

Earthworks Validation Report

For a site at

Trinity Street, Huddersfield

Undertaken for

Stainforth Construction

Report Title:	Trinity Street, Huddersfield Earthworks Validation Report
Report Reference:	7913G-WML-XX-ZZ RP-G-005
Client:	Stainforth Construction
Original Issue Date:	14th March 2024
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Revision Status / History

Rev	Date	Issue / Purpose/ Comment	Prepared	Checked	Authorised
-	14/03/2024	First Issue	SCS	TPB	SCS

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1.0 INTRODUCTION

Project Description

- 1.1 The southern area of the former Huddersfield College, New North Road, Huddersfield (The Site) is to be developed as a Lidl Great Britain Limited (Lidl) supermarket.
- 1.2 To enable the development, existing buildings were to be demolished and the Site brought to a formation level platform to accommodate the Lidl development.
- 1.3 The enabling works are to be undertaken by the Contractor while construction of the superstore, external areas and associated infrastructure is to be subsequently undertaken by Lidl.

Site Location

- 1.4 The site comprises the southern half of the former Kirklees College campus to the west of Huddersfield Town Centre. It is centred on approximate Ordnance Survey National Grid Reference 414068E, 416825N with an indicative postcode of HD1 5NN.
- 1.5 The site is bounded to the north by the larger former college site and a Grade II listed building, to the east by Castlegate. It is bounded to the south and west by Trinity Street.
- 1.6 A location plan by Enjoy Design referenced 00134, Rev 03, indicating the site area within the red-line boundary, is presented in Appendix 01.

Scope

- 1.7 A work packages was to be undertaken to enable the Lidl construction and is briefly summarised as follows. This was provided within the WML Enabling Works Specification Report, referenced 7913-WML-XX-ZZ-SH-S0001, dated September 2020.
 - Site Clearance and Demolition.
 - Ground Investigation and Remediation.
 - Mining Investigation and Ground Stabilisation.
 - Earthworks.
 - Retaining Wall Construction.
- 1.8 This report represents the information associated with the Earthworks Validation. The list of tasks to be undertaken within the earthworks package are summarised below:
 - Inspect the ground and undertake California Bearing Ratio (CBR) tests of the excavated level following the demolition works.
 - Remove any soft or otherwise deleterious material considered unsuitable as a foundation for platform formation.
 - Inspect the stockpile of crushed demolition material and undertake appropriate testing to confirm suitability as fill.
 - Prepare the ground and excavate areas identified by the post demolition topographical survey as requiring reduction to formation.
 - Form the platform for the building and external area in accordance with the Specification.
 - Provide a Verification Completion Report to include all records of work undertaken to confirm appropriate construction of the works.
- 1.9 Excavation, deposition and compaction works were to be undertaken in accordance with the relevant clauses within the SHW. The following drawings, provided in Appendix 01, refer to the required earthworks at the site:

- 7913-WML-00-XX-DR-S-1000 rev P04 Proposed Earthworks Formation Levels.
- 7913-WML-00-XX-DR-S-1001 rev P04 Proposed Earthworks Setting Out Plan.

- 1.10 In summary, the works were to comprise the formation of a development plateau to achieve a California Bearing Ratio (CBR) of 5% (when measured in accordance with BS 1377: Soils for civil engineering purposes: Part 4) at a formation level of 450mm below the proposed finished levels of external hardstanding.
- 1.11 CBR's, were to be undertaken on an approximate 25m x 25m grid. These were to comprise plate loading tests in accordance with BS1377-Part 9:1999 Methods of test for Soils for Civil Engineering Purposes, which were to be modified to provide an equivalent CBR in accordance with guidance provided in Interim Advice Note 73/06 (2009) of Design Guidance for Road Pavement Foundations (Draft HD25), as superseded by CD225 Design for New Pavement Foundations Revision 1 April 2020.
- 1.12 Fill beneath and within 3.0m of the building footprint, unless constrained by retaining walls, was to be loose-tipped and comprising materials which met the requirements of the vibro-contractor's specification, as provided by Lidl under separate cover.
- 1.13 Fill beyond 3m of building footprint was to be constructed by adopting method compaction in accordance with Table 6/4 of SHW Series 0600.

General

- 1.14 In addition to the enclosed earthwork validation report the following documents associated with the Ground Investigation and Remediation and Mining Investigations & Ground Stabilisation should be reviewed as they form part of the scope within the Specification: -
- 1.15 Additional investigations including trial pits and chemical testing below the floor slabs after demolition have been undertaken and included within.
- Phase 2 Geo-environmental Investigation and Assessment, Reference 7913G-WML-00-XX-RP-G-0003, dated May 2023.
 - Remediation Strategy, Reference 7913G-WML-XX-ZZ RP-G-004, dated May 2023.
- 1.16 During the enabling works a mine shaft was encountered in the southern section of the site at NGR 414117E, 416799N, which was investigated and treated as outlined within the following reports. These reports include location plans, together with details of the treatment and capping detail.
- Completion report for Treatment of Suspected Coal Mine Shaft by Drilling and Grouting, Reference VE231554, dated July 2023.
 - Updated Coal Authority Risk Assessment, Reference 7913G-WML-00-XX-RP-G-003 Rev B, dated December 2023.

2.0 SUMMARY OF EARTHWORKS

Demolition and Excavation

- 2.1 It is understood that an appropriate asbestos survey was carried and all asbestos was removed by a specialist contractor prior to demolition commencing.
- 2.2 The demolition of buildings A to E, was subsequently undertaken by Metropolitan Ltd between Autumn 2022 and Spring 2023. Their locations are highlighted on the Enjoy Design drawing referenced 00034, dated April 2018, in Appendix 01 with selected demolition photographs from Stainforth's environmental engineer, Black Rock Environmental Associates BREA within Appendix 02 and within their report in Appendix 10.
- 2.3 The brick and concrete was subsequently stockpiled for segregation and crushing to the required 6F2 grading. However, prior to crushing two sections of broken panelling were noted BREA. On 24th May 2023 two samples of the suspected asbestos were tested by Acorn (ref B-42384) to determine if they contained asbestos. Both samples were determined to comprise insulating wall boards, but neither contained asbestos.
- 2.4 The summary documents including dates and analytical reference numbers are included on BREA 'Document Demolition Issues Involving Asbestos', in Appendix 05, with the test results within Appendix 07.
- 2.5 A copy of the air monitoring undertaken during crushing activities, of the site won demolition material, by Acorn is presented in Appendix 09, with the BREA summary on 'Airborne Fibre Monitoring' summary in Appendix 05. This indicates satisfactory air monitoring results as the air fibre concentrations were all <0.010f/ml.

Classification of Site Won Fill Material

- 2.6 Prior to the commencement of filling operations, materials to be used as engineered fill across the full site area were sourced from site-won "demolition rubble" (including excavated concrete foundations/obstructions) crushed to a granular aggregate and stockpiled around the perimeter of the site.
- 2.7 The stockpiles mainly comprised concrete which was crushed to a 6F2 material class (in accordance with the Specification for Highways Works).
- 2.8 After the stockpile material had been crushed and screened a series of samples were obtained by BREA and submitted for geotechnical analyses. Testing was undertaken on a ratio of approximately 1 test per 500m³ based on a generated volume of 10,000m³.
- 2.9 A summary of the volumes are included on the BREA summary sheer referenced 'Grading and Asbestos Test Results – 6F2 and 6F5 Crushed Aggregates', in Appendix 05 described and 'Site-Won Aggregates'.
- 2.10 Compliance testing included grading and testing for asbestos. The test results indicated that all materials were compliant with the required specification and were considered to classify 6F2 with one minor grading issues associated with sample 23-12778. However, this was not considered to be significant.
- 2.11 No asbestos was recorded in the samples.
- 2.12 BREA also undertook further chemical analyses for a standard suite of contaminants of concern (CoC's) on 9no samples of site won material with the results in Appendix 04. These relate to 1no sample per 1111m³ and determined the materials to be below the relevant reference values for use beneath the proposed new development as described within the WML Remediation Strategy referenced 7913G-WML-XX-ZZ RP-G-004.

Classification of Imported Fill Materials

- 2.13 Due to a shortfall in materials in October 2023, during the commencement of filling operations, materials to be used as engineered fill were also sourced from Marshalls Ltd, from a source of natural quarried sandstone at Appleton Quarry, Shelley, Huddersfield.
- 2.14 Prior to import the supplier provided test data to determine that the material comprised concrete which was crushed to a 6F5 material class (in accordance with the Specification for Highways Works).
- 2.15 Laboratory testing was undertaken on a ratio of approximately 1 test per 500m³ based on the required import volume of 2,000m³.
- 2.16 A summary of the volumes are included on the BREa summary sheet referenced 'Grading and Asbestos Test Results – 6F2 and 6F5 Crushed Aggregates', in Appendix 05 and described as 'Marshall Ltd, Appleton Quarry, Shelley, Huddersfield'.
- 2.17 Compliance testing included grading and testing for asbestos. These test results indicated that all materials were compliant with the required specification and were considered to classify 6F5.
- 2.18 BREa also undertook further chemical analyses for a standard suite of contaminants of concern (CoC's) on 4no samples of site won material with the results in Appendix 04. These relate to 1no sample per 250m³ and determined the materials to be below the relevant reference values for use beneath the proposed new development as described within the WML Remediation Strategy referenced 7913G-WML-XX-ZZ RP-G-004.

Emplacement of Engineered Fill - External

- 2.19 Once satisfied that the crushed site won material classified as 6F2/6F5, the enabling works platform was constructed in accordance with the Specification for Highways Works (SHW) Method 6 under supervision of BREa. This was undertaken in all fill areas, excluding the fill placed beneath and within 3.0m, of the building footprint, which was loose tipped to allow for future vibro compaction.
- 2.20 The fill material was emplaced in 300mm layers and compacted by the ground-worker using a Bomag 213 Roller. Each layer was subjected to 6no passes of the roller in order to achieve a suitable level of compaction to a depth of 450mm below the proposed finished level.
- 2.21 During the earthworks all filling was suspended during times of inclement weather including days with heavy and / or prolonged rainfall or during extremely cold weather.
- 2.22 The 6F2/6F5 engineered fill was terminated within 450m of finish level as required within the Specification.

In-situ Verification Testing

- 2.23 In order to ensure that the emplaced fill to external areas had been adequately engineered a programme of in-situ testing was undertaken by Stainforth and BREa throughout the filling operations outside the building footprint. The in-situ testing on layers of fill comprised a series of 'Plate Bearing' tests (using a 450mm metal plate) on a 25 x 25m grid.
- 2.24 The in-situ testing, undertaken to determine CBR values were found to achieve the required minimum CBR value of 5%. The test results referenced 8, 18, 33 and 40 did not initially achieve the minimum requirement of 5%. These areas were subsequently recompacted and retested, at which point they were determined to achieve a CBR at or greater than 5%.

- 2.25 In order to determine the required compactions had been achieved within the earthworks a series of nuclear gauge density tests (NDG) were undertaken on emplaced and compacted fill outside the building footprint.
- 2.26 The results of the 50no tests range in values between 81 and 98.8% compaction. Of which 36no tests fall below the required value of 90% compaction with the lowest being 81%. Due to the localised lower values, discussions were held between Stainforth, WML and the Lidl engineer in late 2023. It was determined that although the NDG tests show a compaction below the required 90%, in consideration of the CBR results and the proposed use of the externals for access and parking, these were considered to be acceptable.
- 2.27 The insitu testing locations are identified on the Stanworth's unreferenced drawing included within Appendix 01.
- 2.28 The results of the Plate Load/CBR and NDG testing are provided within Appendix 06.

3.0 ADDITIONAL CONTAMINATION AND REMEDIATION

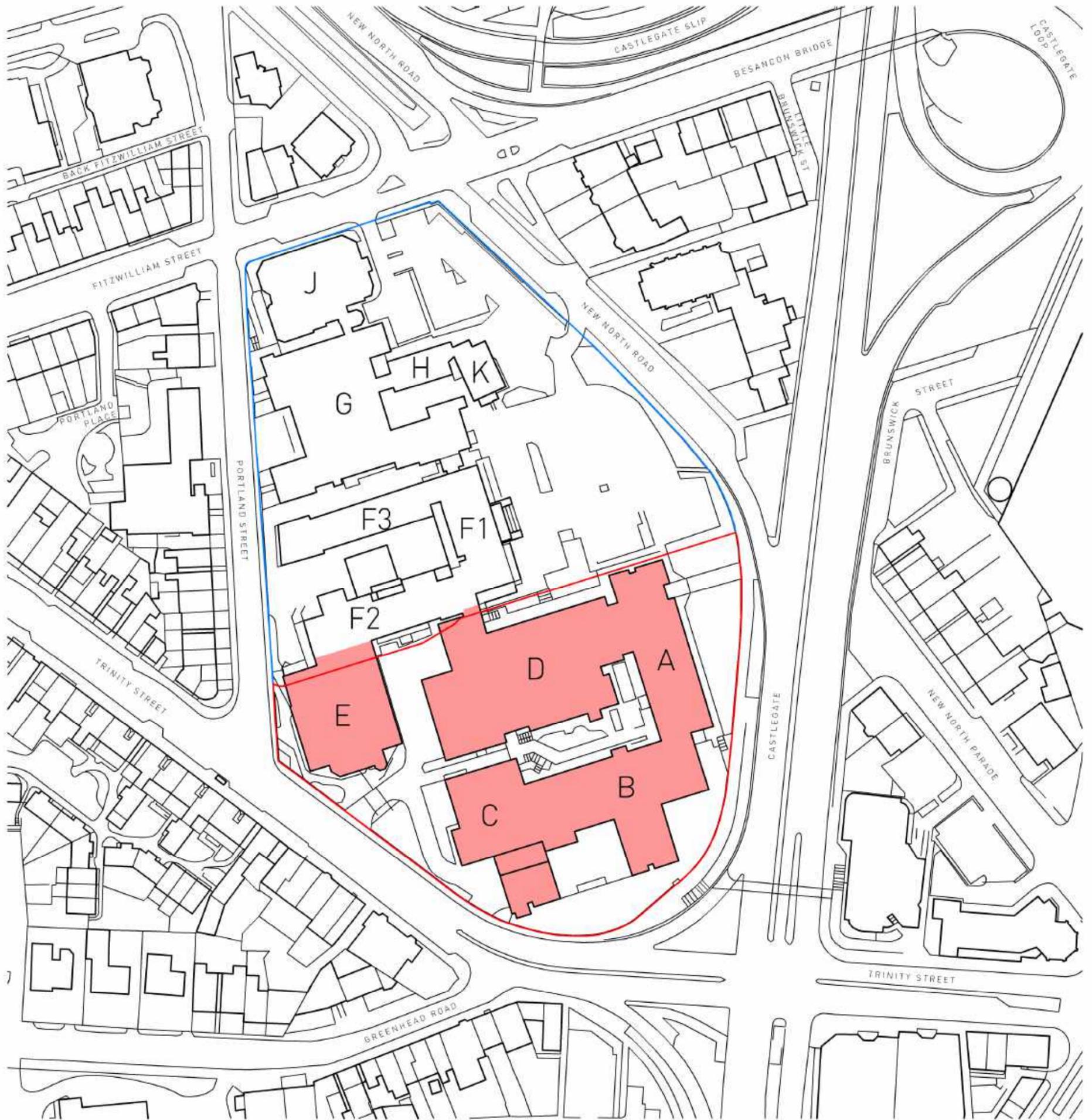
- 3.1 During the earthworks programme additional potential asbestos was encountered by BREAS as outlined below. A copy of the BREA Asbestos Remediation Report, referenced HFW/no/StC/Trinity/37 is presented within Appendix 10, with the relevant photographs, testing and disposal information within the Appendices as referenced in the following section.
- 3.2 In August 2023 a quantity of potential asbestos fragments and a black pipe initially considered to be asbestos were encountered in the location of the mine shaft in the southern corner of the site at NGR 414117E, 416799N.
- 3.3 These were encountered during preparation for grouting and capping the mine shaft. The shards and the pipe were sampled by BREA and tested for asbestos on 10th August 2023 (Acorn reference B-43556) the results of which are presented in Appendix 07. A summary of the investigations are also included on the BREA summary sheet referenced 'Demolition Issues Involving Asbestos' in Appendix 05.
- 3.4 The results indicated that the black pipe did not contain any asbestos. However, the fragments within the shallow made ground soil matrix comprised chrysotile in the form of cement sheeting.
- 3.5 The asbestos contaminated soils were then excavated and placed in a designated area and encapsulated before the fragments were hand-picked, double bagged and removed by the asbestos specialist Foxhall Ltd to a suitable repository. Although the black pipe did not include asbestos, BREA noted that due to landfill issues with a similar pipe on another site, this was also bagged and removed by the asbestos specialist.
- 3.6 BREA summary sheet Asbestos in Soil, in Appendix 05, describes that after remediation by hand picking, the soils were subject to additional asbestos testing (lab reference 125993). The results in Appendix 07 indicate that it did not contain further asbestos as the soils were placed below a depth of 1.00mbgl beneath the proposed landscaping in the south-eastern corner of the development area.
- 3.7 A copy of the waste consignment docket from Foxhall Ltd is presented in Appendix 08. This includes additional residual asbestos from the demolition activities.
- 3.8 The BREA, Airborne Fibre Monitoring, summary sheets in Appendix 05 also indicate that air monitoring was undertaken by Inspectas during hand picking of the ACM's within the mine shaft area on 16th August 2023. Although the results have not been provided, BREA document that they recorded satisfactory results with an air fibre concentration <0.010f/ml.
- 3.9 Photographs from BREA are included within Appendix 02.

4.0 CONCLUSIONS

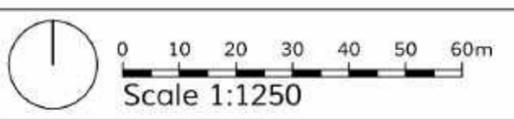
- 4.1 To summarise, WML are satisfied that all works undertaken within the external areas, by Stainforth in conjunction with their environmental consultant BREa, have been undertaken in accordance with the Specification for the works, and to meet the requirements.
- 4.2 The deviation from the Specification associated with the lower than expected compaction results were discussed with the client's engineer and all parties agreed that these would be acceptable.
- 4.3 Detailed design of the foundation structures, on the proposed vibro compacted loose tip fill as detailed within the aforementioned reports, remains the responsibility of the engineer undertaking the design of the proposed building structures.

