above 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

DELIVERY DETAILS ☒

Required by Schedule 4 Part 2 of the
Weights and Measure ACT 1985

16 BAGS OF PEELAND

GROSS : TOP SOIL

TARE : _____

NETT : _____

TICK BOX IF PER LOAD: ☐

SIC CODE

COLLECTION DETAILS (Description of Waste) ☐

Inert ☐ Non Haz ☐ Haz ☐

Excavator Loaded ☐ Grab Loaded ☐

17-05-04 Soil & Stone ☐

17-01-07 Hardcore ☐

17-01-01 Concrete ☐

17-09-04 Mixed Utility Waste ☐

_____ ☐

Further Info (if any):

WORKS CARRIED OUT BY: (NOTE: All loads are full eight wheeler loads unless otherwise stated.)

Full name of Collector: J & R Haulage Limited

Address of Company: Unit 1C, Birchwood Industrial Estate, Hoe Lane,
Nazeing, EN9 2RJ

Telephone No: 020 8805 1337

Email: info@jrhaulage.co.uk

Waste Carriers Licence: **CBDU146504**

DISPOSAL POINT (tick appropriate box)

☐ J & R Haulage Limited
Unit 1C, Birchwood Industrial Estate,
Hoe Lane, Nazeing, EN9 2RJ
EA LICENCE NO: EPR/EB3900XJ

☐ Full Name: _____
Address: _____

THANK YOU FOR YOUR BUSINESS.

Customers requesting or ordering vehicles to leave the public highway shall reimburse us in full respect of
any loss, cost, claims or expenses we may thereby sustain whether as a result of damage to vehicles
themselves or the property of customers or third parties.

J & R HAULAGE LIMITED

Environmental Protection Act 1990 Environmental Protection (Duty of Care) Regulation 1991

Vehicle Reg: JN67MM Driver: Kev Date: 13/9/07

Client Name: KonForm
Delivery/Collection Address: WATTS CLOSE Ticket No: **117841**
W5 (Blue copy to site)

Signature of Producer: [Signature] (must complete) Date: 13/9/07
Print Name: GARY LAUGHAN (must complete)

By signing above 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

DELIVERY DETAILS



Required by Schedule 4 Part 2 of the
Weights and Measure ACT 1985

COLLECTION DETAILS

(Description of Waste)



Inert ☐ Non Haz ☐ Haz ☐
Excavator Loaded ☐ Grab Loaded ☐

17-05-04 Soil & Stone ☐
17-01-07 Hardcore ☐
17-01-01 Concrete ☐
17-09-04 Mixed Utility Waste ☐
☐

GROSS : _____
TARE : _____
NETT : _____
TICK BOX IF PER LOAD: ☒

SIC CODE

Further Info (if any):

WORKS CARRIED OUT BY: (NOTE: All loads are full eight wheeler loads unless otherwise stated.)

Full name of Collector: J & R Haulage Limited
Address of Company: Unit 1C, Birchwood Industrial Estate, Hoe Lane,
Nazeing, EN9 2RJ
Telephone No: 020 8805 1337
Email: info@jrhaulage.co.uk

Waste Carriers Licence: **CBDU146504**

DISPOSAL POINT (tick appropriate box)

☐ J & R Haulage Limited
Unit 1C, Birchwood Industrial Estate,
Hoe Lane, Nazeing, EN9 2RJ
EA LICENCE NO: EPR/EB3900XJ
☐ Full Name: KonForm
Address: WATTS CLOSE

THANK YOU FOR YOUR BUSINESS.

Customers requesting or ordering vehicles to leave the public highway shall reimburse us in full respect of
any loss, cost, claims or expenses we may thereby sustain whether as a result of damage to vehicles
themselves or the property of customers or third parties.

J & R HAULAGE LIMITED

Environmental Protection Act 1990 Environmental Protection (Duty of Care) Regulation 1991

Vehicle Reg GNE9XNO Driver: Peter Date: 15.9.23

Client Name: KONFORM
Delivery/Collection Address: WATTS CLOSE M5 Ticket No: **120165**
(Blue copy to site)

Signature of Producer: [Signature] (must complete) Date: _____
Print Name: GARY LAWRENCE (must complete)

By signing above 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

DELIVERY DETAILS ☒

Required by Schedule 4 Part 2 of the Weights and Measure ACT 1985

16 BAGS of FREELANDS

GROSS : TOP SOIL

TARE : _____

NETT : _____

TICK BOX IF PER LOAD: ☐

SIC CODE

COLLECTION DETAILS (Description of Waste) ☐

Inert ☐ Non Haz ☐ Haz ☐

Excavator Loaded ☐ Grab Loaded ☐

17-05-04 Soil & Stone ☐

17-01-07 Hardcore ☐

17-01-01 Concrete ☐

17-09-04 Mixed Utility Waste ☐

Further Info (if any):

WORKS CARRIED OUT BY: (NOTE: All loads are full eight wheeler loads unless otherwise stated.)

Full name of Collector: J & R Haulage Limited
Address of Company: Unit 1C, Birchwood Industrial Estate, Hoe Lane,
Nazeing, EN9 2RJ
Telephone No: 020 8805 1337
Email: info@jrhaulage.co.uk

Waste Carriers Licence: CBDU146504

DISPOSAL POINT (tick appropriate box)

☐ J & R Haulage Limited
Unit 1C, Birchwood Industrial Estate,
Hoe Lane, Nazeing, EN9 2RJ
EA LICENCE NO: EPR/EB3900XJ
☐ Full Name: _____
Address: _____

THANK YOU FOR YOUR BUSINESS.

Customers requesting or ordering vehicles to leave the public highway shall reimburse us in full respect of any loss, cost, claims or expenses we may thereby sustain whether as a result of damage to vehicles themselves or the property of customers or third parties.

J & R HAULAGE LIMITED

Environmental Protection Act 1990 Environmental Protection (Duty of Care) Regulation 1991

Vehicle Reg: GF65VYU Driver: TONY RICH Date: 19.09.23

Client Name: KONFORM

Delivery/Collection Address: WATTS CLOSE Ticket No: **117791**
NIS (Blue copy to site)

Signature of Producer: [Signature] (must complete) Date: _____

Print Name: GARY LANEAN (must complete)

By signing above 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

DELIVERY DETAILS ☒

Required by Schedule 4 Part 2 of the Weights and Measure ACT 1985

8x4 GRAB
16x BULK BAGS OF
GROSS : TOPSOIL
TARE : (PRIME)
NETT : _____

TICK BOX IF PER LOAD: ☐

SIC CODE

COLLECTION DETAILS (Description of Waste) ☐

Inert ☐ Non Haz ☐ Haz ☐

Excavator Loaded ☐ Grab Loaded ☐

17-05-04 Soil & Stone ☐

17-01-07 Hardcore ☐

17-01-01 Concrete ☐

17-09-04 Mixed Utility Waste ☐

Further Info (if any):

WORKS CARRIED OUT BY: (NOTE: All loads are full eight wheeler loads unless otherwise stated.)

Full name of Collector: J & R Haulage Limited

Address of Company: Unit 1C, Birchwood Industrial Estate, Hoe Lane,
Nazeing, EN9 2RJ

Telephone No: 020 8805 1337

Email: info@jrhaulage.co.uk

Waste Carriers Licence: **CBDU146504**

DISPOSAL POINT (tick appropriate box)

☐ J & R Haulage Limited
Unit 1C, Birchwood Industrial Estate,
Hoe Lane, Nazeing, EN9 2RJ
EA LICENCE NO: EPR/EB3900XJ

LOADED @
☐ Full Name: FREELANDS
Address: POTTERS BAR
ORDER No: 216180
BAGGED @ NAZEING

THANK YOU FOR YOUR BUSINESS.

Customers requesting or ordering vehicles to leave the public highway shall reimburse us in full respect of any loss, cost, claims or expenses we may thereby sustain whether as a result of damage to vehicles themselves or the property of customers or third parties.



Appendix 03 – Soil Import Quality Data



Freeland Horticulture Ltd
Rosedale Nursery
College Road
Hextable
Kent
BR8 7LT

Attention: Philippa Lambourne

Our Ref: 1220-SA

16 November 2023

Dear Philippa

Topsoil Analysis Report: Potters Bar, Hertfordshire Topsoil – November 2023

We have completed the analysis of the topsoil sample recently taken from the above site and it has been forwarded to an approved laboratory for analysis and have the pleasure of reporting our findings. The purpose of the analysis was to determine the suitability of the topsoil for general landscaping purposes and its compliance with the current British Standard for topsoil (BS3882).

SOIL SAMPLING & EXAMINATION

At the time of our sampling visit the topsoil was stored in a stockpile. A series of 10 hand augered trial holes were constructed across the stockpile for the purpose of soil examination and sample collection. As the soil examination confirmed a consistent topsoil composition, the ten samples were combined together to form one composite sample for analysis purposes. The soil was described as dark brown, slightly moist and friable with a well-developed, fine to medium granular structure. The soil contained a low fraction of small stones and no deleterious materials (eg. building waste materials, glass, roots or rhizomes of pernicious weeds) or unusual odours (eg. hydrocarbons) were recorded.

LABORATORY ANALYSIS

The topsoil sample was submitted to a UKAS and MCERTS accredited laboratory for routine physical and chemical parameters to confirm the composition and fertility of the soil. The following parameters were determined:

- ⊕ pH & electrical conductivity values;
- ⊕ major plant nutrients (N, P, K, Mg) & organic matter content;
- ⊕ particle size distribution and stone content;
- ⊕ heavy metals & potentially toxic elements (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn, B);
- ⊕ sulphate, sulphur, sulphide;
- ⊕ total cyanide and total (mono) phenols;
- ⊕ speciated PAHs (US EPA16)
- ⊕ banded aromatic and aliphatic petroleum hydrocarbons (C₅-C₃₅).
- ⊕ Asbestos

The results are presented on the attached Certificate of Analysis and an interpretation of the results is given below.

Phone: 01322 619161

*Freeland horticulture Ltd. Registered in England: Rosedale Nursery, College Road, Hextable, Kent BR8 7LT
Company Registration No: 04015968*

COMMENTS

pH & Electrical Conductivity (salinity) Values

The sample was alkaline in nature (pH 8.2) with a pH value that would be considered suitable for general landscaping purposes.

The electrical conductivity (salinity) value using the soil:water extract was (1397 μ S/cm) indicating that soluble salts are not present at levels that would be harmful to plants.

The electrical conductivity values by CaSO₄ extract (BS3882 requirement) fell below the maximum specified value (3300 μ S/cm) given in BS3882:2015.

Organic Matter & Nutrient Status

The sample was rich in organic matter and all major plant nutrients. No further additions of compost or fertiliser are required, or indeed recommended, for at least the first growing season.

The C:N ratio of the sample was acceptable for general landscape purposes.