APPENDIX 01

Drawings



DEMOLITION KEY:
■ Existing Building to be demolished
— Site Boundary
— Phase 02 Site Boundary



Contractor must verify all dimensions on site before commencing any work or shop drawings. If this drawing exceeds the quantities taken in any way the Architects are to be informed before the work is initiated. Only figured dimensions to be taken from this drawing. Do not scale off this drawing. Drawings based on Ordnance Survey and / or existing record drawings - design and drawing content subject to Site Survey, Structural Survey, Site Investigations, Planning and Statutory Requirements and Approvals. Authorised reproduction from Ordnance Survey Map with permission of the Controller of Her Majesty's Stationery Office. Crown Copyright reserved. Enjoy Design Ltd.

C	Phase 02 hatching omitted	RG	07Sep20	RG
B	updated to retain bldgs 2&3	RG	22Jul20	RG
A	updated to latest proposals	JNS	12Jul18	RG
Rev.	Des.	By	Date	Ch.

APPROVAL	Client:	Trinity One LLP	Job No.:	16,047
	Project:	Trinity One, Huddersfield		
	Title:	Buildings to be Demolished		
	Date:	Apr 18	Scale:	1/1250@A3
	Drawing No:	00 034	Checked By:	RG
			Drawn By:	JNS
			Revision:	C

ENJOY DESIGN

The Old Brewery
 High Court
 Leeds
 LS2 7ES
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GENERAL NOTES

1. GENERAL NOTES: DRAWING WORK TO FIGURED IS 600 NOT SCALE FROM THIS DRAWING TO FIGURED DIMENSIONS ONLY. ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL DIMENSIONS ONLY. THIS IS ALLOWED WITHOUT PRIOR PERMISSION IN WRITING.
2. NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS ALLOWED WITHOUT PRIOR PERMISSION IN WRITING.
3. ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL ARCHITECTS, ENGINEERS AND SPECIALISTS DRAWINGS E.T.Y AND THE SPECIFICATION.
4. THE CONTRACTOR SHALL INCORPORATE ALL THE REQUIREMENTS OF THE PRE-TENDER STAGE HEALTH & SAFETY PLAN.

LEGEND

- PROPOSED RETAINING WALL
- EXISTING RETAINING WALL
- FORMATION LEVEL
- LEVEL
- EXISTING PAVEMENT LEVEL & BOUNDARY
- DENOTES EARTHWORKS PLATFORM FOR PROPOSED BUILDING. LOOSE TIPPED MATERIAL FOR SUBSEQUENT VIBRO COMPACTION.
- AREAS TO BE SUBSEQUENT COVERED WITH SOFT LANDSCAPING.
- AREAS TO BE SUBSEQUENT COVERED WITH HARD SURFACING.



PRELIMINARY ISSUE

P04 LAYOUT AMENDED.	31.10.22	AB	NG
P03 LAYOUT UPDATED.	04.10.22	AB	NG
P02 TREES T27, T28, T30 & T44 TO BE RETAINED.	OCT 20	TB	NG
P01 PRELIMINARY ISSUE.	SEP 20	TB	NG
Rev	Amendment	Date	By

Project **LIDL ENABLING WORKS**

Client **TRINITY ONE LLP**

Title **PROPOSED EARTHWORKS FORMATION LEVELS**

WML Job No.	Drawn	Checked	Date	Scale
7913	TB	NG	SEPT 20	1:200 @ A0

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Drawing No.

Project	Originator	Volume	Level	Type	Role	Number	Rev
7913	- WML	- 00	- XX	- DR	- S	- 1000	P04

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- ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL ARCHITECTS, ENGINEERS AND SPECIALISTS DRAWINGS AND THE SPECIFICATION.
- THE CONTRACTOR SHALL INCORPORATE ALL THE REQUIREMENTS OF THE PRE-TENDER STAGE HEALTH & SAFETY PLAN.

LEGEND	
	PROPOSED RETAINING WALL
	EXISTING RETAINING WALL
	LEVEL FORMATION LEVEL
	EXISTING PAVEMENT LEVEL & BOUNDARY
	DEMOTES EARTHWORKS PLATFORM FOR PROPOSED BUILDING. LOOSE TYPED MATERIAL FOR SUBSEQUENT VIBRO COMPACTION.
	AREAS TO BE SUBSEQUENT COVERED WITH SOFT LANDSCAPING.
	AREAS TO BE SUBSEQUENT COVERED WITH HARD SURFACING.



PRELIMINARY

Rev	Amendment	Date	By	Chkd
P04	LAYOUT UPDATED, COORDINATES AMENDED TO SUIT.	24.10.22	AB	NG
P03	LAYOUT UPDATED.	04.10.22	AB	NG
P02	TREES T27, T28, T30 & T44 TO BE RETAINED.	OCT 20	TB	NG
P01	PRELIMINARY ISSUE	SEPT 20	TB	NG

Project
LIDL ENABLING WORKS

Client
TRINITY ONE LLP

Title
PROPOSED EARTHWORKS SETTING OUT PLAN

WML Job No.	Drawn	Checked	Date	Scale
7913	TB	NG	SEPT 20	1:200 @ A0

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Drawing No.
Project Originator Volume Level Type Role Number Rev
7913 - WML - 00 - XX - DR - S - 1001 P04

APPENDIX 02
Site Photographs

**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

Airborne Fibre Monitoring During On-Site Crushing.



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

**Initial Phase of Remediation
Demolition Proceeding on Site**



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

Crushed Aggregate was Sampled for Chemical Profile (MCERTS) and Physical Compatibility (UKAS).



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

Excavated Soil was Tested prior to Potential Retention and/or Export.



Retained Buildings were Protected During the Demolition Programme.



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

Retained Buildings were Protected During the Remedial Earthworks Programme.



Chimney Demolished and Progressive Vibro-Rolled Infill of Aggregate.



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

Rolling & Monitoring of Site-Won Crushed Aggregate.



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

Asbestos Shards Struck in Made-Ground Excavated for Boundary Concrete Foundation Works



Shards Picked and Double-Bagged at Source and on a Prepared Impervious Geomembrane.



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

Asbestos Shards Found in Made-Ground Excavated for Boundary Concrete Foundations



Segregated Excavations Double-Picked and Sealed in Membrane Pending Analysis Results of Residual Matrix.



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

Asbestos Shards Found in Made-Ground Excavated for Boundary Concrete Foundations

[A] Site Entrance



[B] Site Office and Amenity Buildings



Airborne Fibre Monitoring at Sensitive Points Whilst the Contaminated Made Ground was Excavated and Removed to a Quarantine Zone for Processing. All Measurements were Below 0.01 Fibres per Millilitre.

[C] Processing Point/Quarantine Area



[D] Excavation Point



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

**Stockpile of Asbestos-Picked Made Ground from Boundary Concrete Foundations
The Residual Stockpile Recorded no Asbestos Fibres in the Sampled Matrix**

Scraping Below the Stockpile Footprint to Natural Ground

PPE Worn for Cross-Site Transport



Matrix was Preferentially Buried at a Suitable Depth (Red Line) and Clad with Compacted Natural Soil at the Site.



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

Suspected Asbestos Arisings

**Suspected Asbestos Panelling was Isolated from a Stripped Building.
Assay Showed it to be Free of Asbestos. The material was Exported from Site.**



Historic Tarmac /Plastic Water Pipes were Struck when Excavating to Cap a Mineshaft. The Pipes Looked Identical to (Previously Struck) Asbestos Bearing Pipes a different site. They were Segregated on Exposure and Double-Wrapped in Asbestos Labelled Plastic Sacks but were Assayed to Free of Asbestos. To Prevent Concern at a Disposal Outlet, the Pipes were Exported along with the Shards Segregated from Excavations.



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

Foxhall Ltd Removed Building-Stripped Asbestos plus the Asbestos ns Pipes from Excavation Operations.



Retaining Walls Constructed in Asbestos Removal Areas



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

Historic Drainage Lines were Removed.



Capping the Mineshaft



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

External Natural Stone Aggregate Physically and Chemically Sampled/Tested Prior to Import.



**Samples 1, 2, 3 & 4 from Appleton Quarry met 6F5 Aggregate Standard and GAC Chemical Specifications.
4 x Samples covers 2000 m3 of Imported Aggregate**



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

Sampling Site-Crushed Aggregate For Compliance with Highways Agency 6F2 Grading Standard



6F2 Aggregate Material Crushed by Metropolitan Demolition Ltd

Physical Grading Testing every 500m3 by White Rose Lab & Chemical Analysis by Chemtech Lab every 1000m3



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

White Rose Ltd Sampling Crushed Aggregate for 6F2 Grading Tests and Asbestos Tests



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

White Rose Ltd Sampling Crushed Aggregate for 6F2 Grading Tests and Asbestos Tests



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

White Rose Ltd Sampling Crushed Aggregate for 6F2 Grading Tests and Asbestos Tests



**Stainforth Construction LLP
Retail Development Project – Former Trinity College – Huddersfield – 2023**

White Rose Ltd Sampling Crushed Aggregate for 6F2 Grading Tests and Asbestos Tests



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Retail Development Project – Former Trinity College – Huddersfield – 2023



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Retail Development Project – Former Trinity College – Huddersfield – 2023

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Retail Development Project – Former Trinity College – Huddersfield – 2023

APPENDIX 03

Testing Certificates from Sources

TEST REPORT

Black Rock Environmental Associates Ltd
16 Buckingham Crescent
Clayton
Bradford
West Yorkshire BD14 6EJ



White
Rose
Laboratory
Services
Ltd

Lumley St • Castleford • WF10 5LB
01977 520625 • enquiries@whiteroselabs.co.uk

Report WRL/23/2353-356asbR1
Issue date 06/11/23

Material	Class 6F5		
Site	Marshalls (PWM) Appleton Quarries, Shelley		
Specification	SHW 600 2016	Sample N°	S/23/2353-2356
Source	Ex site	Sampled by	L Armitage
Supplier	Ex site	Date sampled	16/10/23
Sample location	Stockpile Location 1-4	Date received	16/10/23
Sample type	Bulk	Date tested	24/10/23
Order number	-	Date reported	06/11/23

Subcontract Testing

Please find attached results of the following subcontracted testing

Asbestos ID

(Chemtest)

J Church
Managing Director



Final Report

Report No.: 23-34824-1

Initial Date of Issue: 24-Oct-2023

Re-Issue Details:

Client White Rose Labs

Client Address: Lumley Street
Castleford
West Yorkshire
WF10 5LB

Contact(s): Joe Whelan
Julian Church
Results

Project S/23/2353-2356 Black Rock- Marshalls

Quotation No.: **Date Received:** 18-Oct-2023

Order No.: ORD/23/482 **Date Instructed:** 18-Oct-2023

No. of Samples: 4

Turnaround (Wkdays): 5 **Results Due:** 24-Oct-2023

Date Approved: 24-Oct-2023

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

Project: S/23/2353-2356 Black Rock- Marshalls

Client: White Rose Labs	Chemtest Job No.:				23-34824	23-34824	23-34824	23-34824
Quotation No.:	Chemtest Sample ID.:				1718151	1718152	1718153	1718154
	Client Sample ID.:				S/23/2353	S/23/2354	S/23/2355	S/23/2356
	Sample Location:				Stockpile Location 1	Stockpile Location 2	Stockpile Location 3	Stockpile Location 4
	Sample Type:				SOIL	SOIL	SOIL	SOIL
	Date Sampled:				16-Oct-2023	16-Oct-2023	16-Oct-2023	16-Oct-2023
	Asbestos Lab:				NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	Accred.	SOP	Units	LOD				
ACM Type	U	2192		N/A	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected

Test Methods

SOP	Title	Parameters included	Method summary
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

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

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

All Asbestos testing is performed at the indicated laboratory

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

Sample Deviation Codes

A - Date of sampling not supplied

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

C - Sample not received in appropriate containers

D - Broken Container

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

Sample Retention and Disposal

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

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

Charges may apply to extended sample storage

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

customerservices@chemtest.com

TEST REPORT

Black Rock Environmental Associates Ltd
16 Buckingham Crescent
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Report WRL/23/2353psdR1
Issue date 06/11/23

Material	Class 6F5		
Site	Marshalls (PWM) Appleton Quarries, Shelley		
Specification	SHW 600 2016	Sample N°	S/23/2353
Source	Ex Site	Sampled by	L Armitage
Supplier	Ex Site	Date sampled	16/10/23
Sample location	Stockpile Location 1	Date received	16/10/23
Sample type	Bulk	Date tested	31/10/23
Sample method	Shovel	Sample plan	SP/23/886
Weather	Overcast		

BS EN 1097-5 2008 Determination of water content by drying in a ventilated oven

Water content, w 6.2 %

BS EN 933-1 2012 Determination of particle size distribution, sieving method

Analysed by washing and sieving

Sieve Size mm	Amount passing %	Specification SHW 600 2016 Class 6F5
125	100	100
80	89	75 - 99
40	77	50 - 90
20	58	30 - 75
10	41	15 - 60
2	27	0 - 35
0.063	10.6	0 - 12

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT001a/22/01

TEST REPORT

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Report WRL/23/2354psdR1
Issue date 06/11/23

Material	Class 6F5		
Site	Marshalls (PWM) Appleton Quarries, Shelley		
Specification	SHW 600 2016	Sample N°	S/23/2354
Source	Ex Site	Sampled by	L Armitage
Supplier	Ex Site	Date sampled	16/10/23
Sample location	Stockpile Location 2	Date received	16/10/23
Sample type	Bulk	Date tested	31/10/23
Sample method	Shovel	Sample plan	SP/23/886
Weather	Overcast		

BS EN 1097-5 2008 Determination of water content by drying in a ventilated oven

Water content, w 7.3 %

BS EN 933-1 2012 Determination of particle size distribution, sieving method

Analysed by washing and sieving

Sieve Size mm	Amount passing %	Specification SHW 600 2016 Class 6F5
125	100	100
80	95	75 - 99
40	73	50 - 90
20	55	30 - 75
10	42	15 - 60
2	29	0 - 35
0.063	11.3	0 - 12

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT001a/22/01

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Report WRL/23/2355psdR1
Issue date 06/11/23

Material	Class 6F5		
Site	Marshalls (PWM) Appleton Quarries, Shelley		
Specification	SHW 600 2016	Sample N°	S/23/2355
Source	Ex Site	Sampled by	L Armitage
Supplier	Ex Site	Date sampled	16/10/23
Sample location	Stockpile Location 3	Date received	16/10/23
Sample type	Bulk	Date tested	31/10/23
Sample method	Shovel	Sample plan	SP/23/886
Weather	Overcast		

BS EN 1097-5 2008 Determination of water content by drying in a ventilated oven

Water content, w 6.1 %

BS EN 933-1 2012 Determination of particle size distribution, sieving method

Analysed by washing and sieving

Sieve Size mm	Amount passing %	Specification SHW 600 2016 Class 6F5
500	100	
125	96	100
80	89	75 - 99
40	62	50 - 90
20	44	30 - 75
10	32	15 - 60
2	21	0 - 35
0.063	8.8	0 - 12

Deviations From Procedure

Amount passing 500mm assessed visually

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford

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Report WRL/23/2356psdR1
Issue date 06/11/23

Material	Class 6F5		
Site	Marshalls (PWM) Appleton Quarries, Shelley		
Specification	SHW 600 2016	Sample N°	S/23/2356
Source	Ex Site	Sampled by	L Armitage
Supplier	Ex Site	Date sampled	16/10/23
Sample location	Stockpile Location 4	Date received	16/10/23
Sample type	Bulk	Date tested	26/10/23
Sample method	Shovel	Sample plan	SP/23/886
Weather	Overcast		

BS EN 1097-5 2008 Determination of water content by drying in a ventilated oven

Water content, w 6.6 %

BS EN 933-1 2012 Determination of particle size distribution, sieving method

Analysed by washing and sieving

Sieve Size mm	Amount passing %	Specification SHW 600 2016 Class 6F5
125	100	100
80	94	75 - 99
40	65	50 - 90
20	45	30 - 75
10	33	15 - 60
2	23	0 - 35
0.063	9.7	0 - 12

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

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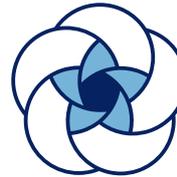
APPENDIX 04

Earthworks Suitability Testing – On Site

Site- Won 6F2 Testing

TEST REPORT

Black Rock Environmental Associates Ltd
16 Buckingham Crescent
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Report WRL/23/0836asb
Issue date 05/05/23

Material	Recycled 6F5		
Site	Former Kirkless College, Huddersfield		
Specification	-	Sample N°	S/23/0836
Source	Ex site	Sampled by	L Armitage
Supplier	Ex site	Date sampled	14/04/23
Sample location	Stockpile	Date received	14/04/23
Sample type	Bulk	Date tested	21/04/23
Order number	-	Date reported	05/05/23

Subcontract Testing

Please find attached results of the following subcontracted testing

Asbestos ID (Chemtest)

J Church
Managing Director



Final Report

Report No.: 23-12778-1
Initial Date of Issue: 21-Apr-2023
Client: White Rose Labs
Client Address: Lumley Street
Castleford
West Yorkshire
WF10 5LB
Contact(s): Joe Whelan
Julian Church
Results
Project: S/22/0836 Black Rock

Quotation No.:		Date Received:	19-Apr-2023
Order No.:	ORD/23/137	Date Instructed:	19-Apr-2023
No. of Samples:	1		
Turnaround (Wkdays):	3	Results Due:	21-Apr-2023
Date Approved:	21-Apr-2023		