Particle Size Distribution & Stone Content

The sample contained 85% sand and fell into the sandy loam texture class. This particle size distribution is considered suitable for a broad range of landscape applications, including tree and shrub planting, turfing and seeding.

The sample was Virtually free from stones of 50 mm and upwards in diameter and only contained a slight fraction of smaller stones (13.7%). As such, stones will not restrict the use of the soil for landscaping purposes.

Potential Contaminants

We are not aware of any specified contaminant levels set for the proposed end-use of this topsoil. This includes human health, environmental protection and metals considered toxic to plants. In the absence of any site-specific assessment criteria, the concentrations that affect human health have been compared with the 'residential with homegrown produce' land use in the Suitable For Use Levels presented in 'The LQM/CIEH S4UIs' for Human Health Risk Assessment (2015) and DEFRA SP1010: 'Development of Category 4 Screening Levels' for Assessment of Land Affected by Contamination – Policy Companion Document (2014).

Of the potential contaminants determined, none was found at levels that would exceed their respective guideline values.

CONCLUSION

The purpose of the analysis was to determine the suitability of the topsoil for general landscaping purposes. From the soil examination and laboratory analysis, the soil is described as an alkaline, non-saline, sandy loam. The organic matter and nutrient levels are acceptable, and no significant contamination was found with respect to the parameters determined. This soil would adhere to the current BS3882 specification for 'multipurpose grade'.

To conclude, based on our findings, the topsoil would be considered well-suited to general landscaping purposes provided the physical condition of the soil is maintained.

We hope this report meets with your approval and provides the necessary information. Please do not hesitate to contact the undersigned if you have any queries or comments.

George Longmuir MSc Soil Sci. M.I Soil Sci.

Client	Freeland Horticulture Ltd
Job Name	Topsoil Analysis
Site	Potters Bar, Hertfordshire
Month/Year	November 23
Our Ref	1220-SA
Date	16 November 2023

Composite sample

pH Value & Salinity

pH value (1:2.5 soil/water ext)	units	8.2
Electrical Conductivity (1:2.5 soil/water ext)	µS/cm	1397
Electrical Conductivity (1:2.5 soil/CaSO4 ext)	µS/cm	2898

Organic Matter & Nutrient Status

Organic Matter (LOI)	%	6.4
Organic Carbon (Derived)	%	3.7
Total Nitrogen	%	0.242
Carbon:Nitrogen Ratio	:1	15.4
Available Phosphorus	mg/l	70.4
Available Potassium	mg/l	1471
Available Magnesium	mg/l	210

Particle Size Analysis & Stones

Clay (<0.002mm)	%	10
Silt (0.063-0.002mm)	%	11
Sand (2.0-0.063mm)	%	79
Texture Class	UK Class	SandyLoam

Stones 2-20mm	% by DW	13.7
Stones 20-50mm	% by DW	0.3
Stones >50mm	% by DW	0.0

Potential Contaminants

Total Arsenic (As)	mg/kg	12.1
Total Cadmium (Cd)	mg/kg	9.18
Total Chromium (Cr)	mg/kg	34.3
Hexavalent Chromium (CR ^{VI})	mg/kg	<0.2
Total Copper (Cu)	mg/kg	17.6
Total Lead (Pb)	mg/kg	19.1
Total Mercury (Hg)	mg/kg	<0.2
Total Nickel (Ni)	mg/kg	24.8
Total Selenium (Se)	mg/kg	0.29
Total Zinc (Zn)	mg/kg	65.3
Total Beryllium (Be)	mg/kg	<1
Total Barium (Ba)	mg/kg	40.5
Total Vanadium (V)	mg/kg	26.3
Hot Water Soluble Boron (B)	mg/kg	1.5
Total Cyanide (CN)	mg/kg	<1
Elemental Sulphur (S)	mg/kg	9.4
Easily Liberated Sulphide (S ²⁻)	mg/kg	<1
Water Soluble Sulphate (SO ₄ ²⁻)	mg/l	120
Total Phenols Index	mg/kg	<1
Asbestos Screen	-	N.D.

Chain of Custody Required. Freeland Ticket: 01322 619161

Client	Freeland Horticulture Ltd
Job Name	Topsoil Analysis
Site	Potters Bar, Hertfordshire
Month/Year	November 23
Our Ref	1220-SA
Date	16 November 2023

Polyaromatic Hydrocarbons

Naphthalene	mg/kg	<0.05
Acenaphthylene	mg/kg	<0.05
Acenaphthene	mg/kg	<0.05
Fluorene	mg/kg	<0.05
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.05
Fluoranthene	mg/kg	0.2
Pyrene	mg/kg	0.2
Benzo[a]anthracene	mg/kg	0.1
Chrysene	mg/kg	0.1
Benzo[b]fluoranthene	mg/kg	<0.1
Benzo[k]fluoranthene	mg/kg	<0.1
Benzo[a]pyrene	mg/kg	0.1
Indeno[1,2,3-cd]pyrene	mg/kg	<0.1
Dibenzo[a,h]anthracene	mg/kg	<0.1
Benzo[g,h,i]perylene	mg/kg	<0.1
Total PAHs sum US EPA 16	mg/kg	<1

Banded Petroleum Hydrocarbons

Aliphatic TPH >C ₅ -C ₆	mg/kg	<0.05
Aliphatic TPH >C ₆ -C ₈	mg/kg	<0.05
Aliphatic TPH >C ₈ -C ₁₀	mg/kg	<0.05
Aliphatic TPH >C ₁₀ -C ₁₂	mg/kg	<10
Aliphatic TPH >C ₁₂ -C ₁₆	mg/kg	<10
Aliphatic TPH >C ₁₆ -C ₂₁	mg/kg	10
Aliphatic TPH >C ₂₁ -C ₃₅	mg/kg	30.0
Aliphatic TPH >C ₃₅ -C ₄₄	mg/kg	<12

Aromatic TPH >C ₅ -C ₇	mg/kg	<0.05
Aromatic TPH >C ₇ -C ₈	mg/kg	<0.05
Aromatic TPH >C ₈ -C ₁₀	mg/kg	<0.05
Aromatic TPH >C ₁₀ -C ₁₂	mg/kg	<10
Aromatic TPH >C ₁₂ -C ₁₆	mg/kg	<10
Aromatic TPH >C ₁₆ -C ₂₁	mg/kg	13.0
Aromatic TPH >C ₂₁ -C ₃₅	mg/kg	47.0
Aromatic TPH >C ₃₅ -C ₄₄	mg/kg	26.0

Total Petroleum Hydrocarbons (C ₅ -C ₄₄)	mg/kg	116
---	-------	-----

BTEX

Benzene	mg/kg	<0.02
Toluene	mg/kg	<0.2
Ethyl Benzene	mg/kg	<0.04
m- & p- Xylene	mg/kg	<0.2
o-Xylene	mg/kg	<0.1



Freeland Horticulture Ltd
Rosedale Nursery
College Road
Hextable
Kent
BR8 7LT

Attention: Philippa Lambourne

Our Ref: 1231-SA

3 January 2024

Dear Philippa

Topsoil Analysis Report: Potters Bar, Hertfordshire Topsoil – December 2023

We have completed the analysis of the topsoil sample recently taken from the above site and it has been forwarded to an approved laboratory for analysis and have the pleasure of reporting our findings. The purpose of the analysis was to determine the suitability of the topsoil for general landscaping purposes and its compliance with the current British Standard for topsoil (BS3882).

SOIL SAMPLING & EXAMINATION

At the time of our sampling visit the topsoil was stored in a stockpile. A series of 10 hand augered trial holes were constructed across the stockpile for the purpose of soil examination and sample collection. As the soil examination confirmed a consistent topsoil composition, the ten samples were combined together to form one composite sample for analysis purposes. The soil was described as dark brown, slightly moist and friable with a well-developed, fine to medium granular structure. The soil contained a low fraction of small stones and no deleterious materials (eg. building waste materials, glass, roots or rhizomes of pernicious weeds) or unusual odours (eg. hydrocarbons) were recorded.

LABORATORY ANALYSIS

The topsoil sample was submitted to a UKAS and MCERTS accredited laboratory for routine physical and chemical parameters to confirm the composition and fertility of the soil. The following parameters were determined:

- ⊕ pH & electrical conductivity values;
- ⊕ major plant nutrients (N, P, K, Mg) & organic matter content;
- ⊕ particle size distribution and stone content;
- ⊕ heavy metals & potentially toxic elements (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn, B);
- ⊕ sulphate, sulphur, sulphide;
- ⊕ total cyanide and total (mono) phenols;
- ⊕ speciated PAHs (US EPA16)
- ⊕ banded aromatic and aliphatic petroleum hydrocarbons (C₅-C₃₅).
- ⊕ Asbestos

The results are presented on the attached Certificate of Analysis and an interpretation of the results is given below.

Phone: 01322 619161

Freeland horticulture Ltd. Registered in England: Rosedale Nursery, College Road, Hextable, Kent BR8 7LT
Company Registration No: 04015968

COMMENTS

pH & Electrical Conductivity (salinity) Values

The sample was alkaline in nature (pH 8.5) with a pH value that would be considered suitable for general landscaping purposes.

The electrical conductivity (salinity) value using the soil:water extract was (1165µS/cm) indicating that soluble salts are not present at levels that would be harmful to plants.

The electrical conductivity values by CaSO₄ extract (BS3882 requirement) fell below the maximum specified value (3300µS/cm) given in BS3882:2015.

Organic Matter & Nutrient Status

The sample was rich in organic matter and all major plant nutrients. No further additions of compost or fertiliser are required, or indeed recommended, for at least the first growing season.

The C:N ratio of the sample was acceptable for general landscape purposes

Particle Size Distribution & Stone Content

The sample contained 85% sand and fell into the sandy loam texture class. This particle size distribution is considered suitable for a broad range of landscape applications, including tree and shrub planting, turfing and seeding.

The sample was Virtually free from stones of 50 mm and upwards in diameter and only contained a slight fraction of smaller stones (5.9%). As such, stones will not restrict the use of the soil for landscaping purposes.

Potential Contaminants

We are not aware of any specified contaminant levels set for the proposed end-use of this topsoil. This includes human health, environmental protection and metals considered toxic to plants. In the absence of any site-specific assessment criteria, the concentrations that affect human health have been compared with the 'residential with homegrown produce' land use in the Suitable For Use Levels presented in 'The LQM/CIEH S4UIs' for Human Health Risk Assessment (2015) and DEFRA SP1010: 'Development of Category 4 Screening Levels' for Assessment of Land Affected by Contamination – Policy Companion Document (2014).

Of the potential contaminants determined, none was found at levels that would exceed their respective guideline values.

CONCLUSION

The purpose of the analysis was to determine the suitability of the topsoil for general landscaping purposes. From the soil examination and laboratory analysis, the soil is described as an alkaline, non-saline, sandy loam. The organic matter and nutrient levels are acceptable, and no significant contamination was found with respect to the parameters determined. This soil would adhere to the current BS3882 specification for 'multipurpose grade'.

To conclude, based on our findings, the topsoil would be considered well-suited to general landscaping purposes provided the physical condition of the soil is maintained.

We hope this report meets with your approval and provides the necessary information. Please do not hesitate to contact the undersigned if you have any queries or comments.

George Longmuir MSc Soil Sci. M.I Soil Sci.

Client	Freeland Horticulture Ltd
Job Name	Topsoil Analysis
Site	Potters Bar, Hertfordshire
Month/Year	December 23
Our Ref	1231-SA
Date	03 January 2024

Composite sample

pH Value & Salinity

pH value (1:2.5 soil/water ext)	units
Electrical Conductivity (1:2.5 soil/water ext)	µS/cm
Electrical Conductivity (1:2.5 soil/CaSO4 ext)	µS/cm

8.5
1165
3231

Organic Matter & Nutrient Status

Organic Matter (LOI)	%
Organic Carbon (Derived)	%
Total Nitrogen	%
Carbon:Nitrogen Ratio	:1
Available Phosphorus	mg/l
Available Potassium	mg/l
Available Magnesium	mg/l

5.8
3.4
0.250
13.5
79.2
1423
166

Particle Size Analysis & Stones

Clay (<0.002mm)	%
Silt (0.063-0.002mm)	%
Sand (2.0-0.063mm)	%
Texture Class	UK Class

6
9
85
Sandy Loam

Stones 2-20mm	% by DW
Stones 20-50mm	% by DW
Stones >50mm	% by DW

4.8
1.1
0.0

Potential Contaminants

Total Arsenic (As)	mg/kg
Total Cadmium (Cd)	mg/kg
Total Chromium (Cr)	mg/kg
Hexavalent Chromium (Cr ^{VI})	mg/kg
Total Copper (Cu)	mg/kg
Total Lead (Pb)	mg/kg
Total Mercury (Hg)	mg/kg
Total Nickel (Ni)	mg/kg
Total Selenium (Se)	mg/kg
Total Zinc (Zn)	mg/kg
Total Beryllium (Be)	mg/kg
Total Barium (Ba)	mg/kg
Total Vanadium (V)	mg/kg
Hot Water Soluble Boron (B)	mg/kg
Total Cyanide (CN)	mg/kg
Elemental Sulphur (S)	mg/kg
Easily Liberated Sulfide (S ²⁻)	mg/kg
Water Soluble Sulfate (SO ₄ ²⁻)	mg/l
Total Phenols Index	mg/kg
Asbestos Screen	-

6.8
0.13
27.7
<0.2
11.1
15.8
<0.2
13.4
0.13
48.5
<1
23.6
22.2
1.4
<1
5.8
<1
72.9
<1
N.D.

Chain of Custody requires a Freeland Horticulture Delivery Ticket-01322 619161

Client	Freeland Horticulture Ltd
Job Name	Topsoil Analysis
Site	Potters Bar, Hertfordshire
Month/Year	December 23
Our Ref	1231-SA
Date	03 January 2024

Polyaromatic Hydrocarbons

Naphthalene	mg/kg	<0.05
Acenaphthylene	mg/kg	<0.05
Acenaphthene	mg/kg	<0.05
Fluorene	mg/kg	<0.05
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.05
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo[a]anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo[b]fluoranthene	mg/kg	<0.1
Benzo[k]fluoranthene	mg/kg	<0.1
Benzo[a]pyrene	mg/kg	<0.1
Indeno[1,2,3-cd]pyrene	mg/kg	<0.1
Dibenzo[a,h]anthracene	mg/kg	<0.1
Benzo[g,h,i]perylene	mg/kg	<0.1
Total PAHs sum US EPA 16	mg/kg	<1

Banded Petroleum Hydrocarbons

Aliphatic TPH >C ₅ -C ₈	mg/kg	<0.05
Aliphatic TPH >C ₆ -C ₈	mg/kg	<0.05
Aliphatic TPH >C ₈ -C ₁₀	mg/kg	<0.05
Aliphatic TPH >C ₁₀ -C ₁₂	mg/kg	<10
Aliphatic TPH >C ₁₂ -C ₁₆	mg/kg	<10
Aliphatic TPH >C ₁₆ -C ₂₁	mg/kg	<10
Aliphatic TPH >C ₂₁ -C ₃₅	mg/kg	38.0
Aliphatic TPH >C ₃₅ -C ₄₄	mg/kg	<12

Aromatic TPH >C ₅ -C ₇	mg/kg	<0.05
Aromatic TPH >C ₇ -C ₈	mg/kg	<0.05
Aromatic TPH >C ₈ -C ₁₀	mg/kg	<0.05
Aromatic TPH >C ₁₀ -C ₁₂	mg/kg	<10
Aromatic TPH >C ₁₂ -C ₁₆	mg/kg	<10
Aromatic TPH >C ₁₆ -C ₂₁	mg/kg	<10
Aromatic TPH >C ₂₁ -C ₃₅	mg/kg	33.0
Aromatic TPH >C ₃₅ -C ₄₄	mg/kg	<12

Total Petroleum Hydrocarbons (TPH)	mg/kg	71.0
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BTEX

Benzene	mg/kg	<0.02
Toluene	mg/kg	<0.2
Ethyl Benzene	mg/kg	<0.04
m- & p- Xylene	mg/kg	<0.2
o-Xylene	mg/kg	<0.1



Appendix 04 - Trial Pit Photographs



TP1



TP2



TP3



TP4



TP5



TP6



TP7



TP8



TP9



TP9.1



TP10



TP10.1



Appendix 05 - Soil Results Summary

Client	Konform Ltd
Site	Watts Close
Job Reference	LQ1147
Date	24/01/2024
Site Use	Residential

Exceeds GAC				270										
Above detection limit				270										
Sample Reference				TP1	TP1	TP2	TP2	TP2	TP3	TP3	TP4	TP4	TP5	TP5
Depth (m)				0.05	0.45	0.45	0.50-0.60	0.50-0.60	0.10	0.50-0.60	0.40	0.50-0.60	0.15	0.50-0.60
Date Sampled				09/01/2024	09/01/2024	09/01/2024	09/01/2024	16/01/2024	09/01/2024	09/01/2024	09/01/2024	09/01/2024	09/01/2024	09/01/2024
Analytical Parameter (Soil Analysis)	Units	Limit of detection	GAC Resl with Plant Uptake											
Stone Content	%	0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	-	18	14	13	19	15	19	19	14	12	19	16
Total mass of sample received	kg	0.001	-	0.7	0.8	0.8	0.9	1.1	0.7	0.7	0.7	0.8	0.9	0.8
Asbestos in Soil	Type	N/A	-	Not-detected	Not-detected	Not-detected	Not-detected		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	-	EWS	EWS	EWS	EWS		EWS	EWS	EWS	EWS	EWS	EWS
General Inorganics														
pH - Automated	pH Units	N/A	-	8.2	9	9.3	8.2	9	8.7	8.2	10	9.5	8	9.1
Total Organic Carbon (TOC) - Automated	%	0.1	-	2.6	1.2	1.1	2.1	1.4	2.7	1.9	0.7	1.2	3.5	1.3
Speciated PAHs														
Naphthalene	mg/kg	0.05	2.3	< 0.05	0.07	0.05	0.07	< 0.05	0.05	0.06	< 0.05	0.09	0.05	0.07
Acenaphthylene	mg/kg	0.05	170	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.09	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	210	< 0.05	0.28	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	170	< 0.05	0.21	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.12	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	95	0.6	1.7	0.23	0.55	0.53	0.2	0.25	0.25	1.4	< 0.05	0.25
Anthracene	mg/kg	0.05	2400	0.12	0.32	0.07	0.1	0.1	0.05	< 0.05	0.07	0.11	< 0.05	0.06
Fluoranthene	mg/kg	0.05	280	1.7	2.4	0.57	1.4	1.1	0.47	0.64	0.65	1.6	0.09	0.58
Pyrene	mg/kg	0.05	620	1.4	1.9	0.49	1.3	0.95	0.39	0.6	0.57	1.4	0.07	0.5
Benzo(a)anthracene	mg/kg	0.05	7.2	0.98	0.88	0.31	0.71	0.5	0.25	0.31	0.34	0.62	0.06	0.27
Chrysene	mg/kg	0.05	15	0.9	1.1	0.33	0.75	0.52	0.26	0.35	0.32	0.69	0.07	0.31
Benzo(b)fluoranthene	mg/kg	0.05	2.6	0.96	1.2	0.42	0.92	0.63	0.38	0.43	0.4	0.71	0.08	0.36
Benzo(k)fluoranthene	mg/kg	0.05	77	0.47	0.37	0.13	0.38	0.22	0.18	0.18	0.14	0.36	0.05	0.14
Benzo(a)pyrene	mg/kg	0.05	2.2	0.82	0.84	0.32	0.77	0.47	0.32	0.35	0.35	0.63	0.06	0.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	27	0.36	0.44	0.17	0.4	0.23	0.18	0.22	0.18	0.28	< 0.05	0.15
Dibenz(a,h)anthracene	mg/kg	0.05	0.28	0.11	0.12	< 0.05	0.1	< 0.05	< 0.05	< 0.05	< 0.05	0.07	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	320	0.46	0.55	0.21	0.53	0.29	0.21	0.23	0.18	0.35	0.06	0.19

Client	Konform Ltd
Site	Watts Close
Job Reference	LQ1147
Date	24/01/2024
Site Use	Residential

Exceeds GAC
Above detection limit

270
270

Total PAH														
Speciated Total EPA-16 PAHs	mg/kg	0.8	-	8.87	12.4	3.3	8	5.54	2.94	3.62	3.45	8.58	< 0.80	3.18
Heavy Metals / Metalloids														
Antimony (aqua regia extractable)	mg/kg	1	-	< 1.0	3.1	3.5	9.7	5.8	3.5	7.1	3.2	3	2.3	3.6
Arsenic (aqua regia extractable)	mg/kg	1	37	12	13	11	23	25	13	19	15	11	12	12
Barium (aqua regia extractable)	mg/kg	1	-	40	86	94	150	100	67	120	40	81	38	82
Beryllium (aqua regia extractable)	mg/kg	0.06	-	0.49	0.75	0.68	1.1	0.84	0.59	1	0.35	0.6	0.57	0.77
Cadmium (aqua regia extractable)	mg/kg	0.2	11	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	6	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	910	16	22	22	27	60	19	25	9.3	20	17	24
Copper (aqua regia extractable)	mg/kg	1	2400	20	39	31	61	37	36	56	13	37	16	26
Lead (aqua regia extractable)	mg/kg	1	200	27	69	69	210	120	81	190	31	77	28	58
Mercury (aqua regia extractable)	mg/kg	0.3	1.2	< 0.3	< 0.3	0.4	1.1	0.7	< 0.3	1.1	< 0.3	0.4	< 0.3	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	-	0.83	0.71	0.74	1.3	1.1	0.99	1.3	0.52	0.7	0.77	0.79
Nickel (aqua regia extractable)	mg/kg	1	180	14	17	16	21	17	16	20	8	15	16	19
Selenium (aqua regia extractable)	mg/kg	1	250	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	410	29	38	34	47	39	30	46	22	31	32	38
Zinc (aqua regia extractable)	mg/kg	1	3700	72	93	110	430	200	100	520	53	99	72	99