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

Project: S/22/0836 Black Rock

Client: White Rose Labs	Chemtest Job No.: 23-12778			
Quotation No.:	Chemtest Sample ID.: 1625604			
	Client Sample ID.: S/23/0836			
	Sample Location: Stockpile			
	Sample Type: SOIL			
	Date Sampled: 14-Apr-2023			
	Asbestos Lab: NEW-ASB			
Determinand	Accred.	SOP	Units	LOD
ACM Type	U	2192		N/A
Asbestos Identification	U	2192		N/A
				-
				No Asbestos Detected

Test Methods

SOP	Title	Parameters included	Method summary
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

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

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

All Asbestos testing is performed at the indicated laboratory

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

Sample Deviation Codes

A - Date of sampling not supplied

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

C - Sample not received in appropriate containers

D - Broken Container

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

Sample Retention and Disposal

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

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

Charges may apply to extended sample storage

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

customerservices@chemtest.com

TEST REPORT

Black Rock Environmental Associates Ltd
16 Buckingham Crescent
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Bradford
BD14 6EJ



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01977 520625 • enquiries@whiteroselabs.co.uk

Report WRL/23/0836psd
Issue date 05/05/23

Material	Recycled 6F5		
Site	Former Kirklees College, Huddersfield		
Specification	SHW 600 2016	Sample N°	S/23/0836
Source	Ex Site	Sampled by	L Armitage
Supplier	Ex Site	Date sampled	14/04/23
Sample location	Stockpile	Date received	14/04/23
Sample type	Bulk	Date tested	27/04/23
Sample method	Shovel	Sample plan	SP/23/269
Weather	Overcast		

BS EN 1097-5 2008 Determination of water content by drying in a ventilated oven

Water content, w 8.1 %

BS EN 933-1 2012 Determination of particle size distribution, sieving method

Analysed by washing and sieving

Sieve Size mm	Amount passing %	Specification SHW 600 2016 Class 6F5
125	100	100
80	67	75 - 99
40	41	50 - 90
20	32	30 - 75
10	23	15 - 60
2	11	0 - 35
0.063	2.3	0 - 12

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT001a/22/01

TEST REPORT

Black Rock Environmental Associates Ltd
16 Buckingham Crescent
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Report WRL/23/1232asb
Issue date 08/06/23

Material	Recycled 6F5	Sample N°	S/23/1232
Site	Trinity Project, Huddersfield	Sampled by	S Jones
Specification	-	Date sampled	23/05/23
Source	Ex site	Date received	23/05/23
Supplier	Ex site	Date tested	26/05/23
Sample location	Sample 1	Date reported	08/06/23
Sample type	Bulk		
Order number	-		

Subcontract Testing

Please find attached results of the following subcontracted testing

Asbestos ID (Chemtest)

J Church
Managing Director



Amended Report

Report No.: 23-17412-3

Initial Date of Issue: 26-May-2023 **Date of Re-Issue:** 26-May-2023

Re-Issue Details: This report has been revised and directly supersedes 23-17412-2 in its entirety

Client: White Rose Labs

Client Address: Lumley Street
Castleford
West Yorkshire
WF10 5LB

Contact(s): Cara Kosma
Joe Whelan
Results
Julian Church

Project: S/23/1232-1237 Black Rock
Environments - Trinity Project

Quotation No.: **Date Received:** 25-May-2023

Order No.: ORD/23/218 **Date Instructed:** 25-May-2023

No. of Samples: 6

Turnaround (Wkdays): 3 **Results Due:** 30-May-2023

Date Approved: 26-May-2023

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

**Project: S/23/1232-1237 Black Rock Environments - Trinity
Project**

Client: White Rose Labs	Chemtest Job No.: 23-17412				
Quotation No.:	Chemtest Sample ID.: 1645211				
	Client Sample ID.: S/23/1232				
	Sample Location: Sample 2				
	Sample Type: SOIL				
	Date Sampled: 23-May-2023				
	Asbestos Lab: NEW-ASB				
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected

Test Methods

SOP	Title	Parameters included	Method summary
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

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

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

All Asbestos testing is performed at the indicated laboratory

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

Sample Deviation Codes

A - Date of sampling not supplied

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

C - Sample not received in appropriate containers

D - Broken Container

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

Sample Retention and Disposal

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

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

Charges may apply to extended sample storage

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

customerservices@chemtest.com

TEST REPORT

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01977 520625 • enquiries@whiteroselabs.co.uk

Report WRL/23/1232psd
Issue date 09/06/23

Material	Recycled 6F5	Sample N°	S/23/1232
Site	Trinity Project Huddersfield	Sampled by	S Jones
Specification	SHW 600 2016	Date sampled	23/05/23
Source	Ex Site	Date received	23/05/23
Supplier	Ex Site	Date tested	07/06/23
Sample location	Sample 1	Sample plan	SP/23/389
Sample type	Bulk		
Sample method	Shovel		
Weather	Sunny		

BS EN 1097-5 2008 Determination of water content by drying in a ventilated oven

Water content, w 5.2 %

BS EN 933-1 2012 Determination of particle size distribution, sieving method

Analysed by washing and sieving

Sieve Size mm	Amount passing %	Specification SHW 600 2016 Class 6F5
125	92	100
80	91	75 - 99
40	61	50 - 90
20	47	30 - 75
10	33	15 - 60
2	17	0 - 35
0.063	2.5	0 - 12

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT001a/22/01

TEST REPORT

Black Rock Environmental Associates Ltd
16 Buckingham Crescent
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Report WRL/23/1233asb
Issue date 08/06/23

Material	Recycled 6F5	Sample N°	S/23/1233
Site	Trinity Project, Huddersfield	Sampled by	S Jones
Specification	-	Date sampled	23/05/23
Source	Ex site	Date received	23/05/23
Supplier	Ex site	Date tested	26/05/23
Sample location	Sample 3	Date reported	08/06/23
Sample type	Bulk		
Order number	-		

Subcontract Testing

Please find attached results of the following subcontracted testing

Asbestos ID (Chemtest)

J Church
Managing Director



Amended Report

Report No.: 23-17412-3

Initial Date of Issue: 26-May-2023 **Date of Re-Issue:** 26-May-2023

Re-Issue Details: This report has been revised and directly supersedes 23-17412-2 in its entirety

Client: White Rose Labs

Client Address: Lumley Street
Castleford
West Yorkshire
WF10 5LB

Contact(s): Cara Kosma
Joe Whelan
Results
Julian Church

Project: S/23/1232-1237 Black Rock
Environments - Trinity Project

Quotation No.: **Date Received:** 25-May-2023

Order No.: ORD/23/218 **Date Instructed:** 25-May-2023

No. of Samples: 6

Turnaround (Wkdays): 3 **Results Due:** 30-May-2023

Date Approved: 26-May-2023

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

**Project: S/23/1232-1237 Black Rock Environments - Trinity
Project**

Client: White Rose Labs	Chemtest Job No.: 23-17412				
Quotation No.:	Chemtest Sample ID.: 1645212				
	Client Sample ID.: S/23/1233				
	Sample Location: Sample 3				
	Sample Type: SOIL				
	Date Sampled: 23-May-2023				
	Asbestos Lab: NEW-ASB				
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected

Test Methods

SOP	Title	Parameters included	Method summary
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
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I/S	Insufficient Sample
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Sample Deviation Codes

A - Date of sampling not supplied

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

C - Sample not received in appropriate containers

D - Broken Container

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

Sample Retention and Disposal

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

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TEST REPORT

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Report WRL/23/1233psd
Issue date 08/06/23

Material	Recycled 6F5	Sample N°	S/23/1233
Site	Trinity Project Huddersfield	Sampled by	S Jones
Specification	SHW 600 2016	Date sampled	23/05/23
Source	Ex Site	Date received	23/05/23
Supplier	Ex Site	Date tested	07/06/23
Sample location	Sample 3	Sample plan	SP/23/389
Sample type	Bulk		
Sample method	Shovel		
Weather	Sunny		

BS EN 1097-5 2008 Determination of water content by drying in a ventilated oven

Water content, w 3.6 %

BS EN 933-1 2012 Determination of particle size distribution, sieving method

Analysed by washing and sieving

Sieve Size mm	Amount passing %	Specification SHW 600 2016 Class 6F5
125	100	100
80	94	75 - 99
40	69	50 - 90
20	48	30 - 75
10	32	15 - 60
2	17	0 - 35
0.063	2.7	0 - 12

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT001a/22/01

TEST REPORT

Black Rock Environmental Associates Ltd
16 Buckingham Crescent
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Report WRL/23/1234asb
Issue date 08/06/23

Material	Recycled 6F5	Sample N°	S/23/1234
Site	Trinity Project, Huddersfield	Sampled by	S Jones
Specification	-	Date sampled	23/05/23
Source	Ex site	Date received	23/05/23
Supplier	Ex site	Date tested	26/05/23
Sample location	Sample 4	Date reported	08/06/23
Sample type	Bulk		
Order number	-		

Subcontract Testing

Please find attached results of the following subcontracted testing

Asbestos ID (Chemtest)

J Church
Managing Director



Amended Report

Report No.: 23-17412-3

Initial Date of Issue: 26-May-2023 **Date of Re-Issue:** 26-May-2023

Re-Issue Details: This report has been revised and directly supersedes 23-17412-2 in its entirety

Client: White Rose Labs

Client Address: Lumley Street
Castleford
West Yorkshire
WF10 5LB

Contact(s): Cara Kosma
Joe Whelan
Results
Julian Church

Project: S/23/1232-1237 Black Rock
Environments - Trinity Project

Quotation No.: **Date Received:** 25-May-2023

Order No.: ORD/23/218 **Date Instructed:** 25-May-2023

No. of Samples: 6

Turnaround (Wkdays): 3 **Results Due:** 30-May-2023

Date Approved: 26-May-2023

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

**Project: S/23/1232-1237 Black Rock Environments - Trinity
Project**

Client: White Rose Labs	Chemtest Job No.: 23-17412				
Quotation No.:	Chemtest Sample ID.: 1645213				
	Client Sample ID.: S/23/1234				
	Sample Location: Sample 4				
	Sample Type: SOIL				
	Date Sampled: 23-May-2023				
	Asbestos Lab: NEW-ASB				
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected

Test Methods

SOP	Title	Parameters included	Method summary
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

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

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

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Sample Deviation Codes

A - Date of sampling not supplied

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

C - Sample not received in appropriate containers

D - Broken Container

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

Sample Retention and Disposal

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

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

Charges may apply to extended sample storage

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

customerservices@chemtest.com

TEST REPORT

Black Rock Environmental Associates Ltd
16 Buckingham Crescent
Clayton
Bradford
BD14 6EJ



White
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Lumley St • Castleford • WF10 5LB
01977 520625 • enquiries@whiteroselabs.co.uk

Report WRL/23/1234psd
Issue date 08/06/23

Material	Recycled 6F5	Sample N°	S/23/1234
Site	Trinity Project Huddersfield	Sampled by	S Jones
Specification	SHW 600 2016	Date sampled	23/05/23
Source	Ex Site	Date received	23/05/23
Supplier	Ex Site	Date tested	05/06/23
Sample location	Sample 4	Sample plan	SP/23/389
Sample type	Bulk		
Sample method	Shovel		
Weather	Sunny		

BS EN 1097-5 2008 Determination of water content by drying in a ventilated oven

Water content, w 6.9 %

BS EN 933-1 2012 Determination of particle size distribution, sieving method

Analysed by washing and sieving

Sieve Size mm	Amount passing %	Specification SHW 600 2016 Class 6F5
125	100	100
80	82	75 - 99
40	65	50 - 90
20	54	30 - 75
10	42	15 - 60
2	22	0 - 35
0.063	2.7	0 - 12

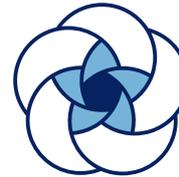
All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT001a/22/01

TEST REPORT

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16 Buckingham Crescent
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Report WRL/23/1235asb
Issue date 08/06/23

Material	Recycled 6F5	Sample N°	S/23/1235
Site	Trinity Project, Huddersfield	Sampled by	S Jones
Specification	-	Date sampled	23/05/23
Source	Ex site	Date received	23/05/23
Supplier	Ex site	Date tested	26/05/23
Sample location	Sample 5	Date reported	08/06/23
Sample type	Bulk		
Order number	-		

Subcontract Testing

Please find attached results of the following subcontracted testing

Asbestos ID (Chemtest)

J Church
Managing Director



Amended Report

Report No.: 23-17412-3

Initial Date of Issue: 26-May-2023 **Date of Re-Issue:** 26-May-2023

Re-Issue Details: This report has been revised and directly supersedes 23-17412-2 in its entirety

Client: White Rose Labs

Client Address: Lumley Street
Castleford
West Yorkshire
WF10 5LB

Contact(s): Cara Kosma
Joe Whelan
Results
Julian Church

Project: S/23/1232-1237 Black Rock
Environments - Trinity Project

Quotation No.: **Date Received:** 25-May-2023

Order No.: ORD/23/218 **Date Instructed:** 25-May-2023

No. of Samples: 6

Turnaround (Wkdays): 3 **Results Due:** 30-May-2023

Date Approved: 26-May-2023

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

**Project: S/23/1232-1237 Black Rock Environments - Trinity
Project**

Client: White Rose Labs	Chemtest Job No.: 23-17412				
Quotation No.:	Chemtest Sample ID.: 1645214				
	Client Sample ID.: S/23/1235				
	Sample Location: Sample 5				
	Sample Type: SOIL				
	Date Sampled: 23-May-2023				
	Asbestos Lab: NEW-ASB				
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected

Test Methods

SOP	Title	Parameters included	Method summary
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry

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Report WRL/23/1235psd
Issue date 08/06/23

Material	Recycled 6F5	Sample N°	S/23/1235
Site	Trinity Project Huddersfield	Sampled by	S Jones
Specification	SHW 600 2016	Date sampled	23/05/23
Source	Ex Site	Date received	23/05/23
Supplier	Ex Site	Date tested	05/06/23
Sample location	Sample 5	Sample plan	SP/23/389
Sample type	Bulk		
Sample method	Shovel		
Weather	Sunny		

BS EN 1097-5 2008 Determination of water content by drying in a ventilated oven

Water content, w 6.3 %

BS EN 933-1 2012 Determination of particle size distribution, sieving method

Analysed by washing and sieving

Sieve Size mm	Amount passing %	Specification SHW 600 2016 Class 6F5
125	100	100
80	86	75 - 99
40	68	50 - 90
20	60	30 - 75
10	48	15 - 60
2	32	0 - 35
0.063	4.9	0 - 12

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
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J Church
Managing Director

RT001a/22/01

TEST REPORT

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Report WRL/23/1236asb
Issue date 08/06/23

Material	Recycled 6F5	Sample N°	S/23/1236
Site	Trinity Project, Huddersfield	Sampled by	S Jones
Specification	-	Date sampled	23/05/23
Source	Ex site	Date received	23/05/23
Supplier	Ex site	Date tested	26/05/23
Sample location	Sample 6	Date reported	08/06/23
Sample type	Bulk		
Order number	-		

Subcontract Testing

Please find attached results of the following subcontracted testing

Asbestos ID (Chemtest)

J Church
Managing Director



Amended Report

Report No.: 23-17412-3

Initial Date of Issue: 26-May-2023 **Date of Re-Issue:** 26-May-2023

Re-Issue Details: This report has been revised and directly supersedes 23-17412-2 in its entirety

Client: White Rose Labs

Client Address: Lumley Street
Castleford
West Yorkshire
WF10 5LB

Contact(s): Cara Kosma
Joe Whelan
Results
Julian Church

Project: S/23/1232-1237 Black Rock
Environments - Trinity Project

Quotation No.: **Date Received:** 25-May-2023

Order No.: ORD/23/218 **Date Instructed:** 25-May-2023

No. of Samples: 6

Turnaround (Wkdays): 3 **Results Due:** 30-May-2023

Date Approved: 26-May-2023

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

**Project: S/23/1232-1237 Black Rock Environments - Trinity
Project**

Client: White Rose Labs	Chemtest Job No.: 23-17412				
Quotation No.:	Chemtest Sample ID.: 1645215				
	Client Sample ID.: S/23/1236				
	Sample Location: Sample 6				
	Sample Type: SOIL				
	Date Sampled: 23-May-2023				
	Asbestos Lab: NEW-ASB				
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected

Test Methods

SOP	Title	Parameters included	Method summary
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry

Report Information

Key

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Sample Retention and Disposal

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TEST REPORT

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Report WRL/23/1236psd
Issue date 08/06/23

Material	Recycled 6F5	Sample N°	S/23/1236
Site	Trinity Project Huddersfield	Sampled by	S Jones
Specification	SHW 600 2016	Date sampled	23/05/23
Source	Ex Site	Date received	23/05/23
Supplier	Ex Site	Date tested	05/06/23
Sample location	Sample 6	Sample plan	SP/23/389
Sample type	Bulk		
Sample method	Shovel		
Weather	Sunny		

BS EN 1097-5 2008 Determination of water content by drying in a ventilated oven

Water content, w 5.4 %

BS EN 933-1 2012 Determination of particle size distribution, sieving method

Analysed by washing and sieving

Sieve Size mm	Amount passing %	Specification SHW 600 2016 Class 6F5
125	100	100
80	91	75 - 99
40	69	50 - 90
20	50	30 - 75
10	35	15 - 60
2	17	0 - 35
0.063	3.1	0 - 12

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT001a/22/01

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Report WRL/23/1237asb
Issue date 08/06/23

Material	Recycled 6F5	Sample N°	S/23/1237
Site	Trinity Project, Huddersfield	Sampled by	S Jones
Specification	-	Date sampled	23/05/23
Source	Ex site	Date received	23/05/23
Supplier	Ex site	Date tested	26/05/23
Sample location	Sample 7	Date reported	08/06/23
Sample type	Bulk		
Order number	-		

Subcontract Testing

Please find attached results of the following subcontracted testing

Asbestos ID (Chemtest)

J Church
Managing Director



Amended Report

Report No.: 23-17412-3

Initial Date of Issue: 26-May-2023 **Date of Re-Issue:** 26-May-2023

Re-Issue Details: This report has been revised and directly supersedes 23-17412-2 in its entirety

Client: White Rose Labs

Client Address: Lumley Street
Castleford
West Yorkshire
WF10 5LB

Contact(s): Cara Kosma
Joe Whelan
Results
Julian Church

Project: S/23/1232-1237 Black Rock
Environments - Trinity Project

Quotation No.: **Date Received:** 25-May-2023

Order No.: ORD/23/218 **Date Instructed:** 25-May-2023

No. of Samples: 6

Turnaround (Wkdays): 3 **Results Due:** 30-May-2023

Date Approved: 26-May-2023

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

**Project: S/23/1232-1237 Black Rock Environments - Trinity
Project**

Client: White Rose Labs	Chemtest Job No.: 23-17412			
Quotation No.:	Chemtest Sample ID.: 1645216			
	Client Sample ID.: S/23/1237			
	Sample Location: Sample 7			
	Sample Type: SOIL			
	Date Sampled: 23-May-2023			
	Asbestos Lab: NEW-ASB			
Determinand	Accred.	SOP	Units	LOD
ACM Type	U	2192		N/A
Asbestos Identification	U	2192		N/A
				No Asbestos Detected

Test Methods

SOP	Title	Parameters included	Method summary
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry

Report Information

Key

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Report WRL/23/1237psd
Issue date 08/06/23

Material	Recycled 6F5	Sample N°	S/23/1237
Site	Trinity Project Huddersfield	Sampled by	S Jones
Specification	SHW 600 2016	Date sampled	23/05/23
Source	Ex Site	Date received	23/05/23
Supplier	Ex Site	Date tested	07/06/23
Sample location	Sample 7	Sample plan	SP/23/389
Sample type	Bulk		
Sample method	Shovel		
Weather	Sunny		

BS EN 1097-5 2008 Determination of water content by drying in a ventilated oven

Water content, w 6.8 %

BS EN 933-1 2012 Determination of particle size distribution, sieving method

Analysed by washing and sieving

Sieve Size mm	Amount passing %	Specification SHW 600 2016 Class 6F5
125	100	100
80	83	75 - 99
40	63	50 - 90
20	54	30 - 75
10	41	15 - 60
2	23	0 - 35
0.063	2.8	0 - 12

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT001a/22/01

TEST REPORT

Black Rock Environmental Associates Ltd
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Report WRL/23/2098psd
Issue date 05/10/23

Material	Recycled 6F2	Sample N°	S/23/2098
Site	Trinity College, Huddersfield	Sampled by	A Lindley
Specification	SHW 600 2016	Date sampled	13/09/23
Source	Ex Site	Date received	13/09/23
Supplier	Ex Site	Date tested	04/10/23
Sample location	Sample 8	Date reported	04/10/23
Sample type	Bulk		
Order number	-		

BS1377-2 1990 Clause 3.2.3.3 - Water content

Water content 9.6 %

BS1377-2 1990 Clause 9.2 Particle size distribution - wet sieving method

Sieve Size	Amount passing %	Specification
		SHW 600 2016
		Class 6F2
125 mm	100	100
90 mm	93	80 - 100
75 mm	84	65 - 100
63 mm	75	
37.5 mm	59	45 - 100
20 mm	45	
10 mm	39	15 - 60
6.3 mm	34	
5 mm	30	10 - 45
2 mm	22	
600 µm	15	0 - 25
212 µm	10	
63 µm	8	0 - 12

*denotes information supplied by client

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RT004a/22/01

TEST REPORT

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Report WRL/23/2098asb
Issue date 05/10/23

Material	Recycled 6F2	Sample N°	See below
Site	Trinity College, Huddersfield	Sampled by	A Lindley
Specification	-	Date sampled	13/09/23
Source	Ex site	Date received	13/09/23
Supplier	Ex site	Date tested	27/09/23
Sample location	See below	Date reported	05/10/23
Sample type	Bulk		
Order number	-		

Subcontract Testing

Please find attached results of the following subcontracted testing

Asbestos ID (Chemtest)

Sample N°	Location
S/23/2098	Sample 8
S/23/2099	Sample 9
S/23/2100	Sample 10
S/23/2101	Sample 11
S/23/2102	Sample 12
S/23/2103	Sample 13
S/23/2104	Sample 14
S/23/2105	Sample 15
S/23/2106	Sample 16

J Church
Managing Director



Final Report

Report No.: 23-31677-1

Initial Date of Issue: 27-Sep-2023

Re-Issue Details:

Client White Rose Labs

Client Address: Lumley Street
Castleford
West Yorkshire
WF10 5LB

Contact(s): Joe Whelan
Julian Church
Results

Project S/23/2098-2106 Black Rock

Quotation No.: **Date Received:** 21-Sep-2023

Order No.: ORD/23/411 **Date Instructed:** 21-Sep-2023

No. of Samples: 9

Turnaround (Wkdays): 5 **Results Due:** 27-Sep-2023

Date Approved: 27-Sep-2023

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

Project: S/23/2098-2106 Black Rock

Client: White Rose Labs		Chemtest Job No.:				23-31677	23-31677	23-31677	23-31677	23-31677	23-31677	23-31677	23-31677	23-31677
Quotation No.:		Chemtest Sample ID.:				1705749	1705750	1705751	1705752	1705753	1705754	1705755	1705756	1705757
		Client Sample ID.:				S/23/2098	S/23/2099	S/23/2100	S/23/2101	S/23/2102	S/23/2103	S/23/2104	S/23/2105	S/23/2106
		Sample Location:				Sample 8	Sample 9	Sample 10	Sample 11	Sample 12	Sample 13	Sample 14	Sample 15	Sample 16
		Sample Type:				SOIL								
		Date Sampled:				13-Sep-2023								
		Asbestos Lab:				NEW-ASB								
Determinand	Accred.	SOP	Units	LOD										
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected									

Test Methods

SOP	Title	Parameters included	Method summary
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry

Report Information

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customerservices@chemtest.com

Imported 6F5 Testing

ANALYTICAL TEST REPORT

Contract no: 121065(1)

Contract name: Stainforth Construction

Client reference: Trinity College, Huddersfield

Clients name: Black Rock Environmental Associates

Clients address: 16 Buckingham Crescent
Clayton, Bradford
West Yorkshire
BD14 6EJ

Samples received: 29 March 2023

Analysis started: 29 March 2023

Analysis completed: 27 April 2023

Report issued: 27 April 2023

This is a supplementary report to report number 121065 issued 06 April 2023.

Key

- U UKAS accredited test
- M MCERTS & UKAS accredited test
- \$ Test carried out by an approved subcontractor
- I/S Insufficient sample to carry out test
- N/S Sample not suitable for testing
- NAD No Asbestos Detected

Approved by:



Samantha Rogerson
Reporting Manager

Chemtech Environmental Limited

SAMPLE INFORMATION

MCERTS (Soils):

Soil descriptions are only intended to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions. MCERTS accreditation applies for sand, clay and loam/topsoil, or combinations of these whether these are derived from naturally occurring soils or from made ground, as long as these materials constitute the major part of the sample. Other materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Lab ref	Sample id	Depth (m)	Sample description	Material removed	% Removed	% Moisture
121065-1	6F5/6F2 Crush Stockpiles 1	-	Sand with Gravel	-	-	2.6
121065-2	6F5/6F2 Crush Stockpiles 2	-	Sand with Gravel	-	-	5.9
121065-3	6F5/6F2 Crush Stockpiles 3	-	Sand with Gravel	-	-	8.3

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SOILS

Lab number			121065-1	121065-2	121065-3
Sample id			6F5/6F2 Crush Stockpiles 1	6F5/6F2 Crush Stockpiles 2	6F5/6F2 Crush Stockpiles 3
Depth (m)			-	-	-
Date sampled			-	-	-
Test	Method	Units			
Chromium (III)	CE208	mg/kg CrIII	30	25	22
Chromium (VI)	CE146	mg/kg CrVI	<1	<1	<1
Arsenic	\$ ^M	mg/kg	5.3	8.7	12
Cadmium	\$ ^M	mg/kg	0.3	0.3	0.3
Chromium	\$ ^M	mg/kg	30	25	22
Copper	\$ ^M	mg/kg	13	18	19
Lead	\$ ^M	mg/kg	14	18	20
Mercury	\$ ^M	mg/kg	< 0.1	< 0.1	< 0.1
Nickel	\$ ^M	mg/kg	16	16	16
Selenium	\$ ^M	mg/kg	< 1.0	< 1.0	< 1.0
Zinc	\$ ^M	mg/kg	63	67	72
pH	CE004 ^M	units	12.1	10.5	10.5
Cyanide (free)	CE077	mg/kg CN	<1	<1	<1
Phenols (total)	CE078	mg/kg PhOH	<0.5	<0.5	<0.5
PAH					
Naphthalene	CE087 ^M	mg/kg	0.02	<0.02	0.04
Acenaphthylene	CE087 ^M	mg/kg	<0.02	<0.02	<0.02
Acenaphthene	CE087 ^M	mg/kg	0.02	<0.02	0.03
Fluorene	CE087 ^U	mg/kg	0.02	<0.02	0.02
Phenanthrene	CE087 ^M	mg/kg	0.23	0.20	0.26
Anthracene	CE087 ^U	mg/kg	0.07	0.06	0.07
Fluoranthene	CE087 ^M	mg/kg	0.49	0.34	0.47
Pyrene	CE087 ^M	mg/kg	0.43	0.30	0.43
Benzo(a)anthracene	CE087 ^U	mg/kg	0.18	0.14	0.18
Chrysene	CE087 ^M	mg/kg	0.22	0.16	0.21
Benzo(b)fluoranthene	CE087 ^M	mg/kg	0.26	0.18	0.24
Benzo(k)fluoranthene	CE087 ^M	mg/kg	0.08	0.06	0.08
Benzo(a)pyrene	CE087 ^U	mg/kg	0.17	0.12	0.15
Indeno(123cd)pyrene	CE087 ^M	mg/kg	0.15	0.09	0.14
Dibenz(ah)anthracene	CE087 ^M	mg/kg	0.02	<0.02	0.02
Benzo(ghi)perylene	CE087 ^M	mg/kg	0.10	0.06	0.09
PAH (total of USEPA 16)	CE087	mg/kg	2.47	1.70	2.44
BTEX & TPH					
MTBE	CE192 ^U	mg/kg	0.08	0.04	0.11
Benzene	CE192 ^U	mg/kg	<0.01	<0.01	<0.01
Toluene	CE192 ^U	mg/kg	<0.01	<0.01	<0.01
Ethylbenzene	CE192 ^U	mg/kg	<0.01	<0.01	<0.01
m & p-Xylene	CE192 ^U	mg/kg	<0.02	<0.02	<0.02

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SOILS

Lab number			121065-1	121065-2	121065-3
Sample id			6F5/6F2 Crush Stockpiles 1	6F5/6F2 Crush Stockpiles 2	6F5/6F2 Crush Stockpiles 3
Depth (m)			-	-	-
Date sampled			-	-	-
Test	Method	Units			
o-Xylene	CE192 ^U	mg/kg	<0.01	<0.01	<0.01
VPH Aromatic (>EC5-EC7)	CE067	mg/kg	<0.01	<0.01	<0.01
VPH Aromatic (>EC7-EC8)	CE067	mg/kg	<0.01	<0.01	<0.01
VPH Aromatic (>EC8-EC10)	CE067	mg/kg	<0.01	<0.01	<0.01
EPH Aromatic (>EC10-EC12)	CE250	mg/kg	<10	<10	<10
EPH Aromatic (>EC12-EC16)	CE250	mg/kg	<10	<10	<10
EPH Aromatic (>EC16-EC21)	CE250	mg/kg	<1	<1	<1
EPH Aromatic (>EC21-EC35)	CE250	mg/kg	15	<1	23
EPH Aromatic (>EC35-EC44)	CE250	mg/kg	<1	<1	14
VPH Aliphatic (>C5-C6)	CE067	mg/kg	0.22	0.16	0.24
VPH Aliphatic (>C6-C8)	CE067	mg/kg	<0.1	<0.1	<0.1
VPH Aliphatic (>C8-C10)	CE067	mg/kg	<0.1	<0.1	<0.1
EPH Aliphatic (>C10-C12)	CE250	mg/kg	<6	<6	<6
EPH Aliphatic (>C12-C16)	CE250	mg/kg	<6	<6	<6
EPH Aliphatic (>C16-C35)	CE250	mg/kg	146	86	201
EPH Aliphatic (>C35-C44)	CE250	mg/kg	22	12	26
Subcontracted analysis					
Asbestos (qualitative)	\$	-	NAD	NAD	NAD

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METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE208	Chromium (III)	Calculation: Cr (total) - Cr (VI)	Dry		1	mg/kg CrIII
CE146	Chromium (VI)	Acid extraction, Colorimetry	Dry		1	mg/kg CrVI
\$ ^M	Arsenic	Aqua regia digest, ICP-MS	Dry	M	0.5	mg/kg
\$ ^M	Cadmium	Aqua regia digest, ICP-MS	Dry	M	0.2	mg/kg
\$ ^M	Chromium	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg
\$ ^M	Copper	Aqua regia digest, ICP-MS	Dry	M	4	mg/kg
\$ ^M	Lead	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg
\$ ^M	Mercury	Aqua regia digest, ICP-MS	Dry	M	0.1	mg/kg
\$ ^M	Nickel	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg
\$ ^M	Selenium	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg
\$ ^M	Zinc	Aqua regia digest, ICP-MS	Dry	M	4.5	mg/kg
CE004	pH	Based on BS 1377, pH Meter	As received	M	-	units
CE077	Cyanide (free)	Extraction, Continuous Flow Colorimetry	As received		1	mg/kg CN
CE078	Phenols (total)	Extraction, Continuous Flow Colorimetry	As received		0.5	mg/kg PhOH
CE087	Naphthalene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Acenaphthylene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Acenaphthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Fluorene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Phenanthrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Anthracene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Fluoranthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Pyrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(a)anthracene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Chrysene	Solvent extraction, GC-MS	As received	M	0.03	mg/kg
CE087	Benzo(b)fluoranthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(k)fluoranthene	Solvent extraction, GC-MS	As received	M	0.03	mg/kg
CE087	Benzo(a)pyrene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Indeno(123cd)pyrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Dibenz(ah)anthracene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(ghi)perylene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	PAH (total of USEPA 16)	Solvent extraction, GC-MS	As received		0.34	mg/kg
CE192	MTBE	Headspace GC-FID	As received	U	0.02	mg/kg
CE192	Benzene	Headspace GC-FID	As received	U	0.01	mg/kg
CE192	Toluene	Headspace GC-FID	As received	U	0.01	mg/kg
CE192	Ethylbenzene	Headspace GC-FID	As received	U	0.01	mg/kg
CE192	m & p-Xylene	Headspace GC-FID	As received	U	0.02	mg/kg
CE192	o-Xylene	Headspace GC-FID	As received	U	0.01	mg/kg
CE067	VPH Aromatic (>EC5-EC7)	Headspace GC-FID	As received		0.01	mg/kg
CE067	VPH Aromatic (>EC7-EC8)	Headspace GC-FID	As received		0.01	mg/kg
CE067	VPH Aromatic (>EC8-EC10)	Headspace GC-FID	As received		0.01	mg/kg
CE250	EPH Aromatic (>EC10-EC12)	Solvent extraction, GCxGC-FID	As received		1	mg/kg

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METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE250	EPH Aromatic (>EC12-EC16)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC16-EC21)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC21-EC35)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC35-EC44)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE067	VPH Aliphatic (>C5-C6)	Headspace GC-FID	As received		0.1	mg/kg
CE067	VPH Aliphatic (>C6-C8)	Headspace GC-FID	As received		0.1	mg/kg
CE067	VPH Aliphatic (>C8-C10)	Headspace GC-FID	As received		0.1	mg/kg
CE250	EPH Aliphatic (>C10-C12)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C12-C16)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C16-C35)	Solvent extraction, GCxGC-FID	As received		15	mg/kg
CE250	EPH Aliphatic (>C35-C44)	Solvent extraction, GCxGC-FID	As received		10	mg/kg
\$	Asbestos (qualitative)	HSG 248, Microscopy	Dry	U	-	-

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DEVIATING SAMPLE INFORMATION

Comments

Sample deviation is determined in accordance with the UKAS note "Guidance on Deviating Samples" and based on reference standards and laboratory trials.

For samples identified as deviating, test result(s) may be compromised and may not be representative of the sample at the time of sampling.

Chemtech Environmental Ltd cannot be held responsible for the integrity of sample(s) received if Chemtech Environmental Ltd did not undertake the sampling. Such samples may be deviating.

Key

N	No (not deviating sample)
Y	Yes (deviating sample)
NSD	Sampling date not provided
NST	Sampling time not provided (waters only)
EHT	Sample exceeded holding time(s)
IC	Sample not received in appropriate containers
HP	Headspace present in sample container
NCF	Sample not chemically fixed (where appropriate)
OR	Other (specify)

Lab ref	Sample id	Depth (m)	Deviating	Tests (Reason for deviation)
121065-1	6F5/6F2 Crush Stockpiles 1	-	Y	pH (EHT), Cyanide (EHT), Phenols (IC/EHT), PAH (IC/EHT), TPH (IC/EHT), BTEX
121065-2	6F5/6F2 Crush Stockpiles 2	-	Y	pH (EHT), Cyanide (EHT), Phenols (IC/EHT), PAH (IC/EHT), TPH (IC/EHT), BTEX
121065-3	6F5/6F2 Crush Stockpiles 3	-	Y	pH (EHT), Cyanide (EHT), Phenols (IC/EHT), PAH (IC/EHT), TPH (IC/EHT), BTEX

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ADDITIONAL INFORMATION

Notes

Opinions and interpretations expressed herein are outside the UKAS accreditation scope.

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

This report shall not be reproduced except in full, without prior written approval.

Samples will be disposed of 4 weeks from initial receipt unless otherwise instructed.

For soils and solids, all results are reported on a dry basis. Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones, where applicable.