Client	Konform Ltd
Site	Watts Close
Job Reference	LQ1147
Date	24/01/2024
Site Use	Residential

Exceeds GAC			270											
Above detection limit			270											
Sample Reference				TP6	TP6	TP7	TP7	TP7	TP8	TP8	TP8	TP8	TP9	TP9
Depth (m)				0.35	0.45	0.20	0.50-0.60	0.50-0.60	0.40-0.45	0.40-0.45	0.50-0.60	0.50-0.60	0.05	0.45
Date Sampled				09/01/2024	09/01/2024	09/01/2024	09/01/2024	16/01/2024	09/01/2024	16/01/2024	09/01/2024	16/01/2024	09/01/2024	09/01/2024
Analytical Parameter (Soil Analysis)	Units	Limit of detection	GAC Resl with Plant Uptake											
Stone Content	%	0.1	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	44	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	-	15	9.6	18	18	13	15	13	17	13	20	14
Total mass of sample received	kg	0.001	-	0.7	0.7	0.8	0.8	1.2	0.7	1.1	0.7	1	0.5	0.7
Asbestos in Soil	Type	N/A	-	Not-detected	Not-detected	Not-detected	Not-detected		Not-detected		Not-detected		Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	-	KSZ	KSZ	KSZ	KSZ		KSZ		KSZ		KSZ	EWS
General Inorganics														
pH - Automated	pH Units	N/A	-	9.2	11.1	8.3	8.2	9.3	8	11.1	7.8	9.4	8.4	11.1
Total Organic Carbon (TOC) - Automated	%	0.1	-	1.6	0.9	3.1	2	1.2	1.5	1.3	2	1.3	3.1	0.6
Speciated PAHs														
Naphthalene	mg/kg	0.05	2.3	0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.06	< 0.05	< 0.05	< 0.05	0.07	< 0.05
Acenaphthylene	mg/kg	0.05	170	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.16	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	210	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.09	< 0.05	< 0.05
Fluorene	mg/kg	0.05	170	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.06	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	95	0.53	0.29	0.14	0.54	0.41	0.67	0.32	0.39	0.72	0.1	0.19
Anthracene	mg/kg	0.05	2400	0.11	0.08	0.05	0.15	0.07	0.27	0.06	0.08	0.11	< 0.05	0.07
Fluoranthene	mg/kg	0.05	280	0.82	0.76	0.28	1.7	0.81	2.2	0.65	1.2	1.6	0.32	0.51
Pyrene	mg/kg	0.05	620	0.7	0.7	0.25	1.5	0.75	2.1	0.6	1.1	1.3	0.35	0.49
Benzo(a)anthracene	mg/kg	0.05	7.2	0.33	0.4	0.14	0.85	0.4	1.7	0.33	0.62	0.66	0.18	0.29
Chrysene	mg/kg	0.05	15	0.35	0.43	0.17	0.89	0.45	1.6	0.38	0.64	0.67	0.22	0.29
Benzo(b)fluoranthene	mg/kg	0.05	2.6	0.35	0.44	0.2	1	0.57	1.7	0.4	0.76	0.81	0.23	0.39
Benzo(k)fluoranthene	mg/kg	0.05	77	0.18	0.2	0.05	0.44	0.18	0.88	0.24	0.32	0.26	0.1	0.09
Benzo(a)pyrene	mg/kg	0.05	2.2	0.34	0.45	0.16	0.94	0.41	1.9	0.37	0.72	0.57	0.21	0.35
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	27	0.21	0.22	0.1	0.5	0.22	0.85	0.18	0.37	0.31	0.13	0.18
Dibenz(a,h)anthracene	mg/kg	0.05	0.28	0.06	0.07	< 0.05	0.15	< 0.05	0.28	< 0.05	0.12	< 0.05	0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	320	0.23	0.26	0.12	0.54	0.26	1	0.24	0.42	0.38	0.15	0.2

Client	Konform Ltd
Site	Watts Close
Job Reference	LQ1147
Date	24/01/2024
Site Use	Residential

Exceeds GAC		270												
Above detection limit		270												
Total PAH														
Speciated Total EPA-16 PAHs	mg/kg	0.8	-	4.31	4.3	1.66	9.17	4.53	15.3	3.77	6.76	7.47	2.11	3.05
Heavy Metals / Metalloids														
Antimony (aqua regia extractable)	mg/kg	1	-	3.7	3.6	3.3	12	4.8	7.5	5.5	7.8	5	2.5	1.9
Arsenic (aqua regia extractable)	mg/kg	1	37	11	12	14	24	13	17	13	21	13	13	10
Barium (aqua regia extractable)	mg/kg	1	-	74	74	47	170	100	120	100	140	95	56	34
Beryllium (aqua regia extractable)	mg/kg	0.06	-	0.68	0.6	0.57	1.1	0.75	0.86	0.72	1	0.76	0.56	0.29
Cadmium (aqua regia extractable)	mg/kg	0.2	11	< 0.2	< 0.2	< 0.2	< 0.2	0.4	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	6	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	910	22	19	19	27	79	23	73	25	67	17	7.7
Copper (aqua regia extractable)	mg/kg	1	2400	29	29	24	59	32	78	32	58	34	24	17
Lead (aqua regia extractable)	mg/kg	1	200	52	87	40	390	110	470	81	200	93	46	24
Mercury (aqua regia extractable)	mg/kg	0.3	1.2	< 0.3	0.3	< 0.3	0.9	< 0.3	0.7	0.3	1	0.6	< 0.3	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	-	0.84	1.5	1.1	1.3	0.99	1.1	0.87	1.4	0.92	0.69	0.37
Nickel (aqua regia extractable)	mg/kg	1	180	18	16	17	22	17	16	15	20	16	14	7.9
Selenium (aqua regia extractable)	mg/kg	1	250	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	410	34	32	32	44	37	37	35	44	35	29	16
Zinc (aqua regia extractable)	mg/kg	1	3700	100	93	93	450	160	310	150	430	180	86	53

Client	Konform Ltd
Site	Watts Close
Job Reference	LQ1147
Date	24/01/2024
Site Use	Residential

Exceeds GAC		270				
Above detection limit		270				
Sample Reference				TP10	TP10	TP10
Depth (m)				0.35	0.45	0.45
Date Sampled				09/01/2024	09/01/2024	16/01/2024
Analytical Parameter (Soil Analysis)	Units	Limit of detection	GAC Resl with Plant Uptake			
Stone Content	%	0.1	-	< 0.1	< 0.1	16
Moisture Content	%	0.01	-	14	18	14
Total mass of sample received	kg	0.001	-	0.8	0.6	1.1
Asbestos in Soil	Type	N/A	-	Not-detected	Not-detected	
Asbestos Analyst ID	N/A	N/A	-	EWS	EWS	
General Inorganics						
pH - Automated	pH Units	N/A	-	10.7	8	10
Total Organic Carbon (TOC) - Automated	%	0.1	-	0.6	2.1	1.5
Speciated PAHs						
Naphthalene	mg/kg	0.05	2.3	< 0.05	1.3	0.18
Acenaphthylene	mg/kg	0.05	170	0.06	0.24	0.08
Acenaphthene	mg/kg	0.05	210	0.1	0.41	0.17
Fluorene	mg/kg	0.05	170	0.09	0.54	0.21
Phenanthrene	mg/kg	0.05	95	0.84	4	0.79
Anthracene	mg/kg	0.05	2400	0.28	0.99	0.17
Fluoranthene	mg/kg	0.05	280	1.7	4.4	1.1
Pyrene	mg/kg	0.05	620	1.5	4.2	0.94
Benzo(a)anthracene	mg/kg	0.05	7.2	0.74	1.9	0.51
Chrysene	mg/kg	0.05	15	0.78	2.1	0.56
Benzo(b)fluoranthene	mg/kg	0.05	2.6	0.82	2.1	0.7
Benzo(k)fluoranthene	mg/kg	0.05	77	0.22	0.88	0.24
Benzo(a)pyrene	mg/kg	0.05	2.2	0.78	2	0.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	27	0.37	1.2	0.26
Dibenz(a,h)anthracene	mg/kg	0.05	0.28	0.12	0.32	0.05
Benzo(ghi)perylene	mg/kg	0.05	320	0.43	1.4	0.31

Client	Konform Ltd
Site	Watts Close
Job Reference	LQ1147
Date	24/01/2024
Site Use	Residential

Exceeds GAC
Above detection limit

270

270

Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	-	8.9	27.9	6.76
Heavy Metals / Metalloids						
Antimony (aqua regia extractable)	mg/kg	1	-	2.8	15	6.4
Arsenic (aqua regia extractable)	mg/kg	1	37	13	31	16
Barium (aqua regia extractable)	mg/kg	1	-	55	150	120
Beryllium (aqua regia extractable)	mg/kg	0.06	-	0.43	1.2	0.85
Cadmium (aqua regia extractable)	mg/kg	0.2	11	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	6	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	910	12	27	93
Copper (aqua regia extractable)	mg/kg	1	2400	16	71	63
Lead (aqua regia extractable)	mg/kg	1	200	38	270	130
Mercury (aqua regia extractable)	mg/kg	0.3	1.2	< 0.3	0.8	0.6
Molybdenum (aqua regia extractable)	mg/kg	0.25	-	0.74	2.2	1.2
Nickel (aqua regia extractable)	mg/kg	1	180	9.8	23	18
Selenium (aqua regia extractable)	mg/kg	1	250	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	410	24	45	37
Zinc (aqua regia extractable)	mg/kg	1	3700	64	450	240



Appendix 06 – Laboratory Certificates

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Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3A	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		

Izabela Wójcik

Signed:

Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923672
Sample Reference				TP1
Sample Number				None Supplied
Depth (m)				0.05
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	18
Total mass of sample received	kg	0.001	NONE	0.7

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.6

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.6
Anthracene	mg/kg	0.05	MCERTS	0.12
Fluoranthene	mg/kg	0.05	MCERTS	1.7
Pyrene	mg/kg	0.05	MCERTS	1.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.98
Chrysene	mg/kg	0.05	MCERTS	0.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.96
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.47
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.82
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.36
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.11
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.46

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	8.87
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	< 1.0
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12
Barium (aqua regia extractable)	mg/kg	1	MCERTS	40
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.49
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	27
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.83
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	29
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	72