ANALYTICAL TEST REPORT

Contract no: 123262(2)

Contract name: Stainforth Construction, Trinity, Huddersfield

Client reference: -

Clients name: Black Rock Environmental Associates

Clients address: 16 Buckingham Crescent
Clayton, Bradford
West Yorkshire
BD14 6EJ

Samples received: 31 May 2023

Analysis started: 31 May 2023

Analysis completed: 23 June 2023

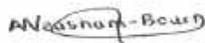
Report issued: 12 February 2024

This is a supplementary report to report number 123262(1) issued 23 June 2023.

Key

- U UKAS accredited test
- M MCERTS & UKAS accredited test
- \$ Test carried out by an approved subcontractor
- I/S Insufficient sample to carry out test
- N/S Sample not suitable for testing
- NAD No Asbestos Detected

Approved by:



Abbie Neasham-Bourn
Senior Reporting Administrator

Chemtech Environmental Limited

SOLIDS

Lab number			123262-1	123262-2	123262-3
Sample id			6F2/4	6F2/5	6F2/6
Depth (m)			-	-	-
Date sampled			-	-	-
Test	Method	Units			
Chromium (III)	CE208	mg/kg CrIII	25	25	21
Chromium (VI)	CE146	mg/kg CrVI	<1	<1	<1
Arsenic	\$	mg/kg	3.2	4.0	3.2
Cadmium	\$	mg/kg	0.1	0.2	< 0.10
Chromium	\$	mg/kg	25	25	21
Copper	\$	mg/kg	8.6	9.4	6.8
Lead	\$	mg/kg	22	17	8.6
Mercury	\$	mg/kg	< 0.05	< 0.05	< 0.05
Nickel	\$	mg/kg	12	13	9.0
Selenium	\$	mg/kg	< 0.25	0.3	< 0.25
Zinc	\$	mg/kg	31	44	27
pH	CE004	units	11.1	11.0	10.3
Cyanide (free)	CE077	mg/kg CN	<1	<1	<1
Phenols (total)	CE078	mg/kg PhOH	<0.5	<0.5	<0.5
PAH					
Naphthalene	CE087	mg/kg	<0.02	<0.02	<0.02
Acenaphthylene	CE087	mg/kg	<0.02	<0.02	<0.02
Acenaphthene	CE087	mg/kg	<0.02	<0.02	<0.02
Fluorene	CE087	mg/kg	<0.02	<0.02	<0.02
Phenanthrene	CE087	mg/kg	0.05	0.19	0.15
Anthracene	CE087	mg/kg	<0.02	0.04	0.03
Fluoranthene	CE087	mg/kg	0.06	0.24	0.18
Pyrene	CE087	mg/kg	0.05	0.21	0.15
Benzo(a)anthracene	CE087	mg/kg	0.02	0.10	0.08
Chrysene	CE087	mg/kg	0.03	0.13	0.10
Benzo(b)fluoranthene	CE087	mg/kg	0.03	0.11	0.08
Benzo(k)fluoranthene	CE087	mg/kg	<0.03	0.04	0.03
Benzo(a)pyrene	CE087	mg/kg	<0.02	0.11	0.07
Indeno(123cd)pyrene	CE087	mg/kg	<0.02	0.06	0.04
Dibenz(ah)anthracene	CE087	mg/kg	<0.02	<0.02	<0.02
Benzo(ghi)perylene	CE087	mg/kg	<0.02	0.07	0.05
PAH (total of USEPA 16)	CE087	mg/kg	<0.34	1.28	0.96
BTEX & TPH					
MTBE	CE192	mg/kg	<0.02	0.12	<0.02
Benzene	CE192	mg/kg	<0.01	<0.01	<0.01
Toluene	CE192	mg/kg	<0.01	<0.01	<0.01
Ethylbenzene	CE192	mg/kg	<0.01	<0.01	<0.01
m & p-Xylene	CE192	mg/kg	<0.02	<0.02	<0.02
o-Xylene	CE192	mg/kg	<0.01	<0.01	<0.01
VPH Aromatic (>EC5-EC7)	CE067	mg/kg	<0.01	<0.01	<0.01
VPH Aromatic (>EC7-EC8)	CE067	mg/kg	<0.01	<0.01	<0.01

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SOLIDS

Lab number			123262-1	123262-2	123262-3
Sample id			6F2/4	6F2/5	6F2/6
Depth (m)			-	-	-
Date sampled			-	-	-
Test	Method	Units			
VPH Aromatic (>EC8-EC10)	CE067	mg/kg	<0.01	<0.01	<0.01
EPH Aromatic (>EC10-EC12)	CE250	mg/kg	<10	<10	<10
EPH Aromatic (>EC12-EC16)	CE250	mg/kg	13	18	<10
EPH Aromatic (>EC16-EC21)	CE250	mg/kg	<1	<1	<1
EPH Aromatic (>EC21-EC35)	CE250	mg/kg	17	52	<1
EPH Aromatic (>EC35-EC44)	CE250	mg/kg	15	23	<1
VPH Aliphatic (>C5-C6)	CE067	mg/kg	<0.1	0.12	<0.1
VPH Aliphatic (>C6-C8)	CE067	mg/kg	<0.1	<0.1	<0.1
VPH Aliphatic (>C8-C10)	CE067	mg/kg	<0.1	<0.1	<0.1
EPH Aliphatic (>C10-C12)	CE250	mg/kg	<6	<6	<6
EPH Aliphatic (>C12-C16)	CE250	mg/kg	<6	<6	<6
EPH Aliphatic (>C16-C35)	CE250	mg/kg	19	70	<15
EPH Aliphatic (>C35-C44)	CE250	mg/kg	20	49	<10
Subcontracted Analysis					
Asbestos (qualitative)	\$	-	NAD	NAD	NAD

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METHOD DETAILS

METHOD	SOLIDS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE208	Chromium (III)	Calculation: Cr (total) - Cr (VI)	Dry		1	mg/kg CrIII
CE146	Chromium (VI)	Acid extraction, Colorimetry	Dry		1	mg/kg CrVI
\$	Arsenic	Aqua regia digest, ICP-MS	Dry		0.5	mg/kg
\$	Cadmium	Aqua regia digest, ICP-MS	Dry		0.1	mg/kg
\$	Chromium	Aqua regia digest, ICP-MS	Dry		0.5	mg/kg
\$	Copper	Aqua regia digest, ICP-MS	Dry		0.5	mg/kg
\$	Lead	Aqua regia digest, ICP-MS	Dry		0.5	mg/kg
\$	Mercury	Aqua regia digest, ICP-MS	Dry		0.05	mg/kg
\$	Nickel	Aqua regia digest, ICP-MS	Dry		0.5	mg/kg
\$	Selenium	Aqua regia digest, ICP-MS	Dry		0.25	mg/kg
\$	Zinc	Aqua regia digest, ICP-MS	Dry		0.5	mg/kg
CE004	pH	Based on BS 1377, pH Meter	As received		-	units
CE077	Cyanide (free)	Extraction, Continuous Flow Colorimetry	As received		1	mg/kg CN
CE078	Phenols (total)	Extraction, Continuous Flow Colorimetry	As received		0.5	mg/kg PhOH
CE087	Naphthalene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Acenaphthylene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Acenaphthene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Fluorene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Phenanthrene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Anthracene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Fluoranthene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Pyrene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Benzo(a)anthracene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Chrysene	Solvent extraction, GC-MS	As received		0.03	mg/kg
CE087	Benzo(b)fluoranthene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Benzo(k)fluoranthene	Solvent extraction, GC-MS	As received		0.03	mg/kg
CE087	Benzo(a)pyrene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Indeno(123cd)pyrene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Dibenz(ah)anthracene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Benzo(ghi)perylene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	PAH (total of USEPA 16)	Solvent extraction, GC-MS	As received		0.34	mg/kg
CE192	MTBE	Headspace GC-FID	As received		0.02	mg/kg
CE192	Benzene	Headspace GC-FID	As received		0.01	mg/kg
CE192	Toluene	Headspace GC-FID	As received		0.01	mg/kg
CE192	Ethylbenzene	Headspace GC-FID	As received		0.01	mg/kg
CE192	m & p-Xylene	Headspace GC-FID	As received		0.02	mg/kg
CE192	o-Xylene	Headspace GC-FID	As received		0.01	mg/kg
CE067	VPH Aromatic (>EC5-EC7)	Headspace GC-FID	As received		0.01	mg/kg
CE067	VPH Aromatic (>EC7-EC8)	Headspace GC-FID	As received		0.01	mg/kg
CE067	VPH Aromatic (>EC8-EC10)	Headspace GC-FID	As received		0.01	mg/kg
CE250	EPH Aromatic (>EC10-EC12)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC12-EC16)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC16-EC21)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC21-EC35)	Solvent extraction, GCxGC-FID	As received		1	mg/kg

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METHOD DETAILS

METHOD	SOLIDS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE250	EPH Aromatic (>EC35-EC44)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE067	VPH Aliphatic (>C5-C6)	Headspace GC-FID	As received		0.1	mg/kg
CE067	VPH Aliphatic (>C6-C8)	Headspace GC-FID	As received		0.1	mg/kg
CE067	VPH Aliphatic (>C8-C10)	Headspace GC-FID	As received		0.1	mg/kg
CE250	EPH Aliphatic (>C10-C12)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C12-C16)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C16-C35)	Solvent extraction, GCxGC-FID	As received		15	mg/kg
CE250	EPH Aliphatic (>C35-C44)	Solvent extraction, GCxGC-FID	As received		10	mg/kg
\$	Asbestos (qualitative)	HSG 248, Microscopy	Dry	U	-	-

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ADDITIONAL INFORMATION

Notes

Opinions and interpretations expressed herein are outside the UKAS accreditation scope.

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

This report shall not be reproduced except in full, without prior written approval.

Samples will be disposed of 4 weeks from initial receipt unless otherwise instructed.

For soils and solids, all results are reported on a dry basis. Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones, where applicable.

Chemtech Environmental Limited

TEST REPORT REVISIONS

The table below identifies amendments that have been made to this test report for each revision.

Test Report Reference	Details of amendments to test report	Issue Date
123262	Original report issued	07 June 2023
123262(1)	Soil Suite 1 added	12 February 2024
123262(2)	Sample ID's Amended	12 February 2024

ANALYTICAL TEST REPORT

Contract no: 126868(1)

Contract name: Stainforth Construction LLP - Trinity Project Huddersfield

Client reference: 6F5/6F2 Crush Stockpile 7

Clients name: Black Rock Environmental Associates

Clients address: 16 Buckingham Crescent
Clayton, Bradford
West Yorkshire
BD14 6EJ

Samples received: 22 September 2023

Analysis started: 22 September 2023

Analysis completed: 29 September 2023

Report issued: 13 February 2024

This is a supplementary report to report number 126868 issued 23 September 2023.

Key

U UKAS accredited test

M MCERTS & UKAS accredited test

\$ Test carried out by an approved subcontractor

I/S Insufficient sample to carry out test

N/S Sample not suitable for testing

NAD No Asbestos Detected

Approved by:



Samantha Rogerson
Reporting Manager

Chemtech Environmental Limited

SOLIDS

Lab number			126868-1
Sample id			6F5/6F2 Stockpile 7
Depth (m)			-
Date sampled			14/09/2023
Test	Method	Units	
Arsenic (total)	CE264	mg/kg As	<3
Cadmium (total)	CE264	mg/kg Cd	<2
Chromium (total)	CE264	mg/kg Cr	32
Chromium (III)	CE208	mg/kg CrIII	32
Chromium (VI)	CE146	mg/kg CrVI	<1
Copper (total)	CE264	mg/kg Cu	8.0
Lead (total)	CE264	mg/kg Pb	15
Mercury (total)	CE264	mg/kg Hg	<2
Nickel (total)	CE264	mg/kg Ni	10
Selenium (total)	CE264	mg/kg Se	<3
Zinc (total)	CE264	mg/kg Zn	35
pH	CE004	units	11.9
Sulphate (2:1 water soluble)	CE061	mg/l SO ₄	<10
Cyanide (free)	CE077	mg/kg CN	<1
Phenols (total)	CE078	mg/kg PhOH	<0.5
PAH			
Naphthalene	CE087	mg/kg	0.03
Acenaphthylene	CE087	mg/kg	<0.02
Acenaphthene	CE087	mg/kg	0.10
Fluorene	CE087	mg/kg	0.07
Phenanthrene	CE087	mg/kg	0.69
Anthracene	CE087	mg/kg	0.18
Fluoranthene	CE087	mg/kg	0.88
Pyrene	CE087	mg/kg	0.75
Benzo(a)anthracene	CE087	mg/kg	0.40
Chrysene	CE087	mg/kg	0.43
Benzo(b)fluoranthene	CE087	mg/kg	0.37
Benzo(k)fluoranthene	CE087	mg/kg	0.16
Benzo(a)pyrene	CE087	mg/kg	0.37
Indeno(123cd)pyrene	CE087	mg/kg	0.20
Dibenz(ah)anthracene	CE087	mg/kg	0.05
Benzo(ghi)perylene	CE087	mg/kg	0.21
PAH (total of USEPA 16)	CE087	mg/kg	4.89
BTEX & TPH			
MTBE	CE192	mg/kg	<0.02
Benzene	CE192	mg/kg	<0.01
Toluene	CE192	mg/kg	<0.01
Ethylbenzene	CE192	mg/kg	<0.01
m & p-Xylene	CE192	mg/kg	<0.02
o-Xylene	CE192	mg/kg	<0.01

Chemtech Environmental Limited

SOLIDS

Lab number	126868-1		
Sample id	6F5/6F2 Stockpile 7		
Depth (m)	-		
Date sampled	14/09/2023		
Test	Method	Units	
VPH Aromatic (>EC5-EC7)	CE067	mg/kg	<0.01
VPH Aromatic (>EC7-EC8)	CE067	mg/kg	<0.01
VPH Aromatic (>EC8-EC10)	CE067	mg/kg	<0.01
EPH Aromatic (>EC10-EC12)	CE250	mg/kg	<10
EPH Aromatic (>EC12-EC16)	CE250	mg/kg	<10
EPH Aromatic (>EC16-EC21)	CE250	mg/kg	<1
EPH Aromatic (>EC21-EC35)	CE250	mg/kg	<1
EPH Aromatic (>EC35-EC44)	CE250	mg/kg	<1
VPH Aliphatic (>C5-C6)	CE067	mg/kg	<0.1
VPH Aliphatic (>C6-C8)	CE067	mg/kg	<0.1
VPH Aliphatic (>C8-C10)	CE067	mg/kg	<0.1
EPH Aliphatic (>C10-C12)	CE250	mg/kg	<6
EPH Aliphatic (>C12-C16)	CE250	mg/kg	<6
EPH Aliphatic (>C16-C35)	CE250	mg/kg	<15
EPH Aliphatic (>C35-C44)	CE250	mg/kg	<10
Subcontracted Analysis			
Asbestos (qualitative)	\$	-	NAD

Chemtech Environmental Limited

METHOD DETAILS

METHOD	SOLIDS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE264	Arsenic (total)	Aqua Regia Extraction, ICPOES	Dry		3	mg/kg As
CE264	Cadmium (total)	Aqua Regia Extraction, ICPOES	Dry		2	mg/kg Cd
CE264	Chromium (total)	Aqua Regia Extraction, ICPOES	Dry		2	mg/kg Cr
CE208	Chromium (III)	Calculation: Cr (total) - Cr (VI)	Dry		1	mg/kg CrIII
CE146	Chromium (VI)	Acid extraction, Colorimetry	Dry		1	mg/kg CrVI
CE264	Copper (total)	Aqua Regia Extraction, ICPOES	Dry		2	mg/kg Cu
CE264	Lead (total)	Aqua Regia Extraction, ICPOES	Dry		3	mg/kg Pb
CE264	Mercury (total)	Aqua Regia Extraction, ICPOES	Dry		2	mg/kg Hg
CE264	Nickel (total)	Aqua Regia Extraction, ICPOES	Dry		3	mg/kg Ni
CE264	Selenium (total)	Aqua Regia Extraction, ICPOES	Dry		3	mg/kg Se
CE264	Zinc (total)	Aqua Regia Extraction, ICPOES	Dry		4	mg/kg Zn
CE004	pH	Based on BS 1377, pH Meter	As received		-	units
CE061	Sulphate (2:1 water soluble)	Aqueous extraction, ICP-OES	Dry		10	mg/l SO ₄
CE077	Cyanide (free)	Extraction, Continuous Flow Colorimetry	As received		1	mg/kg CN
CE078	Phenols (total)	Extraction, Continuous Flow Colorimetry	As received		0.5	mg/kg PhOH
CE087	Naphthalene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Acenaphthylene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Acenaphthene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Fluorene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Phenanthrene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Anthracene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Fluoranthene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Pyrene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Benzo(a)anthracene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Chrysene	Solvent extraction, GC-MS	As received		0.03	mg/kg
CE087	Benzo(b)fluoranthene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Benzo(k)fluoranthene	Solvent extraction, GC-MS	As received		0.03	mg/kg
CE087	Benzo(a)pyrene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Indeno(123cd)pyrene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Dibenz(ah)anthracene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	Benzo(ghi)perylene	Solvent extraction, GC-MS	As received		0.02	mg/kg
CE087	PAH (total of USEPA 16)	Solvent extraction, GC-MS	As received		0.34	mg/kg
CE192	MTBE	Headspace GC-FID	As received		0.02	mg/kg
CE192	Benzene	Headspace GC-FID	As received		0.01	mg/kg
CE192	Toluene	Headspace GC-FID	As received		0.01	mg/kg
CE192	Ethylbenzene	Headspace GC-FID	As received		0.01	mg/kg
CE192	m & p-Xylene	Headspace GC-FID	As received		0.02	mg/kg
CE192	o-Xylene	Headspace GC-FID	As received		0.01	mg/kg
CE067	VPH Aromatic (>EC5-EC7)	Headspace GC-FID	As received		0.01	mg/kg
CE067	VPH Aromatic (>EC7-EC8)	Headspace GC-FID	As received		0.01	mg/kg
CE067	VPH Aromatic (>EC8-EC10)	Headspace GC-FID	As received		0.01	mg/kg
CE250	EPH Aromatic (>EC10-EC12)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC12-EC16)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC16-EC21)	Solvent extraction, GCxGC-FID	As received		1	mg/kg

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METHOD DETAILS

METHOD	SOLIDS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE250	EPH Aromatic (>EC21-EC35)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC35-EC44)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE067	VPH Aliphatic (>C5-C6)	Headspace GC-FID	As received		0.1	mg/kg
CE067	VPH Aliphatic (>C6-C8)	Headspace GC-FID	As received		0.1	mg/kg
CE067	VPH Aliphatic (>C8-C10)	Headspace GC-FID	As received		0.1	mg/kg
CE250	EPH Aliphatic (>C10-C12)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C12-C16)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C16-C35)	Solvent extraction, GCxGC-FID	As received		15	mg/kg
CE250	EPH Aliphatic (>C35-C44)	Solvent extraction, GCxGC-FID	As received		10	mg/kg
\$	Asbestos (qualitative)	HSG 248, Microscopy	Dry	U	-	-

Chemtech Environmental Limited

ADDITIONAL INFORMATION

Notes

Opinions and interpretations expressed herein are outside the UKAS accreditation scope.