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923672	TP1	None Supplied	0.05	Brown clay and sand with vegetation.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3B	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		

Signed:

Izabela Wójcik

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waters - 2 weeks from reporting
asbestos - 6 months from reporting

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An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923673
Sample Reference				TP1
Sample Number				None Supplied
Depth (m)				0.45
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	14
Total mass of sample received	kg	0.001	NONE	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.2

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.07
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.28
Fluorene	mg/kg	0.05	MCERTS	0.21
Phenanthrene	mg/kg	0.05	MCERTS	1.7
Anthracene	mg/kg	0.05	MCERTS	0.32
Fluoranthene	mg/kg	0.05	MCERTS	2.4
Pyrene	mg/kg	0.05	MCERTS	1.9
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.88
Chrysene	mg/kg	0.05	MCERTS	1.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.37
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.84
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.44
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.12
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.55

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	12.4
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	3.1
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13
Barium (aqua regia extractable)	mg/kg	1	MCERTS	86
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.75
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	39
Lead (aqua regia extractable)	mg/kg	1	MCERTS	69
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.71
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	38
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	93

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923673	TP1	None Supplied	0.45	Brown clay and sand.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

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Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

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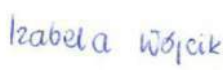
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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3C	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		


Signed:
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soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923674
Sample Reference				TP2
Sample Number				None Supplied
Depth (m)				0.45
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	13
Total mass of sample received	kg	0.001	NONE	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.3
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.1

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.23
Anthracene	mg/kg	0.05	MCERTS	0.07
Fluoranthene	mg/kg	0.05	MCERTS	0.57
Pyrene	mg/kg	0.05	MCERTS	0.49
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.31
Chrysene	mg/kg	0.05	MCERTS	0.33
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.42
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.13
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.32
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.17
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.21

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.3
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	3.5
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11
Barium (aqua regia extractable)	mg/kg	1	MCERTS	94
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.68
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	31
Lead (aqua regia extractable)	mg/kg	1	MCERTS	69
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.74
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	34
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923674	TP2	None Supplied	0.45	Brown clay and sand with gravel.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

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Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

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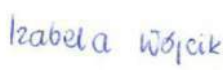
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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3D	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		


Signed:
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For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923675
Sample Reference				TP2
Sample Number				None Supplied
Depth (m)				0.50-0.60
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	19
Total mass of sample received	kg	0.001	NONE	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.1

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.07
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.55
Anthracene	mg/kg	0.05	MCERTS	0.1
Fluoranthene	mg/kg	0.05	MCERTS	1.4
Pyrene	mg/kg	0.05	MCERTS	1.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.71
Chrysene	mg/kg	0.05	MCERTS	0.75
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.92
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.38
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.77
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.4
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.1
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.53

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	8
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	9.7
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	23
Barium (aqua regia extractable)	mg/kg	1	MCERTS	150
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	61
Lead (aqua regia extractable)	mg/kg	1	MCERTS	210
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.1
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	1.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	47
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	430

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923675	TP2	None Supplied	0.50-0.60	Brown sand.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3E	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		

Signed:

Izabela Wójcik

Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

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Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923676
Sample Reference				TP3
Sample Number				None Supplied
Depth (m)				0.10
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	19
Total mass of sample received	kg	0.001	NONE	0.7

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.7
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.7

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.2
Anthracene	mg/kg	0.05	MCERTS	0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.47
Pyrene	mg/kg	0.05	MCERTS	0.39
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.25
Chrysene	mg/kg	0.05	MCERTS	0.26
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.38
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.18
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.32
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.18
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.21

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	2.94
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	3.5
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13
Barium (aqua regia extractable)	mg/kg	1	MCERTS	67
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.59
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	36
Lead (aqua regia extractable)	mg/kg	1	MCERTS	81
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.99
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	30
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923676	TP3	None Supplied	0.1	Brown sand with gravel and vegetation.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3F	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		

Izabela Wójcik
Signed:
Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923677
Sample Reference				TP3
Sample Number				None Supplied
Depth (m)				0.50-0.60
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	19
Total mass of sample received	kg	0.001	NONE	0.7

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.9

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.06
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.25
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.64
Pyrene	mg/kg	0.05	MCERTS	0.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.31
Chrysene	mg/kg	0.05	MCERTS	0.35
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.43
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.18
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.35
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.22
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.23

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.62
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	7.1
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	19
Barium (aqua regia extractable)	mg/kg	1	MCERTS	120
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	56
Lead (aqua regia extractable)	mg/kg	1	MCERTS	190
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.1
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	1.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	46
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	520

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923677	TP3	None Supplied	0.50-0.60	Brown sand with gravel.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

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Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
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D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

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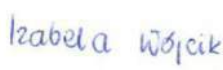
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Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3G	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		


Signed:
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Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923678
Sample Reference				TP4
Sample Number				None Supplied
Depth (m)				0.40
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	14
Total mass of sample received	kg	0.001	NONE	0.7

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	10
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.7

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.25
Anthracene	mg/kg	0.05	MCERTS	0.07
Fluoranthene	mg/kg	0.05	MCERTS	0.65
Pyrene	mg/kg	0.05	MCERTS	0.57
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.34
Chrysene	mg/kg	0.05	MCERTS	0.32
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.14
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.35
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.18
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.18

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.45
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	3.2
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15
Barium (aqua regia extractable)	mg/kg	1	MCERTS	40
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.35
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	9.3
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13
Lead (aqua regia extractable)	mg/kg	1	MCERTS	31
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.52
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	8
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	22
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	53

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923678	TP4	None Supplied	0.4	Brown sand with gravel.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3H	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		

Izabela Wójcik
Signed:
Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923679
Sample Reference				TP4
Sample Number				None Supplied
Depth (m)				0.50-0.60
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	12
Total mass of sample received	kg	0.001	NONE	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.5
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.2

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.09
Acenaphthylene	mg/kg	0.05	MCERTS	0.09
Acenaphthene	mg/kg	0.05	MCERTS	0.05
Fluorene	mg/kg	0.05	MCERTS	0.12
Phenanthrene	mg/kg	0.05	MCERTS	1.4
Anthracene	mg/kg	0.05	MCERTS	0.11
Fluoranthene	mg/kg	0.05	MCERTS	1.6
Pyrene	mg/kg	0.05	MCERTS	1.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.62
Chrysene	mg/kg	0.05	MCERTS	0.69
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.71
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.36
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.63
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.28
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.07
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.35

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	8.58
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	3
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11
Barium (aqua regia extractable)	mg/kg	1	MCERTS	81
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	37
Lead (aqua regia extractable)	mg/kg	1	MCERTS	77
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	31
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	99

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923679	TP4	None Supplied	0.50-0.60	Brown sand with gravel and rubble.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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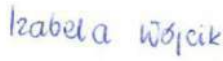
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Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3I	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		


Signed:
Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923680
Sample Reference				TP5
Sample Number				None Supplied
Depth (m)				0.15
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	19
Total mass of sample received	kg	0.001	NONE	0.9

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.5

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.09
Pyrene	mg/kg	0.05	MCERTS	0.07
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.06
Chrysene	mg/kg	0.05	MCERTS	0.07
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.08
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.06
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.06

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	2.3
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12
Barium (aqua regia extractable)	mg/kg	1	MCERTS	38
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.57
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	28
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.77
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	32
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	72

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923680	TP5	None Supplied	0.15	Brown sand with gravel.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3J	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		

Izabela Wójcik
Signed:

Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

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soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923681
Sample Reference				TP5
Sample Number				None Supplied
Depth (m)				0.50-0.60
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	16
Total mass of sample received	kg	0.001	NONE	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.1
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.07
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.25
Anthracene	mg/kg	0.05	MCERTS	0.06
Fluoranthene	mg/kg	0.05	MCERTS	0.58
Pyrene	mg/kg	0.05	MCERTS	0.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.27
Chrysene	mg/kg	0.05	MCERTS	0.31
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.36
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.14
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.15
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.19

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.18
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	3.6
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12
Barium (aqua regia extractable)	mg/kg	1	MCERTS	82
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.77
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	58
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.79
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	38
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	99

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923681	TP5	None Supplied	0.50-0.60	Brown sand with gravel.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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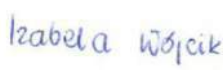
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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3K	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		


Signed:
Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923682
Sample Reference				TP6
Sample Number				None Supplied
Depth (m)				0.35
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	15
Total mass of sample received	kg	0.001	NONE	0.7

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.2
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.6

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.53
Anthracene	mg/kg	0.05	MCERTS	0.11
Fluoranthene	mg/kg	0.05	MCERTS	0.82
Pyrene	mg/kg	0.05	MCERTS	0.7
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.33
Chrysene	mg/kg	0.05	MCERTS	0.35
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.35
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.18
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.34
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.21
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.06
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.23

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	4.31
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	3.7
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11
Barium (aqua regia extractable)	mg/kg	1	MCERTS	74
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.68
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	29
Lead (aqua regia extractable)	mg/kg	1	MCERTS	52
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.84
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	34
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923682	TP6	None Supplied	0.35	Brown sand with gravel.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3L	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		

Signed:

Izabela Wójcik

Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923683
Sample Reference				TP6
Sample Number				None Supplied
Depth (m)				0.45
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	9.6
Total mass of sample received	kg	0.001	NONE	0.7

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	11.1
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.9

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.29
Anthracene	mg/kg	0.05	MCERTS	0.08
Fluoranthene	mg/kg	0.05	MCERTS	0.76
Pyrene	mg/kg	0.05	MCERTS	0.7
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.4
Chrysene	mg/kg	0.05	MCERTS	0.43
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.44
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.45
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.22
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.07
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.26

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	4.3
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	3.6
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12
Barium (aqua regia extractable)	mg/kg	1	MCERTS	74
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	29
Lead (aqua regia extractable)	mg/kg	1	MCERTS	87
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	1.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	32
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	93

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923683	TP6	None Supplied	0.45	Brown sand with gravel.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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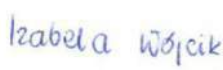
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Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3M	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		


Signed:
Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923684
Sample Reference				TP7
Sample Number				None Supplied
Depth (m)				0.20
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	18
Total mass of sample received	kg	0.001	NONE	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.1

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.14
Anthracene	mg/kg	0.05	MCERTS	0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.28
Pyrene	mg/kg	0.05	MCERTS	0.25
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.14
Chrysene	mg/kg	0.05	MCERTS	0.17
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.16
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.12

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.66
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	3.3
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14
Barium (aqua regia extractable)	mg/kg	1	MCERTS	47
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.57
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	40
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	1.1
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	32
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	93

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923684	TP7	None Supplied	0.2	Brown sand with gravel.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3N	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		

Signed:

Izabela Wójcik

Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923685
Sample Reference				TP7
Sample Number				None Supplied
Depth (m)				0.50-0.60
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	18
Total mass of sample received	kg	0.001	NONE	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.54
Anthracene	mg/kg	0.05	MCERTS	0.15
Fluoranthene	mg/kg	0.05	MCERTS	1.7
Pyrene	mg/kg	0.05	MCERTS	1.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.85
Chrysene	mg/kg	0.05	MCERTS	0.89
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.44
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.94
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.15
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.54

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	9.17
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	12
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	24
Barium (aqua regia extractable)	mg/kg	1	MCERTS	170
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	59
Lead (aqua regia extractable)	mg/kg	1	MCERTS	390
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.9
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	1.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	44
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	450

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923685	TP7	None Supplied	0.50-0.60	Brown sand with gravel.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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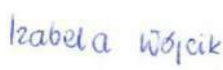
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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	30	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		


Signed:
Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923686
Sample Reference				TP8
Sample Number				None Supplied
Depth (m)				0.40-0.45
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	44
Moisture Content	%	0.01	NONE	15
Total mass of sample received	kg	0.001	NONE	0.7

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.5

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.06
Acenaphthylene	mg/kg	0.05	MCERTS	0.16
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.67
Anthracene	mg/kg	0.05	MCERTS	0.27
Fluoranthene	mg/kg	0.05	MCERTS	2.2
Pyrene	mg/kg	0.05	MCERTS	2.1
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.7
Chrysene	mg/kg	0.05	MCERTS	1.6
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.7
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.88
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.85
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.28
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	15.3
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	7.5
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17
Barium (aqua regia extractable)	mg/kg	1	MCERTS	120
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.86
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	78
Lead (aqua regia extractable)	mg/kg	1	MCERTS	470
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	1.1
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	37
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	310

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923686	TP8	None Supplied	0.40-0.45	Brown sand with stones.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

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Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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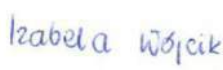
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Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3P	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		


Signed:
Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

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soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923687
Sample Reference				TP8
Sample Number				None Supplied
Depth (m)				0.50-0.60
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	17
Total mass of sample received	kg	0.001	NONE	0.7

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.39
Anthracene	mg/kg	0.05	MCERTS	0.08
Fluoranthene	mg/kg	0.05	MCERTS	1.2
Pyrene	mg/kg	0.05	MCERTS	1.1
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.62
Chrysene	mg/kg	0.05	MCERTS	0.64
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.76
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.32
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.72
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.37
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.12
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.42

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	6.76
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	7.8
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21
Barium (aqua regia extractable)	mg/kg	1	MCERTS	140
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	58
Lead (aqua regia extractable)	mg/kg	1	MCERTS	200
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	1.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	44
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	430

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923687	TP8	None Supplied	0.50-0.60	Brown sand.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3Q	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		

Izabela Wójcik
Signed:

Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923688
Sample Reference				TP9
Sample Number				None Supplied
Depth (m)				0.05
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	20
Total mass of sample received	kg	0.001	NONE	0.5

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.4
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.1

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.07
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.1
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.32
Pyrene	mg/kg	0.05	MCERTS	0.35
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.18
Chrysene	mg/kg	0.05	MCERTS	0.22
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.23
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.21
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.13
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.15

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	2.11
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	2.5
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13
Barium (aqua regia extractable)	mg/kg	1	MCERTS	56
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.56
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	46
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.69
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	29
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	86

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923688	TP9	None Supplied	0.05	Brown sand with vegetation.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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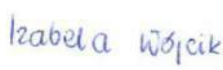
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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3R	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		


Signed:
Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

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soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923689
Sample Reference				TP9
Sample Number				None Supplied
Depth (m)				0.45
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	14
Total mass of sample received	kg	0.001	NONE	0.7

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	11.1
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.6

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.19
Anthracene	mg/kg	0.05	MCERTS	0.07
Fluoranthene	mg/kg	0.05	MCERTS	0.51
Pyrene	mg/kg	0.05	MCERTS	0.49
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.29
Chrysene	mg/kg	0.05	MCERTS	0.29
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.39
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.09
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.35
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.18
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.2

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.05
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	1.9
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10
Barium (aqua regia extractable)	mg/kg	1	MCERTS	34
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.29
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	7.7
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17
Lead (aqua regia extractable)	mg/kg	1	MCERTS	24
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.37
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	7.9
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	16
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	53

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923689	TP9	None Supplied	0.45	Brown sand.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

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Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3S	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		

Signed:

Izabela Wójcik

Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

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soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923690
Sample Reference				TP10
Sample Number				None Supplied
Depth (m)				0.35
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	14
Total mass of sample received	kg	0.001	NONE	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	10.7
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.6

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.06
Acenaphthene	mg/kg	0.05	MCERTS	0.1
Fluorene	mg/kg	0.05	MCERTS	0.09
Phenanthrene	mg/kg	0.05	MCERTS	0.84
Anthracene	mg/kg	0.05	MCERTS	0.28
Fluoranthene	mg/kg	0.05	MCERTS	1.7
Pyrene	mg/kg	0.05	MCERTS	1.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.74
Chrysene	mg/kg	0.05	MCERTS	0.78
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.82
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.22
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.78
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.37
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.12
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.43

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	8.9
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	2.8
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13
Barium (aqua regia extractable)	mg/kg	1	MCERTS	55
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.43
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	12
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	38
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.74
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	9.8
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	24
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	64

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923690	TP10	None Supplied	0.35	Brown sand.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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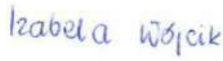
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e: Kalex Group

Analytical Report Number : 24-77335

Replaces Analytical Report Number: 24-77335, issue no. 2
Report format change.
Report split by sample, as per client request

Project / Site name:	Konform Land at Watts Close N15 5DW	Samples received on:	09/01/2024
Your job number:	Konform Land at Watts Close N1	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	LQ1147 WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	3T	Report issued on:	22/01/2024
Samples Analysed:	1 soil sample		


Signed:
Izabela Wójcik
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Your Order No: LQ1147 WATTS CLOSE

Lab Sample Number				2923691
Sample Reference				TP10
Sample Number				None Supplied
Depth (m)				0.45
Date Sampled				09/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	18
Total mass of sample received	kg	0.001	NONE	0.6

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.1

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	1.3
Acenaphthylene	mg/kg	0.05	MCERTS	0.24
Acenaphthene	mg/kg	0.05	MCERTS	0.41
Fluorene	mg/kg	0.05	MCERTS	0.54
Phenanthrene	mg/kg	0.05	MCERTS	4
Anthracene	mg/kg	0.05	MCERTS	0.99
Fluoranthene	mg/kg	0.05	MCERTS	4.4
Pyrene	mg/kg	0.05	MCERTS	4.2
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.9
Chrysene	mg/kg	0.05	MCERTS	2.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.88
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.32
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.4

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	27.9
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	15
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	31
Barium (aqua regia extractable)	mg/kg	1	MCERTS	150
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	71
Lead (aqua regia extractable)	mg/kg	1	MCERTS	270
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.8
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	2.2
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	45
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	450

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-77335
Project / Site name: Konform Land at Watts Close N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2923691	TP10	None Supplied	0.45	Brown sand.

Analytical Report Number : 24-77335

Project / Site name: Konform Land at Watts Close N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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e: Kalex Group

Analytical Report Number : 24-78449

Project / Site name:	Konform - Land at Watts Close, N15 5DW	Samples received on:	16/01/2024
Your job number:		Samples instructed on/ Analysis started on:	16/01/2024
Your order number:	LQ1147-WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	1	Report issued on:	23/01/2024
Samples Analysed:	1 soil sample		

Signed: _____

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-78449

Project / Site name: Konform - Land at Watts Close, N15 5DW

Your Order No: LQ1147-WATTS CLOSE

Lab Sample Number				2929457
Sample Reference				TP2
Sample Number				None Supplied
Depth (m)				0.50-0.60
Date Sampled				16/01/2024
Time Taken				1300
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	15
Total mass of sample received	kg	0.001	NONE	1.1

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.4

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.53
Anthracene	mg/kg	0.05	MCERTS	0.1
Fluoranthene	mg/kg	0.05	MCERTS	1.1
Pyrene	mg/kg	0.05	MCERTS	0.95
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.5
Chrysene	mg/kg	0.05	MCERTS	0.52
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.63
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.22
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.47
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.23
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.29

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	5.54
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	5.8
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	25
Barium (aqua regia extractable)	mg/kg	1	MCERTS	100
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.84
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	60
Copper (aqua regia extractable)	mg/kg	1	MCERTS	37
Lead (aqua regia extractable)	mg/kg	1	MCERTS	120
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	1.1
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	39
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	200

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-78449
Project / Site name: Konform - Land at Watts Close, N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2929457	TP2	None Supplied	0.50-0.60	Brown loam and clay with gravel.

Analytical Report Number : 24-78449

Project / Site name: Konform - Land at Watts Close, N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 °C)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.



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Analytical Report Number : 24-78451

Project / Site name:	Konform - Land at Watts Close, N15 5DW	Samples received on:	16/01/2024
Your job number:		Samples instructed on/ Analysis started on:	16/01/2024
Your order number:	LQ1147-WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	1	Report issued on:	23/01/2024
Samples Analysed:	1 soil sample		

Signed: _____

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-78451

Project / Site name: Konform - Land at Watts Close, N15 5DW

Your Order No: LQ1147-WATTS CLOSE

Lab Sample Number				2929459
Sample Reference				TP7
Sample Number				None Supplied
Depth (m)				0.50-0.60
Date Sampled				16/01/2024
Time Taken				1310
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	13
Total mass of sample received	kg	0.001	NONE	1.2

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.3
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.2

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.41
Anthracene	mg/kg	0.05	MCERTS	0.07
Fluoranthene	mg/kg	0.05	MCERTS	0.81
Pyrene	mg/kg	0.05	MCERTS	0.75
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.4
Chrysene	mg/kg	0.05	MCERTS	0.45
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.57
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.18
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.41
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.22
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.26

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	4.53
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	4.8
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13
Barium (aqua regia extractable)	mg/kg	1	MCERTS	100
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.75
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	79
Copper (aqua regia extractable)	mg/kg	1	MCERTS	32
Lead (aqua regia extractable)	mg/kg	1	MCERTS	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.99
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	37
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	160

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-78451

Project / Site name: Konform - Land at Watts Close, N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2929459	TP7	None Supplied	0.50-0.60	Brown loam and clay with gravel.

Analytical Report Number : 24-78451

Project / Site name: Konform - Land at Watts Close, N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 °C)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 24-78452

Project / Site name:	Konform - Land at Watts Close, N15 5DW	Samples received on:	16/01/2024
Your job number:		Samples instructed on/ Analysis started on:	16/01/2024
Your order number:	LQ1147-WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	1	Report issued on:	23/01/2024
Samples Analysed:	1 soil sample		



Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-78452
Project / Site name: Konform - Land at Watts Close, N15 5DW
Your Order No: LQ1147-WATTS CLOSE

Lab Sample Number				2929460
Sample Reference				TP8
Sample Number				None Supplied
Depth (m)				0.40-0.45
Date Sampled				16/01/2024
Time Taken				1320
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	13
Total mass of sample received	kg	0.001	NONE	1.1

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	11.1
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.32
Anthracene	mg/kg	0.05	MCERTS	0.06
Fluoranthene	mg/kg	0.05	MCERTS	0.65
Pyrene	mg/kg	0.05	MCERTS	0.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.33
Chrysene	mg/kg	0.05	MCERTS	0.38
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.24
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.37
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.18
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.24

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.77
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	5.5
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13
Barium (aqua regia extractable)	mg/kg	1	MCERTS	100
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.72
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	73
Copper (aqua regia extractable)	mg/kg	1	MCERTS	32
Lead (aqua regia extractable)	mg/kg	1	MCERTS	81
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.87
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	35
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	150

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-78452

Project / Site name: Konform - Land at Watts Close, N15 5DW

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2929460	TP8	None Supplied	0.40-0.45	Brown loam and clay with gravel.

Analytical Report Number : 24-78452

Project / Site name: Konform - Land at Watts Close, N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 24-78454

Project / Site name:	Konform - Land at Watts Close, N15 5DW	Samples received on:	16/01/2024
Your job number:		Samples instructed on/ Analysis started on:	16/01/2024
Your order number:	LQ1147-WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	1	Report issued on:	23/01/2024
Samples Analysed:	1 soil sample		



Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

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soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-78454
Project / Site name: Konform - Land at Watts Close, N15 5DW
Your Order No: LQ1147-WATTS CLOSE

Lab Sample Number				2929461
Sample Reference				TP8
Sample Number				None Supplied
Depth (m)				0.50-0.60
Date Sampled				16/01/2024
Time Taken				1330
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	13
Total mass of sample received	kg	0.001	NONE	1

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.4
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.09
Fluorene	mg/kg	0.05	MCERTS	0.06
Phenanthrene	mg/kg	0.05	MCERTS	0.72
Anthracene	mg/kg	0.05	MCERTS	0.11
Fluoranthene	mg/kg	0.05	MCERTS	1.6
Pyrene	mg/kg	0.05	MCERTS	1.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.66
Chrysene	mg/kg	0.05	MCERTS	0.67
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.81
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.26
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.57
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.31
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.38

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	7.47
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	5
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13
Barium (aqua regia extractable)	mg/kg	1	MCERTS	95
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.76
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	67
Copper (aqua regia extractable)	mg/kg	1	MCERTS	34
Lead (aqua regia extractable)	mg/kg	1	MCERTS	93
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.6
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	0.92
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	35
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	180

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-78454

Project / Site name: Konform - Land at Watts Close, N15 5DW

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2929461	TP8	None Supplied	0.50-0.60	Brown loam and clay with gravel.

Analytical Report Number : 24-78454

Project / Site name: Konform - Land at Watts Close, N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 24-78455

Project / Site name:	Konform - Land at Watts Close, N15 5DW	Samples received on:	16/01/2024
Your job number:		Samples instructed on/ Analysis started on:	16/01/2024
Your order number:	LQ1147-WATTS CLOSE	Analysis completed by:	22/01/2024
Report Issue Number:	1	Report issued on:	23/01/2024
Samples Analysed:	1 soil sample		



Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

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soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-78455
Project / Site name: Konform - Land at Watts Close, N15 5DW
Your Order No: LQ1147-WATTS CLOSE

Lab Sample Number				2929462
Sample Reference				TP10
Sample Number				None Supplied
Depth (m)				0.45
Date Sampled				16/01/2024
Time Taken				1340
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	
Stone Content	%	0.1	NONE	16
Moisture Content	%	0.01	NONE	14
Total mass of sample received	kg	0.001	NONE	1.1

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	10
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.5

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.18
Acenaphthylene	mg/kg	0.05	MCERTS	0.08
Acenaphthene	mg/kg	0.05	MCERTS	0.17
Fluorene	mg/kg	0.05	MCERTS	0.21
Phenanthrene	mg/kg	0.05	MCERTS	0.79
Anthracene	mg/kg	0.05	MCERTS	0.17
Fluoranthene	mg/kg	0.05	MCERTS	1.1
Pyrene	mg/kg	0.05	MCERTS	0.94
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.51
Chrysene	mg/kg	0.05	MCERTS	0.56
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.7
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.24
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.26
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.31

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	6.76
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Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	6.4
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16
Barium (aqua regia extractable)	mg/kg	1	MCERTS	120
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.85
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	93
Copper (aqua regia extractable)	mg/kg	1	MCERTS	63
Lead (aqua regia extractable)	mg/kg	1	MCERTS	130
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.6
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	1.2
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	37
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	240

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-78455

Project / Site name: Konform - Land at Watts Close, N15 5DW

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Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2929462	TP10	None Supplied	0.45	Brown loam and clay with gravel and stones.

Analytical Report Number : 24-78455

Project / Site name: Konform - Land at Watts Close, N15 5DW

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

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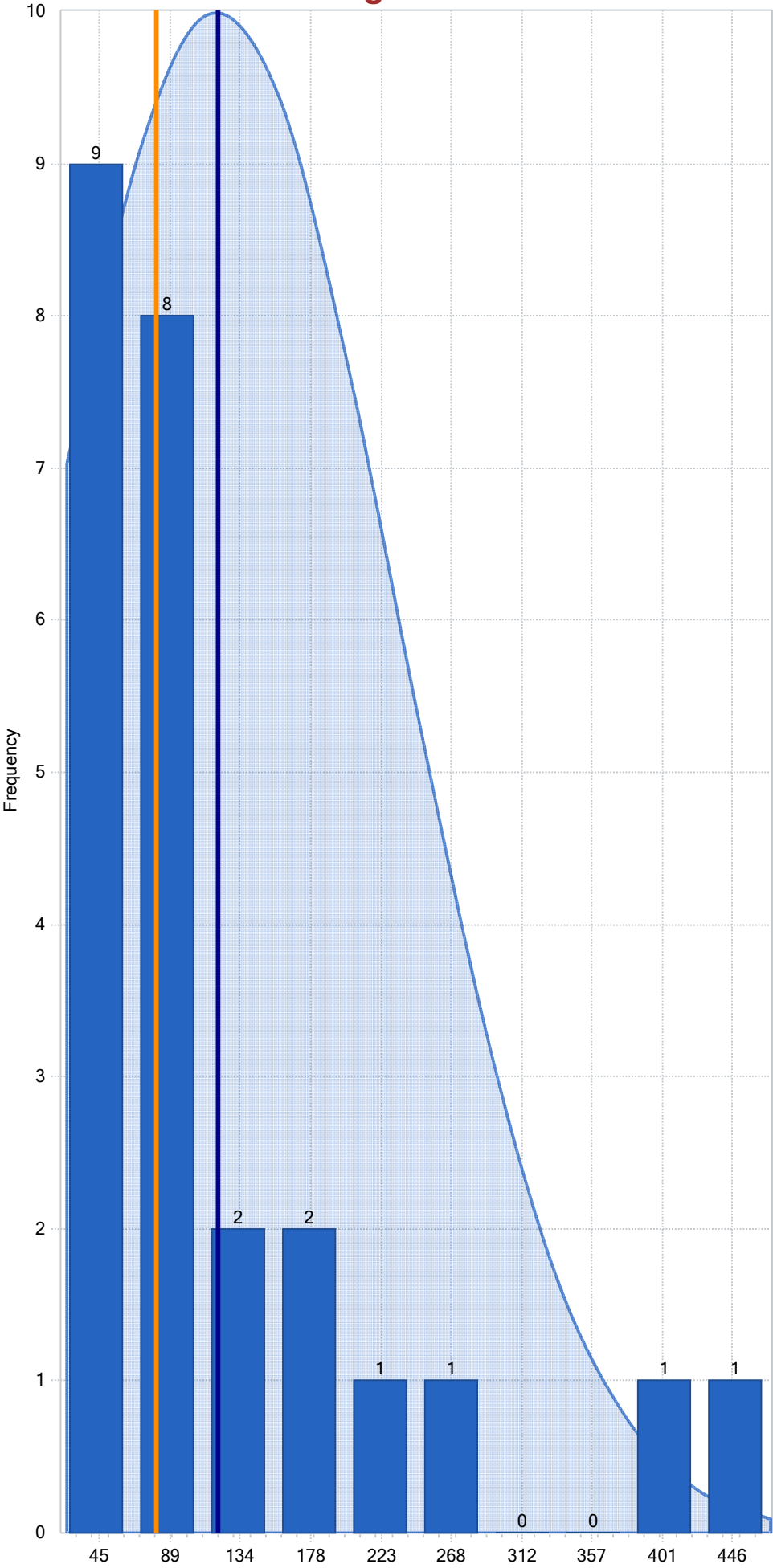
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

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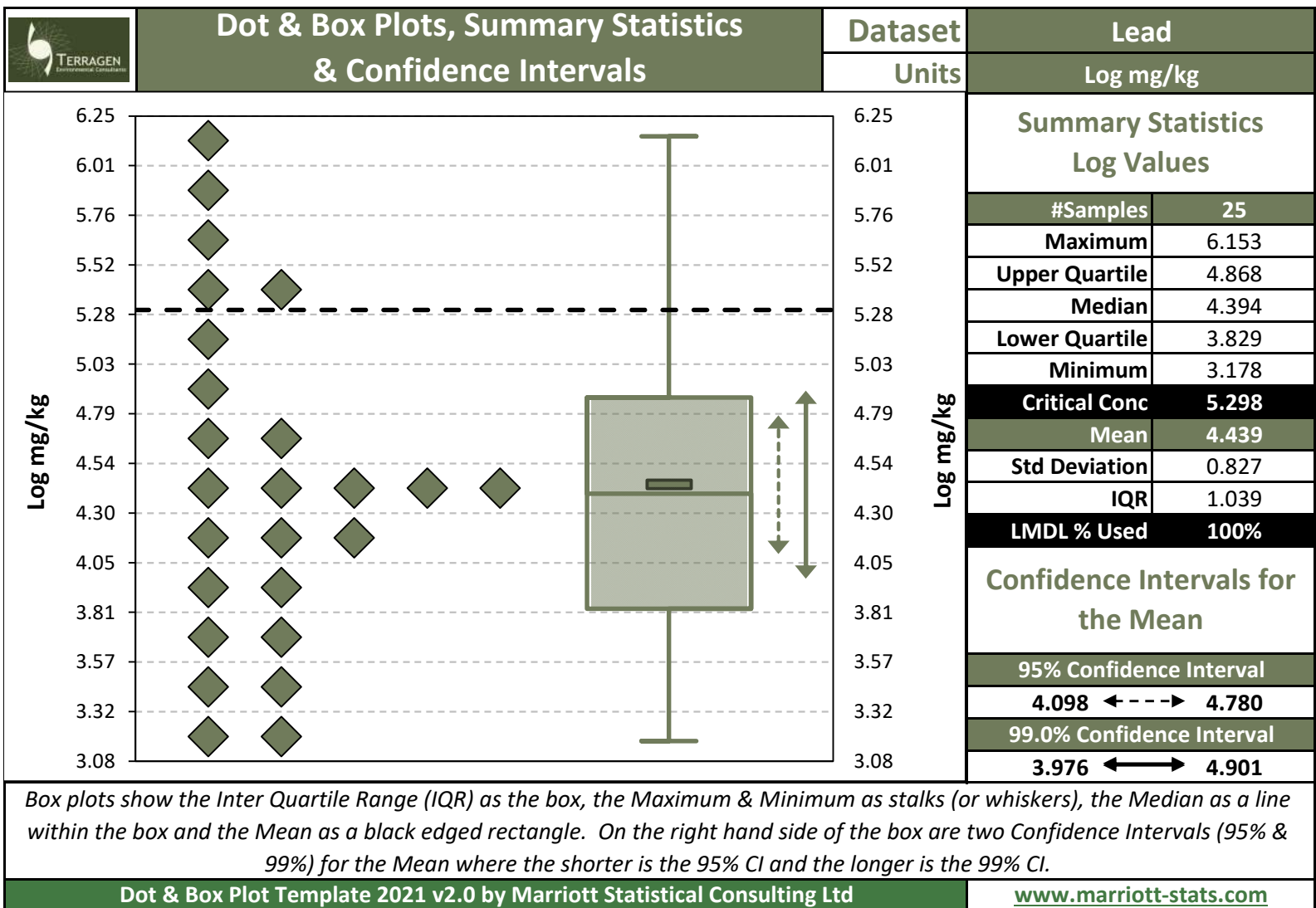
Appendix 07 – Histograms and box plots