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

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Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

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Samples will be disposed of 4 weeks from initial receipt unless otherwise instructed.

BTEX compounds are identified by retention time only and may include interference from co-eluting compounds.

For soils and solids, all results are reported on a dry basis. Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones, where applicable.

Moisture Content Calculated on a Wet Weight basis

Chemtech Environmental Limited

TEST REPORT REVISIONS

The table below identifies amendments that have been made to this test report for each revision.

Test Report Reference	Details of amendments to test report	Issue Date
126868	Original report issued	23 September 2024
126868(1)	Amended Sample ID	13 February 2024



ANALYTICAL TEST REPORT

Contract no: 127752

Contract name: Marshalls Quarry Shelley Huddersfield

Client reference: -

Clients name: Black Rock Environmental Associates

Clients address: 16 Buckingham Crescent
Clayton, Bradford
West Yorkshire
BD14 6EJ

Samples received: 23 October 2023

Analysis started: 23 October 2023

Analysis completed: 01 November 2023

Report issued: 01 November 2023

Key

U UKAS accredited test

M MCERTS & UKAS accredited test

\$ Test carried out by an approved subcontractor

I/S Insufficient sample to carry out test

N/S Sample not suitable for testing

NAD No Asbestos Detected

Approved by:

Abbie Neasham-Bourn
Senior Reporting Administrator

Chemtech Environmental Limited

SAMPLE INFORMATION

MCERTS (Soils):

Soil descriptions are only intended to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions. MCERTS accreditation applies for sand, clay and loam/topsoil, or combinations of these whether these are derived from naturally occurring soils or from made ground, as long as these materials constitute the major part of the sample. Other materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Lab ref	Sample id	Depth (m)	Sample description	Material removed	% Removed	% Moisture
127752-1	6F5 Aggregates 1	-	Clayey Sand with Gravel	-	-	10.6
127752-2	6F5 Aggregates 2	-	Clayey Sand with Gravel	-	-	11.6
127752-3	6F5 Aggregates 3	-	Sand with Gravel & Roots	-	-	6.2
127752-4	6F5 Aggregates 4	-	Sand with Gravel	-	-	14.5

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SOILS

Lab number			127752-1	127752-2	127752-3	127752-4
Sample id			6F5	6F5	6F5	6F5
Depth (m)			Aggregates 1	Aggregates 2	Aggregates 3	Aggregates 4
Date sampled			-	-	-	-
			16/10/2023	16/10/2023	16/10/2023	16/10/2023
Test	Method	Units				
Arsenic (total)	CE264 ^M	mg/kg As	6.3	3.2	3.8	3.2
Cadmium (total)	CE264 ^M	mg/kg Cd	<2	<2	<2	<2
Chromium (total)	CE264 ^U	mg/kg Cr	25.4	29.4	29.3	30.6
Chromium (III)	CE208	mg/kg CrIII	25.4	29.4	29.3	30.6
Chromium (VI)	CE263	mg/kg CrVI	<0.04	<0.04	<0.04	<0.04
Copper (total)	CE264 ^M	mg/kg Cu	18.8	13.2	11.1	13.0
Lead (total)	CE264 ^U	mg/kg Pb	15.5	12.9	13.0	11.3
Mercury (total)	CE264 ^U	mg/kg Hg	<2	<2	<2	<2
Nickel (total)	CE264 ^M	mg/kg Ni	22.5	19.7	23.8	20.5
Selenium (total)	CE264	mg/kg Se	<3	<3	<3	<3
Zinc (total)	CE264 ^M	mg/kg Zn	49.1	42.4	48.2	43.0
pH	CE004 ^M	units	8.9	8.8	8.8	9.0
Sulphate (acid extractable)	CE062 ^M	mg/kg SO ₄	3095	360	<100	<100
Cyanide (free)	CE077	mg/kg CN	<1	<1	<1	<1
Phenols (total)	CE078	mg/kg PhOH	<0.5	<0.5	<0.5	<0.5
PAH						
Naphthalene	CE087 ^M	mg/kg	<0.02	<0.02	<0.02	<0.02
Acenaphthylene	CE087 ^M	mg/kg	<0.02	<0.02	<0.02	<0.02
Acenaphthene	CE087 ^M	mg/kg	<0.02	<0.02	<0.02	<0.02
Fluorene	CE087 ^U	mg/kg	<0.02	<0.02	<0.02	<0.02
Phenanthrene	CE087 ^M	mg/kg	0.03	0.03	0.03	0.03
Anthracene	CE087 ^U	mg/kg	<0.02	<0.02	<0.02	<0.02
Fluoranthene	CE087 ^M	mg/kg	0.03	0.03	0.04	0.04
Pyrene	CE087 ^M	mg/kg	0.03	0.03	0.04	0.04
Benzo(a)anthracene	CE087 ^U	mg/kg	0.03	<0.02	0.02	0.03
Chrysene	CE087 ^M	mg/kg	<0.03	<0.03	<0.03	<0.03
Benzo(b)fluoranthene	CE087 ^M	mg/kg	0.03	0.02	0.03	0.03
Benzo(k)fluoranthene	CE087 ^M	mg/kg	<0.03	<0.03	<0.03	<0.03
Benzo(a)pyrene	CE087 ^U	mg/kg	<0.02	0.03	0.03	0.02
Indeno(123cd)pyrene	CE087 ^M	mg/kg	<0.02	<0.02	<0.02	0.02
Dibenz(ah)anthracene	CE087 ^M	mg/kg	<0.02	<0.02	<0.02	<0.02
Benzo(ghi)perylene	CE087 ^M	mg/kg	<0.02	<0.02	<0.02	0.02
PAH (total of USEPA 16)	CE087	mg/kg	<0.34	<0.34	<0.34	<0.34
BTEX & TPH						
MTBE	\$	mg/kg	<0.001	<0.001	<0.001	<0.001
Benzene	\$	mg/kg	<0.001	<0.001	<0.001	<0.001
Toluene	\$	mg/kg	<0.001	<0.001	<0.001	<0.001
Ethylbenzene	\$	mg/kg	<0.001	<0.001	<0.001	<0.001
m & p-Xylene	\$	mg/kg	<0.001	<0.001	<0.001	<0.001
o-Xylene	\$	mg/kg	<0.001	<0.001	<0.001	<0.001
VPH Aromatic (>EC5-EC7)	\$	mg/kg	<0.05	<0.05	<0.05	<0.05
VPH Aromatic (>EC7-EC8)	\$	mg/kg	<0.05	<0.05	<0.05	<0.05

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SOILS

Lab number			127752-1	127752-2	127752-3	127752-4
Sample id			6F5 Aggregates 1	6F5 Aggregates 2	6F5 Aggregates 3	6F5 Aggregates 4
Depth (m)			-	-	-	-
Date sampled			16/10/2023	16/10/2023	16/10/2023	16/10/2023
Test	Method	Units				
VPH Aromatic (>EC8-EC10)	\$	mg/kg	<0.05	<0.05	<0.05	<0.05
EPH Aromatic (>EC10-EC12)	CE250	mg/kg	<0.5	<0.5	<0.5	<0.5
EPH Aromatic (>EC12-EC16)	CE250	mg/kg	<1	<1	<1	<1
EPH Aromatic (>EC16-EC21)	CE250	mg/kg	<2	<2	<2	<2
EPH Aromatic (>EC21-EC35)	CE250	mg/kg	<5	<5	<5	<5
EPH Aromatic (>EC35-EC44)	CE250	mg/kg	<1.5	<1.5	<1.5	<1.5
VPH Aliphatic (>C5-C6)	\$	mg/kg	<0.05	<0.05	<0.05	<0.05
VPH Aliphatic (>C6-C8)	\$	mg/kg	<0.1	<0.1	<0.1	<0.1
VPH Aliphatic (>C8-C10)	\$	mg/kg	<0.05	<0.05	<0.05	<0.05
EPH Aliphatic (>C10-C12)	CE250	mg/kg	<0.5	<0.5	<0.5	<0.5
EPH Aliphatic (>C12-C16)	CE250	mg/kg	<0.5	<0.5	<0.5	<0.5
EPH Aliphatic (>C16-C35)	CE250	mg/kg	<4.5	<4.5	<4.5	<4.5
EPH Aliphatic (>C35-C44)	CE250	mg/kg	<1	<1	<1	<1
Subcontracted Analysis						
Asbestos (qualitative)	\$	-	NAD	NAD	NAD	NAD

Chemtech Environmental Limited

METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE264	Arsenic (total)	Aqua Regia Extraction, ICPOES	Dry	M	3	mg/kg As
CE264	Cadmium (total)	Aqua Regia Extraction, ICPOES	Dry	M	2	mg/kg Cd
CE264	Chromium (total)	Aqua Regia Extraction, ICPOES	Dry	U	2	mg/kg Cr
CE208	Chromium (III)	Calculation: Cr (total) - Cr (VI)	Dry		1	mg/kg CrIII
CE263	Chromium (VI)	Discrete Analyser	Dry			mg/kg CrVI
CE264	Copper (total)	Aqua Regia Extraction, ICPOES	Dry	M	2	mg/kg Cu
CE264	Lead (total)	Aqua Regia Extraction, ICPOES	Dry	U	3	mg/kg Pb
CE264	Mercury (total)	Aqua Regia Extraction, ICPOES	Dry	U	2	mg/kg Hg
CE264	Nickel (total)	Aqua Regia Extraction, ICPOES	Dry	M	3	mg/kg Ni
CE264	Selenium (total)	Aqua Regia Extraction, ICPOES	Dry	U	3	mg/kg Se
CE264	Zinc (total)	Aqua Regia Extraction, ICPOES	Dry	M	4	mg/kg Zn
CE004	pH	Based on BS 1377, pH Meter	As received	M	-	units
CE062	Sulphate (acid extractable)	HCl extract, analysed by ICP-OES	Dry	M	100	mg/kg SO ₄
CE077	Cyanide (free)	Extraction, Continuous Flow Colorimetry	As received		1	mg/kg CN
CE078	Phenols (total)	Extraction, Continuous Flow Colorimetry	As received		1	mg/kg PhOH
CE087	Naphthalene	Solvent extraction, GC-MS	As received	M	0	mg/kg
CE087	Acenaphthylene	Solvent extraction, GC-MS	As received	M	0	mg/kg
CE087	Acenaphthene	Solvent extraction, GC-MS	As received	M	0	mg/kg
CE087	Fluorene	Solvent extraction, GC-MS	As received	U	0	mg/kg
CE087	Phenanthrene	Solvent extraction, GC-MS	As received	M	0	mg/kg
CE087	Anthracene	Solvent extraction, GC-MS	As received	U	0	mg/kg
CE087	Fluoranthene	Solvent extraction, GC-MS	As received	M	0	mg/kg
CE087	Pyrene	Solvent extraction, GC-MS	As received	M	0	mg/kg
CE087	Benzo(a)anthracene	Solvent extraction, GC-MS	As received	U	0	mg/kg
CE087	Chrysene	Solvent extraction, GC-MS	As received	M	0	mg/kg
CE087	Benzo(b)fluoranthene	Solvent extraction, GC-MS	As received	M	0	mg/kg
CE087	Benzo(k)fluoranthene	Solvent extraction, GC-MS	As received	M	0	mg/kg
CE087	Benzo(a)pyrene	Solvent extraction, GC-MS	As received	U	0	mg/kg
CE087	Indeno(123cd)pyrene	Solvent extraction, GC-MS	As received	M	0	mg/kg
CE087	Dibenz(ah)anthracene	Solvent extraction, GC-MS	As received	M	0	mg/kg
CE087	Benzo(ghi)perylene	Solvent extraction, GC-MS	As received	M	0	mg/kg
CE087	PAH (total of USEPA 16)	Solvent extraction, GC-MS	As received		0	mg/kg
\$	MTBE	Headspace GC-FID	As received	U	0.001	mg/kg
\$	Benzene	Headspace GC-FID	As received	U	0.001	mg/kg
\$	Toluene	Headspace GC-FID	As received	U	0.001	mg/kg
\$	Ethylbenzene	Headspace GC-FID	As received	U	0.001	mg/kg
\$	m & p-Xylene	Headspace GC-FID	As received	U	0.001	mg/kg
\$	o-Xylene	Headspace GC-FID	As received	U	0.001	mg/kg
\$	VPH Aromatic (>EC5-EC7)	Headspace GC-FID	As received		0.1	mg/kg
\$	VPH Aromatic (>EC7-EC8)	Headspace GC-FID	As received		0.1	mg/kg
\$	VPH Aromatic (>EC8-EC10)	Headspace GC-FID	As received		0.1	mg/kg
CE250	EPH Aromatic (>EC10-EC12)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC12-EC16)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC16-EC21)	Solvent extraction, GCxGC-FID	As received		1	mg/kg

Chemtech Environmental Limited

METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE250	EPH Aromatic (>EC21-EC35)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC35-EC44)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
\$	VPH Aliphatic (>C5-C6)	Headspace GC-FID	As received		0.1	mg/kg
\$	VPH Aliphatic (>C6-C8)	Headspace GC-FID	As received		0.1	mg/kg
\$	VPH Aliphatic (>C8-C10)	Headspace GC-FID	As received		0.1	mg/kg
CE250	EPH Aliphatic (>C10-C12)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C12-C16)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C16-C35)	Solvent extraction, GCxGC-FID	As received		15	mg/kg
CE250	EPH Aliphatic (>C35-C44)	Solvent extraction, GCxGC-FID	As received		10	mg/kg
\$	Asbestos (qualitative)	HSG 248, Microscopy	Dry	U	-	-

Chemtech Environmental Limited

DEVIATING SAMPLE INFORMATION

Comments

Sample deviation is determined in accordance with the UKAS note "Guidance on Deviating Samples" and based on reference standards and laboratory trials.

For samples identified as deviating, test result(s) may be compromised and may not be representative of the sample at the time of sampling.

Chemtech Environmental Ltd cannot be held responsible for the integrity of sample(s) received if Chemtech Environmental Ltd did not undertake the sampling. Such samples may be deviating.

Key

N	No (not deviating sample)
Y	Yes (deviating sample)
NSD	Sampling date not provided
NST	Sampling time not provided (waters only)
EHT	Sample exceeded holding time(s)
IC	Sample not received in appropriate containers
HP	Headspace present in sample container
NCF	Sample not chemically fixed (where appropriate)
OR	Other (specify)

Lab ref	Sample id	Depth (m)	Deviating	Tests (Reason for deviation)
127752-1	6F5 Aggregates 1	-	N	-
127752-2	6F5 Aggregates 2	-	N	-
127752-3	6F5 Aggregates 3	-	N	-
127752-4	6F5 Aggregates 4	-	N	-

Chemtech Environmental Limited

ADDITIONAL INFORMATION

Notes

Opinions and interpretations expressed herein are outside the UKAS accreditation scope.

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

This report shall not be reproduced except in full, without prior written approval.

Samples will be disposed of 4 weeks from initial receipt unless otherwise instructed.

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BTEX compounds are identified by retention time only and may include interference from co-eluting compounds.

For soils and solids, all results are reported on a dry basis. Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones, where applicable.

Moisture Content Calculated on a Wet Weight basis

Chemtech Environmental Limited

SAMPLE INFORMATION



ANALYTICAL TEST REPORT

Contract no: 129419 (1)

Contract name: Stainforth Construction Trinity Project Huddersfield

Client reference: Crushed Aggregate 6F2

Clients name: Black Rock Environmental Associates

Clients address: 16 Buckingham Crescent
Clayton, Bradford
West Yorkshire
BD14 6EJ

Samples received: 04 January 2024

Analysis started: 04 January 2024

Analysis completed: 16 January 2024

Report issued: 15 February 2024
This is a supplementary report to report number 129419 issued 16th jan 2024

Key

- U UKAS accredited test
- M MCERTS & UKAS accredited test
- \$ Test carried out by an approved subcontractor
- I/S Insufficient sample to carry out test
- N/S Sample not suitable for testing
- NAD No Asbestos Detected

Approved by:

Chemtech Environmental Limited

SAMPLE INFORMATION

Samantha Rogerson
Reporting Manager

Unit 6 Parkhead, Greencroft Industrial Park, Stanley, County Durham, DH9 7YB
Tel 01207 528578 Email customerservices@chemtech-env.co.uk
Vat Reg No. 772 5703 18 Registered in England number 4284013

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SAMPLE INFORMATION

MCERTS (Soils):

Soil descriptions are only intended to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions. MCERTS accreditation applies for sand, clay and loam/topsoil, or combinations of these whether these are derived from naturally occurring soils or from made ground, as long as these materials constitute the major part of the sample. Other materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Lab ref	Sample id	Depth (m)	Sample description	Material removed	% Removed	% Moisture
129419-1	8	-	Sand with Gravel	-	-	7.2
129419-2	9	-	Sand with Gravel	-	-	15.1

Chemtech Environmental Limited

SAMPLE INFORMATION

Lab number			129419-1	129419-2
Sample id			8	9
Depth (m)			-	-
Date sampled			13/12/2023	13/12/2023
Test	Method	Units		
Arsenic (total)	CE264 ^M	mg/kg As	4.3	6.6
Cadmium (total)	CE264 ^M	mg/kg Cd	<2	<2
Chromium (total)	CE264 ^M	mg/kg Cr	18.1	21.2
Chromium (III)	CE208	mg/kg CrIII	17.9	21.1
Chromium (VI)	CE263	mg/kg CrVI	0.2	0.2
Copper (total)	CE264 ^M	mg/kg Cu	14.4	28.1
Lead (total)	CE264 ^U	mg/kg Pb	20.2	68.2
Mercury (total)	CE264 ^U	mg/kg Hg	<2	<2
Nickel (total)	CE264 ^M	mg/kg Ni	9.3	12.8
Selenium (total)	CE264	mg/kg Se	<3	<3
Zinc (total)	CE264 ^M	mg/kg Zn	41.4	83.3
pH	CE004 ^M	units	12.3	10.6
Cyanide (free)	CE077	mg/kg CN	<1	<1
Phenols (total)	CE078	mg/kg PhOH	1.9	<0.5
PAH				
Naphthalene	CE087 ^M	mg/kg	0.04	0.22
Acenaphthylene	CE087 ^M	mg/kg	<0.02	0.03
Acenaphthene	CE087 ^M	mg/kg	0.05	0.72
Fluorene	CE087 ^U	mg/kg	0.03	0.43
Phenanthrene	CE087 ^M	mg/kg	0.46	5.44
Anthracene	CE087 ^U	mg/kg	0.16	1.70
Fluoranthene	CE087 ^M	mg/kg	0.49	5.89
Pyrene	CE087 ^M	mg/kg	0.43	4.87
Benzo(a)anthracene	CE087 ^U	mg/kg	0.19	2.24
Chrysene	CE087 ^M	mg/kg	0.18	2.23
Benzo(b)fluoranthene	CE087 ^M	mg/kg	0.18	1.96
Benzo(k)fluoranthene	CE087 ^M	mg/kg	0.06	0.78
Benzo(a)pyrene	CE087 ^U	mg/kg	0.15	1.86
Indeno(123cd)pyrene	CE087 ^M	mg/kg	0.07	1.11
Dibenz(ah)anthracene	CE087 ^M	mg/kg	<0.02	0.19
Benzo(ghi)perylene	CE087 ^M	mg/kg	0.05	1.00
PAH (total of USEPA 16)	CE087	mg/kg	2.54	30.7

Chemtech Environmental Limited

SAMPLE INFORMATION

Lab number			129419-1	129419-2
Sample id			8	9
Depth (m)			-	-
Date sampled			13/12/2023	13/12/2023
Test	Method	Units		
BTEX & TPH				
MTBE	\$	mg/kg	<1	<1
Benzene	\$	mg/kg	<1	<1
Toluene	\$	mg/kg	<1	<1
Ethylbenzene	\$	mg/kg	<1	<1
m & p-Xylene	\$	mg/kg	<1	<1
o-Xylene	\$	mg/kg	<1	<1
VPH Aromatic (>EC5-EC7)	\$	mg/kg	<0.05	<0.05
VPH Aromatic (>EC7-EC8)	\$	mg/kg	<0.05	<0.05
VPH Aromatic (>EC8-EC10)	\$	mg/kg	<0.05	<0.05
EPH Aromatic (>EC10-EC12)	CE250	mg/kg	<0.5	<0.5
EPH Aromatic (>EC12-EC16)	CE250	mg/kg	<1	<1
EPH Aromatic (>EC16-EC21)	CE250	mg/kg	<2	20
EPH Aromatic (>EC21-EC35)	CE250	mg/kg	25	59
EPH Aromatic (>EC35-EC44)	CE250	mg/kg	6	9
VPH Aliphatic (>C5-C6)	\$	mg/kg	<0.05	<0.05
VPH Aliphatic (>C6-C8)	\$	mg/kg	<0.05	<0.05
VPH Aliphatic (>C8-C10)	\$	mg/kg	<0.05	<0.05
EPH Aliphatic (>C10-C12)	CE250	mg/kg	<0.5	<0.5
EPH Aliphatic (>C12-C16)	CE250	mg/kg	1	<0.5
EPH Aliphatic (>C16-C35)	CE250	mg/kg	149	30
EPH Aliphatic (>C35-C44)	CE250	mg/kg	19	7
Subcontracted Analysis				
Asbestos (qualitative)	\$	-	NAD	NAD

Chemtech Environmental Limited

SAMPLE INFORMATION

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE264	Arsenic (total)	Aqua Regia Extraction, ICPOES	Dry	M	1.8	mg/kg As
CE264	Cadmium (total)	Aqua Regia Extraction, ICPOES	Dry	M	1.6	mg/kg Cd
CE264	Chromium (total)	Aqua Regia Extraction, ICPOES	Dry	M	3	mg/kg Cd
CE208	Chromium (III)	Calculation: Cr (total) - Cr (VI)	Dry		1	mg/kg CrIII
CE263	Chromium (VI)	Discrete Analyser	Dry			mg/kg CrVI
CE264	Copper (total)	Aqua Regia Extraction, ICPOES	Dry	M	1.6	mg/kg Cu
CE264	Lead (total)	Aqua Regia Extraction, ICPOES	Dry	U	2.3	mg/kg Pb
CE264	Mercury (total)	Aqua Regia Extraction, ICPOES	Dry	U	0.7	mg/kg Hg
CE264	Nickel (total)	Aqua Regia Extraction, ICPOES	Dry	M	2.1	mg/kg Ni
CE264	Selenium (total)	Aqua Regia Extraction, ICPOES	Dry	U	3	mg/kg Se
CE264	Zinc (total)	Aqua Regia Extraction, ICPOES	Dry	M	4	mg/kg Zn
CE208	Chromium (III)	Calculation: Cr (total) - Cr (VI)	Dry		1	mg/kg CrIII
CE263	Chromium (VI)	Discrete Analyser	Dry			mg/kg CrVI
CE004	pH	Based on BS 1377, pH Meter	As received	M	-	units
CE077	Cyanide (free)	Extraction, Continuous Flow Colorimetry	As received		1	mg/kg CN
CE078	Phenols (total)	Extraction, Continuous Flow Colorimetry	As received		0.5	mg/kg PhOH
CE087	Naphthalene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Acenaphthylene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Acenaphthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Fluorene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Phenanthrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Anthracene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Fluoranthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Pyrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(a)anthracene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Chrysene	Solvent extraction, GC-MS	As received	M	0.03	mg/kg
CE087	Benzo(b)fluoranthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(k)fluoranthene	Solvent extraction, GC-MS	As received	M	0.03	mg/kg
CE087	Benzo(a)pyrene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Indeno(123cd)pyrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Dibenz(ah)anthracene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(ghi)perylene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	PAH (total of USEPA 16)	Solvent extraction, GC-MS	As received		0.34	mg/kg
\$	MTBE	Headspace GC-FID	As received	U	1	mg/kg
\$	Benzene	Headspace GC-FID	As received	U	1	mg/kg
\$	Toluene	Headspace GC-FID	As received	U	1	mg/kg
\$	Ethylbenzene	Headspace GC-FID	As received	U	1	mg/kg
\$	m & p-Xylene	Headspace GC-FID	As received	U	1	mg/kg
\$	o-Xylene	Headspace GC-FID	As received	U	1	mg/kg
\$	BTEX (total)	Headspace GC-FID	As received		1	mg/kg
\$	VPH Aromatic (>EC5-EC7)	Headspace GC-FID	As received		0.05	mg/kg
\$	VPH Aromatic (>EC7-EC8)	Headspace GC-FID	As received		0.05	mg/kg
\$	VPH Aromatic (>EC8-EC10)	Headspace GC-FID	As received		0.05	mg/kg
CE250	EPH Aromatic (>EC10-EC12)	Solvent extraction, GCxGC-FID	As received		0.5	mg/kg

Chemtech Environmental Limited

SAMPLE INFORMATION

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE250	EPH Aromatic (>EC12-EC16)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC16-EC21)	Solvent extraction, GCxGC-FID	As received		2	mg/kg
CE250	EPH Aromatic (>EC21-EC35)	Solvent extraction, GCxGC-FID	As received		5	mg/kg
CE250	EPH Aromatic (>EC35-EC44)	Solvent extraction, GCxGC-FID	As received		1.5	mg/kg
\$	VPH Aliphatic (>C5-C6)	Headspace GC-FID	As received		0.05	mg/kg
\$	VPH Aliphatic (>C6-C8)	Headspace GC-FID	As received		0.05	mg/kg
\$	VPH Aliphatic (>C8-C10)	Headspace GC-FID	As received		0.05	mg/kg
CE250	EPH Aliphatic (>C10-C12)	Solvent extraction, GCxGC-FID	As received		0.5	mg/kg
CE250	EPH Aliphatic (>C12-C16)	Solvent extraction, GCxGC-FID	As received		0.5	mg/kg
CE250	EPH Aliphatic (>C16-C35)	Solvent extraction, GCxGC-FID	As received		4.5	mg/kg
CE250	EPH Aliphatic (>C35-C44)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
\$	Asbestos (qualitative)	HSG 248, Microscopy	Dry	U	-	-

Chemtech Environmental Limited

SAMPLE INFORMATION

Comments

Sample deviation is determined in accordance with the UKAS note "Guidance on Deviating Samples" and based on reference standards and laboratory trials.

For samples identified as deviating, test result(s) may be compromised and may not be representative of the sample at the time of sampling.

Chemtech Environmental Ltd cannot be held responsible for the integrity of sample(s) received if Chemtech Environmental Ltd did not undertake the sampling. Such samples may be deviating.

Key

N	No (not deviating sample)
Y	Yes (deviating sample)
NSD	Sampling date not provided
NST	Sampling time not provided (waters only)
EHT	Sample exceeded holding time(s)
IC	Sample not received in appropriate containers
HP	Headspace present in sample container
NCF	Sample not chemically fixed (where appropriate)
OR	Other (specify)

Lab ref	Sample id	Depth (m)	Deviating	Tests (Reason for deviation)
129419-1	8	-	Y	PAH (IC), BTEX (IC), VPH (IC), VPH (IC), Phenols (IC)
129419-2	9	-	Y	PAH (IC), BTEX (IC), VPH (IC), VPH (IC), Phenols (IC)

Chemtech Environmental Limited

SAMPLE INFORMATION

Notes

Opinions and interpretations expressed herein are outside the UKAS accreditation scope.

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

This report shall not be reproduced except in full, without prior written approval.

Soil/Solid samples will be disposed of 4 weeks from initial receipt unless otherwise agreed.

Waters and leachate samples will be disposed of 2 weeks from report issue unless otherwise agreed.

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For soils and solids, all results are reported on a dry basis. Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones, where applicable.

Moisture Content Calculated on a Wet Weight basis

Chemtech Environmental Limited

SAMPLE INFORMATION

The table below identifies ammendments that have been made to this test report for each revision.

Test Report Reference	Details of amendments to test report	Issue Date
129419	Original report issued	16 January 2024
129419	Sample ID`s amended as requested	15/02/2024

TEST REPORT

Black Rock Environmental Associates Ltd
16 Buckingham Crescent
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Bradford
BD14 6EJ



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Report WRL/23/2099psd
Issue date 05/10/23

Material	Recycled 6F2	Sample N°	S/23/2099
Site	Trinity College, Huddersfield	Sampled by	A Lindley
Specification	SHW 600 2016	Date sampled	13/09/23
Source	Ex Site	Date received	13/09/23
Supplier	Ex Site	Date tested	04/10/23
Sample location	Sample 9	Date reported	04/10/23
Sample type	Bulk		
Order number	-		

BS1377-2 1990 Clause 3.2.3.3 - Water content

Water content 9.3 %

BS1377-2 1990 Clause 9.2 Particle size distribution - wet sieving method

Sieve Size	Amount passing %	Specification
		SHW 600 2016
		Class 6F2
125 mm	100	100
90 mm	95	80 - 100
75 mm	80	65 - 100
63 mm	69	
37.5 mm	52	45 - 100
20 mm	41	
10 mm	34	15 - 60
6.3 mm	30	
5 mm	27	10 - 45
2 mm	20	
600 µm	14	0 - 25
212 µm	10	
63 µm	7	0 - 12

*denotes information supplied by client

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT004a/22/01

TEST REPORT

Black Rock Environmental Associates Ltd
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Report WRL/23/2100psd
Issue date 05/10/23

Material	Recycled 6F2	Sample N°	S/23/2100
Site	Trinity College, Huddersfield	Sampled by	A Lindley
Specification	SHW 600 2016	Date sampled	13/09/23
Source	Ex Site	Date received	13/09/23
Supplier	Ex Site	Date tested	04/10/23
Sample location	Sample 10	Date reported	04/10/23
Sample type	Bulk		
Order number	-		

BS1377-2 1990 Clause 3.2.3.3 - Water content

Water content 9.0 %

BS1377-2 1990 Clause 9.2 Particle size distribution - wet sieving method

Sieve Size	Amount passing %	Specification
		SHW 600 2016
		Class 6F2
125 mm	100	100
90 mm	95	80 - 100
75 mm	90	65 - 100
63 mm	77	
37.5 mm	58	45 - 100
20 mm	45	
10 mm	34	15 - 60
6.3 mm	28	
5 mm	24	10 - 45
2 mm	17	
600 µm	12	0 - 25
212 µm	8	
63 µm	5	0 - 12

*denotes information supplied by client

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT004a/22/01

TEST REPORT

Black Rock Environmental Associates Ltd
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Report WRL/23/2101psd
Issue date 05/10/23

Material	Recycled 6F2	Sample N°	S/23/2101
Site	Trinity College, Huddersfield	Sampled by	A Lindley
Specification	SHW 600 2016	Date sampled	13/09/23
Source	Ex Site	Date received	13/09/23
Supplier	Ex Site	Date tested	04/10/23
Sample location	Sample 11	Date reported	04/10/23
Sample type	Bulk		
Order number	-		

BS1377-2 1990 Clause 3.2.3.3 - Water content

Water content 7.9 %

BS1377-2 1990 Clause 9.2 Particle size distribution - wet sieving method

Sieve Size	Amount passing %	Specification
		SHW 600 2016
		Class 6F2
125 mm	100	100
90 mm	97	80 - 100
75 mm	85	65 - 100
63 mm	72	
37.5 mm	53	45 - 100
20 mm	38	
10 mm	29	15 - 60
6.3 mm	23	
5 mm	20	10 - 45
2 mm	14	
600 µm	9	0 - 25
212 µm	5	
63 µm	3	0 - 12

*denotes information supplied by client

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT004a/22/01

TEST REPORT

Black Rock Environmental Associates Ltd
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Report WRL/23/2102psd
Issue date 05/10/23

Material	Recycled 6F2	Sample N°	S/23/2102
Site	Trinity College, Huddersfield	Sampled by	A Lindley
Specification	SHW 600 2016	Date sampled	13/09/23
Source	Ex Site	Date received	13/09/23
Supplier	Ex Site	Date tested	04/10/23
Sample location	Sample 12	Date reported	04/10/23
Sample type	Bulk		
Order number	-		

BS1377-2 1990 Clause 3.2.3.3 - Water content

Water content 8.3 %

BS1377-2 1990 Clause 9.2 Particle size distribution - wet sieving method

Sieve Size	Amount passing %	Specification
		SHW 600 2016
		Class 6F2
125 mm	100	100
90 mm	95	80 - 100
75 mm	76	65 - 100
63 mm	65	
37.5 mm	50	45 - 100
20 mm	37	
10 mm	30	15 - 60
6.3 mm	25	
5 mm	21	10 - 45
2 mm	15	
600 µm	10	0 - 25
212 µm	5	
63 µm	3	0 - 12

*denotes information supplied by client

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT004a/22/01

TEST REPORT

Black Rock Environmental Associates Ltd
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Report WRL/23/2103psd
Issue date 05/10/23

Material	Recycled 6F2	Sample N°	S/23/2103
Site	Trinity College, Huddersfield	Sampled by	A Lindley
Specification	SHW 600 2016	Date sampled	13/09/23
Source	Ex Site	Date received	13/09/23
Supplier	Ex Site	Date tested	04/10/23
Sample location	Sample 13	Date reported	04/10/23
Sample type	Bulk		
Order number	-		

BS1377-2 1990 Clause 3.2.3.3 - Water content

Water content 6.9 %

BS1377-2 1990 Clause 9.2 Particle size distribution - wet sieving method

Sieve Size	Amount passing %	Specification
		SHW 600 2016
		Class 6F2
125 mm	100	100
90 mm	92	80 - 100
75 mm	75	65 - 100
63 mm	66	
37.5 mm	49	45 - 100
20 mm	37	
10 mm	30	15 - 60
6.3 mm	25	
5 mm	23	10 - 45
2 mm	18	
600 µm	12	0 - 25
212 µm	6	
63 µm	4	0 - 12

*denotes information supplied by client

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT004a/22/01

TEST REPORT

Black Rock Environmental Associates Ltd
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Report WRL/23/2104psd
Issue date 05/10/23

Material	Recycled 6F2	Sample N°	S/23/2104
Site	Trinity College, Huddersfield	Sampled by	A Lindley
Specification	SHW 600 2016	Date sampled	13/09/23
Source	Ex Site	Date received	13/09/23
Supplier	Ex Site	Date tested	04/10/23
Sample location	Sample 14	Date reported	04/10/23
Sample type	Bulk		
Order number	-		

BS1377-2 1990 Clause 3.2.3.3 - Water content

Water content 7.7 %

BS1377-2 1990 Clause 9.2 Particle size distribution - wet sieving method

Sieve Size	Amount passing %	Specification
		SHW 600 2016
		Class 6F2
125 mm	100	100
90 mm	89	80 - 100
75 mm	78	65 - 100
63 mm	67	
37.5 mm	49	45 - 100
20 mm	36	
10 mm	28	15 - 60
6.3 mm	23	
5 mm	20	10 - 45
2 mm	14	
600 µm	9	0 - 25
212 µm	5	
63 µm	4	0 - 12