Histogram for Pb

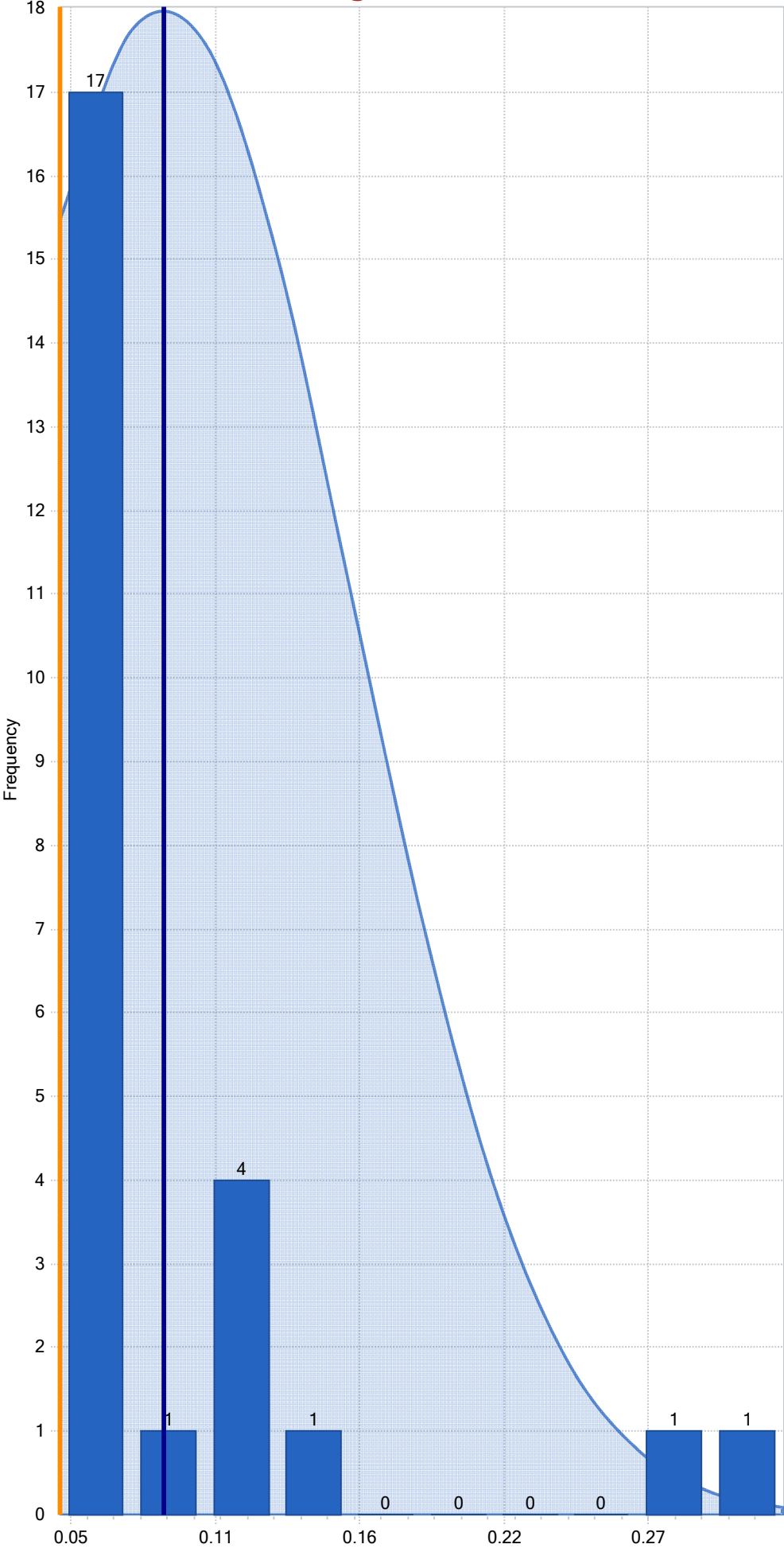


Number of Values	25
Minimum	24.00
Maximum	470.00
SD	113.78
Skewness	1.91
Kurtosis	3.46
☒ Mean	119.64
☒ Median	81.00
☒ Normal Distribution	

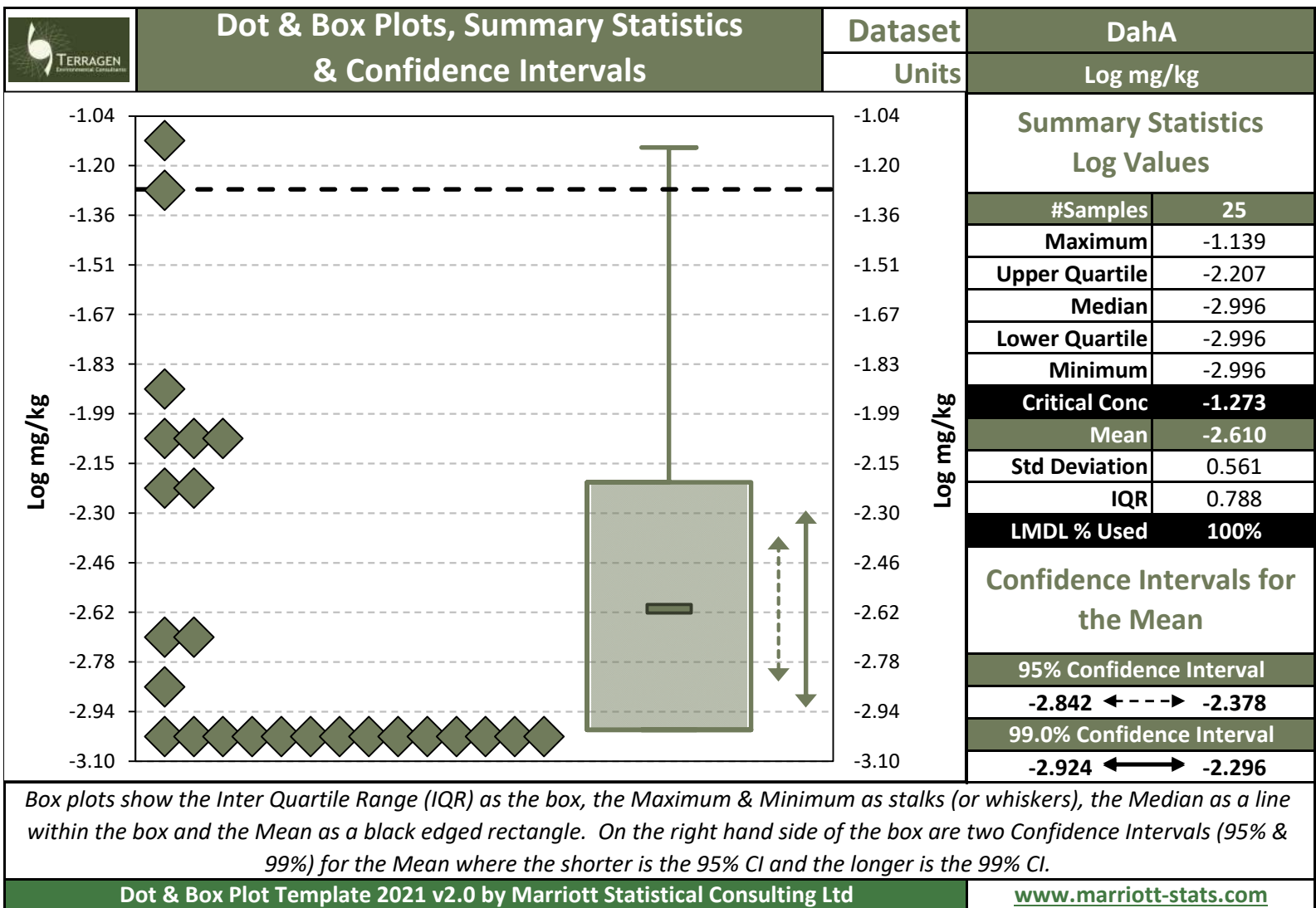
- ☐ Less Bins
- ☐ More Bins



Histogram for DahA



DahA	
Number of Values	25
Minimum	0.05
Maximum	0.32
SD	0.07
Skewness	2.42
Kurtosis	5.69
☒ Mean	0.09
☒ Median	0.05
☒ Normal Distribution	
☐ Less Bins	
☐ More Bins	





Appendix 08 – Confirmation Statement



Konform (Uk) Limited
Kingfisher House, Hoffmanns Way,
Chelmsford, CM1 1 GU
01279 721 096

Richard Devereaux

Formation Design and Build

Dear Richard,

We recently completed our contract works at Watts Close, with our scope of works as follows;

- *All groundworks, including foundation construction, drainage & services.*

Upon completion of the groundworks at Watts Close, this statement serves to confirm that a watching brief was maintained at all times, throughout our time on site, & no unforeseen visual or olfactory evidence of contamination was encountered during the substructure works.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Paul Collins', on a light grey background.

14/12/23
Paul Collins
Contracts Manager
Konform Ltd