*denotes information supplied by client

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT004a/22/01

TEST REPORT

Black Rock Environmental Associates Ltd
16 Buckingham Crescent
Clayton
Bradford
BD14 6EJ



White
Rose
Laboratory
Services
Ltd

Lumley St • Castleford • WF10 5LB
01977 520625 • enquiries@whiteroselabs.co.uk

Report WRL/23/2105psd
Issue date 05/10/23

Material	Recycled 6F2	Sample N°	S/23/2105
Site	Trinity College, Huddersfield	Sampled by	A Lindley
Specification	SHW 600 2016	Date sampled	13/09/23
Source	Ex Site	Date received	13/09/23
Supplier	Ex Site	Date tested	04/10/23
Sample location	Sample 15	Date reported	04/10/23
Sample type	Bulk		
Order number	-		

BS1377-2 1990 Clause 3.2.3.3 - Water content

Water content 8.8 %

BS1377-2 1990 Clause 9.2 Particle size distribution - wet sieving method

Sieve Size	Amount passing %	Specification
		SHW 600 2016
		Class 6F2
125 mm	100	100
90 mm	96	80 - 100
75 mm	79	65 - 100
63 mm	69	
37.5 mm	52	45 - 100
20 mm	37	
10 mm	27	15 - 60
6.3 mm	22	
5 mm	17	10 - 45
2 mm	7	
600 µm	3	0 - 25
212 µm	2	
63 µm	2	0 - 12

*denotes information supplied by client

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT004a/22/01

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Report WRL/23/2106psd
Issue date 05/10/23

Material	Recycled 6F2	Sample N°	S/23/2106
Site	Trinity College, Huddersfield	Sampled by	A Lindley
Specification	SHW 600 2016	Date sampled	13/09/23
Source	Ex Site	Date received	13/09/23
Supplier	Ex Site	Date tested	04/10/23
Sample location	Sample 16	Date reported	04/10/23
Sample type	Bulk		
Order number	-		

BS1377-2 1990 Clause 3.2.3.3 - Water content

Water content 7.4 %

BS1377-2 1990 Clause 9.2 Particle size distribution - wet sieving method

Sieve Size	Amount passing %	Specification
		SHW 600 2016
		Class 6F2
125 mm	100	100
90 mm	92	80 - 100
75 mm	77	65 - 100
63 mm	72	
37.5 mm	52	45 - 100
20 mm	37	
10 mm	25	15 - 60
6.3 mm	20	
5 mm	16	10 - 45
2 mm	8	
600 µm	3	0 - 25
212 µm	1	
63 µm	1	0 - 12

*denotes information supplied by client

All testing carried out at White Rose Laboratory Services Ltd, Lumley Street, Castleford
Test results relate only to items tested

J Church
Managing Director

RT004a/22/01

TEST REPORT

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16 Buckingham Crescent
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Bradford
West Yorkshire BD14 6EJ



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01977 520625 • enquiries@whiteroselabs.co.uk

Report WRL/23/2690asb
Issue date 05/01/24

Material	Crushed Aggregate	Sample Ref	S/23/2690
Site	Trinity, Huddersfield	Sampled by	L Armitage
Specification	-	Date sampled	13/12/23
Source	Ex Site	Date received	13/12/23
Supplier	Ex Site	Date tested	20/12/23
Sample location	17		
Sample type	Bulk		

Subcontract Testing

Please find attached results of the following subcontracted testing

Asbestos ID

(Chemtest)

J Church MSc
Managing Director



Final Report

Report No.: 23-41735-1

Initial Date of Issue: 20-Dec-2023

Re-Issue Details:

Client White Rose Labs

Client Address: Lumley Street
Castleford
West Yorkshire
WF10 5LB

Contact(s): Joe Whelan
Results

Project S/23/2690 Black Rock - Trinity,
Huddersfield

Quotation No.: **Date Received:** 18-Dec-2023

Order No.: ORD/23/594 **Date Instructed:** 18-Dec-2023

No. of Samples: 1

Turnaround (Wkdays): 5 **Results Due:** 22-Dec-2023

Date Approved: 20-Dec-2023

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

Project: S/23/2690 Black Rock - Trinity, Huddersfield

Client: White Rose Labs	Chemtest Job No.: 23-41735				
Quotation No.:	Chemtest Sample ID.: 1747063				
	Client Sample ID.: S/23/2690				
	Sample Location: Location 17				
	Sample Type: SOIL				
	Date Sampled: 13-Dec-2023				
	Asbestos Lab: NEW-ASB				
Determinand	Accred.	SOP	Units	LOD	
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected

Test Methods

SOP	Title	Parameters included	Method summary
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

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

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

All Asbestos testing is performed at the indicated laboratory

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

Sample Deviation Codes

A - Date of sampling not supplied

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

C - Sample not received in appropriate containers

D - Broken Container

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

Sample Retention and Disposal

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

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

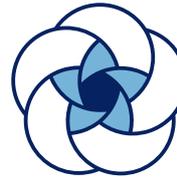
Charges may apply to extended sample storage

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

customerservices@chemtest.com

TEST REPORT

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Report WRL/23/2691-2693asb
Issue date 05/01/24

Material	Crushed Aggregate	Sample Ref	S/23/2691-2693
Site	Trinity, Huddersfield	Sampled by	L Armitage
Specification	-	Date sampled	13/12/23
Source	Ex Site	Date received	13/12/23
Supplier	Ex Site	Date tested	02/01/24
Sample location	18-20		
Sample type	Bulk		

Subcontract Testing

Please find attached results of the following subcontracted testing

Asbestos ID

(Chemtest)

J Church MSc
Managing Director



Final Report

Report No.: 23-42398-1

Initial Date of Issue: 02-Jan-2024

Re-Issue Details:

Client White Rose Labs

Client Address: Lumley Street
Castleford
West Yorkshire
WF10 5LB

Contact(s): Julian Church
Reports

Project S/23/2691-2693 Black Rock

Quotation No.: **Date Received:** 21-Dec-2023

Order No.: ORD/23/607 **Date Instructed:** 21-Dec-2023

No. of Samples: 3

Turnaround (Wkdays): 5 **Results Due:** 04-Jan-2024

Date Approved: 02-Jan-2024

Approved By:

Details: Stuart Henderson, Technical
Manager

Results - Soil

Project: S/23/2691-2693 Black Rock

Client: White Rose Labs		Chemtest Job No.:				23-42398	23-42398	23-42398
Quotation No.:		Chemtest Sample ID.:				1749266	1749267	1749268
		Client Sample ID.:				S/23/2691	S/23/2692	S/23/2693
		Sample Location:				Location 18	Location 19	Location 20
		Sample Type:				SOIL	SOIL	SOIL
		Date Sampled:				13-Dec-2023	13-Dec-2023	13-Dec-2023
		Asbestos Lab:				NEW-ASB	NEW-ASB	NEW-ASB
Determinand	HWOL Code	Accred.	SOP	Units	LOD			
ACM Type		U	2192		N/A	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected

Test Methods

SOP	Title	Parameters included	Method summary
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry

Report Information

Key

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

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

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

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

All Asbestos testing is performed at the indicated laboratory

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

Sample Deviation Codes

A - Date of sampling not supplied

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

C - Sample not received in appropriate containers

D - Broken Container

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

Sample Retention and Disposal

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

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

Charges may apply to extended sample storage

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

customerservices@chemtest.com

APPENDIX 05

Earthworks Summary Tables

Stainforth Construction LLP
Trinity Project Huddersfield 2023
Grading & Asbestos Test Results
6F2 and 6F5 Crushed Aggregates

All Sampling and Grading-Tests undertaken by White Rose Laboratory of Castleford. Asbestos Assays subcontracted to Chemtest Ltd

Site-Won Aggregates
20 x tests for 10,000m3

Sample	Date	Reference	Asbestos [Chemtest Ltd]	(Site-Won) 6F2 Grading
1	14-04-23	23-12778	None	
		WRL/23/0836psd		Marginal Non-Compliance
2	23-05-23	S/23/1232	None	
		WRL/23/1232psd		Compliant
3	23-05-23	S/23/1233	None	
		WRL/23/1233psd		Compliant
4	23-05-23	S/23/1234	None	
		WRL/23/1234psd		Compliant
5	23-05-23	S/23/1235	None	
		WRL/23/1235psd		Compliant
6	23-05-23	S/23/1236	None	
		WRL/23/1236psd		tCompliant
7	23-05-23	S/23/1237	None	
		WRL/23/1237psd		Compliant

Sample	Date	Reference	Asbestos [Chemtest]	(Site-Won) 6F2 Grading
8	13-09-23	S/23/2098	None	
		WRL/23/2098psd		Compliant
9	13-09-23	S/23/2099	None	
		WRL/23/2099psd		Compliant
10	13-09-23	S/23/2100	None	
		WRL/23/2100psd		Compliant
11	13-09-23	S/23/2001	None	
		WRL/23/2101psd		Compliant
12	13-09-23	S/23/2102	None	
		WRL/23/2102psd		Compliant
13	13-09-23	S/23/2103	None	
		WRL/23/2103psd		Compliant
14	13-09-23	S/23/2104	None	
		WRL/23/2104psd		Compliant
15	13-09-23	S/23/2105	None	
		WRL/23/2105psd		Compliant
16	13-09-23	S/23/2106	None	
		WRL/23/2106psd		Compliant

Sample	Date	Reference	Asbestos [White Rose]	(Site-Won) 6F2 Grading
17		S/23/2690	None	
		WRL/23/2690psd		Compliant
18		S/23/2691	None	
		WRL/23/2691psd		Compliant
19		S/23/2692	None	
		WRL/23/2692psd		Compliant
20		S/23/2693	None]	
		WRL/23/2693psd		Compliant

**Marshall Ltd – Appleton Quarry -Shelley – Huddersfield
[6F5 and Type 1 Aggregates Accepted on Site]**

Sample	Date	Reference	Asbestos [Chemtest Ltd]	(Imported) 6F5 Grading
1	16-10-23	S/23/2353	None	
		WRL/23/2353psd		Compliant
2	16-10-23	S/23/2354	None	
		WRL/23/2354psd		Compliant
3	16-10-23	S/23/2355	None	
		WRL/23/2355psd		Marginal Non- Compliance
4	16-10-23	S/23/2356	None	
		WRL/23/2356psd		Compliant

**Johnson Wellfield Quarry -Crosland Moor – Huddersfield
[Tested by Johnson Wellfield but not Imported to Site]**

Sample	Date	Reference	Asbestos [Chemtest Ltd]	(Imported) 6F5 Grading
A	1-09-23	S/23/2076 A	None	
	7 09 23	SA 23 01		Compliant
B	1-09-23	S/23/2076 B	None	
		Further 6F5 Sample Needed		

STAINFORTH – TRINITY PROJECT - HUDDERSFIELD
Black Rock Chemical Tests 2023 - 2024

Recumbent Soils and Water on Site		
Date Received at Lab	Chemtech Reference	Comments
Soils		
03-04-23	121256	Sewer Trench Excavations, Treezone Soil and Slab Turnover Soil Stockpiles were not heavily contaminated and were eligible to be reincorporated elsewhere on site.
24-04-23	121982	Trial Pit 9 Topsoil was eligible to be reincorporated elsewhere on site.
Sewage Trench Water		
03-04-23	121265	Excavations for the Sewer Trench exposed standing water. The analysis showed that it was not sewage (low COD and negligible Ammonia) but water travelling alongside the former sewer pipe. It was drained to sewer.
<i>Please see Photoplate Pages 3, 9</i>		

Demolition Issues involving Asbestos

Metropolitan Ltd demolished the nominated buildings from the former College. It issued Progress Reports and confirmed the stripped buildings as they became eligible for demolition & crushing.

Date	Acorn Reference	Comments
Bulk Asbestos		
24-05-23	B-42384	Two sections of broken Panelling were included in demolition materials programmed for export or crushing. Stainforth desired to ensure they did not contain Asbestos. This was confirmed by Assay at Acorn Analytical Services of Cleckheaton.
10-08-23	B-43556	A quantity of Asbestos shards and black pipes was struck during excavations to cap the former Mineshaft in the southwest corner of the site. The shards proved to be Asbestos Cement that was hand picked, double bagged and removed by Foxhall Ltd as Hazardous Waste. The black pipes were free of Asbestos. However, they were identical (probably a replacement model) to Asbestos-bearing pipes struck at a Stainforth Project in Harrogate. To prevent concern at a transfer station or landfill site, the pipes were bagged and removed as Hazardous Waste... together with the shards.
21-08-23	Foxhall Hazardous Waste Consignment Note for Asbestos removal... reference TRINIT/07765.	Foxhall also removed Asbestos generated by

Metropolitan Demolition Ltd.

Please see Photoplate Pages 16, 17

Asbestos in Soil

Date Sampled	Chemtech Reference	Comments
16-08-23	125993	<p>The section of excavation waste bearing tramp Asbestos Cement shards was transported to a quarantine area and manually double-picked. Picked shards were double bagged in specialist Asbestos sacks for removal by Foxhall.</p> <p>The picked soil was analysed and found free of Asbestos fibres. It was removed to a section of infill in the landscape area in the southeast corner of the site. The infill depth was demarcated with a sprayline to ensure burial was at least 1m below final ground elevation.</p>

Please see Photoplate Pages 12 to 17

Airborne Fibre Monitoring		
Date Sampled	Contractor Reference	Comments
15-05-23	Acorn B-42226	A routine monitoring engagement to ensure demolition concrete was not releasing Asbestos Fibres when being crushed to create 6F2 Aggregate for reinstatement.
16-08-23	Inspectas J023369/EC 01	A monitoring exercise whilst the Mineshaft Excavations were being manually picked of Asbestos Shards. It was to check that the site boundaries were not subject to any significant presence of airborne Asbestos Fibres.
<p>In both cases the monitoring stations recorded less than 0.01 fibres per millilitre of air. This is the standard limit that allows workers to re-occupy workstations after an Asbestos stripping exercise has been mounted.</p>		
<p><i>Please see Photoplate Pages 5, 6, 14</i></p>		

Crushed Aggregates for Engineered Reinstatement

Date Received at Lab	Chemtech Reference		Comments
6F2			
29-03-23	1 & 2 & 3	121065	Lab techniques produce an elevated pH but all tested neutral with pH papers No Asbestos present
31-05-23	4 & 5 & 6	123262	
22-09-23	7	126868	
04-01-24	8 & 9	129419	
6F5			
23-10-23	Marshalls Quarry, Shelley	127752	Natural Sandstone Quarry. Four samples taken. Relatively high Sulphate but naturally occurring. Stone accepted as both 6F5 & Type 1 Aggregate.
November 23	Johnsons Quarry	23-2076 White Rose Lab	Material met grading and chemical results but rejected by Stainforth on overall quality for import.
<i>Please see Photoplate Pages 8, 19 to 24</i>			

APPENDIX 06
In situ Validation Testing

Combined Compaction Testing Results Tables from Stainforth Construction

Test Ref.	Location/GPS	Chainage	Bulk Density (Mg/m ³)	Laboratory Moisture Content (%)	Dry Density (Mg/m ³)	Compaction (%)*
1	Test 1	N/A	1.753	7.6	1.80	92.6
2	Test 2	N/A	1.668	10.0	1.67	86.2
3	Test 3	N/A	1.659	12.3	1.63	83.9
4	Test 4	N/A	1.656	9.1	1.67	86.2
5	Test 5	N/A	1.689	11.0	1.68	86.4
6	Test 6	N/A	1.620	8.7	1.64	84.6
7	Test 7	N/A	1.577	8.6	1.60	82.5
8	Test 8	N/A	1.571	10.2	1.57	81.0
9	Test 9	N/A	1.759	8.1	1.79	92.5
10	Test 10	N/A	1.671	11.4	1.65	85.2
11	Test 11	N/A	1.832	12.5	1.79	92.5
12	Test 12	N/A	1.889	9.2	1.91	98.3
13	Test 13	N/A	1.854	10.9	1.84	95.0
14	Test 14	N/A	1.837	10.5	1.83	94.4
15	Test 15	N/A	1.872	7.7	1.92	98.8
16	Test 16	N/A	1.849	8.2	1.88	97.1
17	Test 17	N/A	1.856	8.9	1.88	96.8
18	Test 18	N/A	1.851	9.1	1.87	96.4
19	Test 19	N/A	1.880	8.7	1.91	98.2
20	Test 20	N/A	1.866	10.4	1.86	96.0

Test Ref.	Location/GPS	Chainage	Bulk Density (Mg/m ³)	Laboratory Moisture Content (%)	Dry Density (Mg/m ³)	Compaction (%)*
21	Test 21	N/A	1.867	8.0	1.73	89.1
22	Test 22	N/A	1.794	7.9	1.66	85.7
23	Test 23	N/A	1.817	8.0	1.68	86.7
24	Test 24	N/A	1.811	9.5	1.65	85.2
25	Test 25	N/A	1.817	8.6	1.67	86.2
26	Test 26	N/A	1.813	8.1	1.68	86.4
27	Test 27	N/A	1.815	8.5	1.67	86.2
28	Test 28	N/A	1.843	9.2	1.69	87.0
29	Test 29	N/A	1.901	8.7	1.75	90.1
30	Test 30	N/A	1.860	9.5	1.70	87.6
31	Test 31	N/A	1.761	7.9	1.63	84.1
32	Test 32	N/A	1.766	8.0	1.63	84.3
33	Test 33	N/A	1.751	8.3	1.62	83.3
34	Test 34	N/A	1.783	9.8	1.62	83.7
35	Test 35	N/A	1.818	8.8	1.67	86.1
36	Test 36	N/A	1.805	8.4	1.66	85.8
37	Test 37	N/A	1.840	9.0	1.69	87.0
38	Test 38	N/A	1.796	9.1	1.65	84.8
39	Test 39	N/A	1.834	9.7	1.67	86.2
40	Test 40	N/A	1.804	10.9	1.63	83.8

Test Ref.	Location/GPS	Chainage	Bulk Density (Mg/m ³)	Laboratory Moisture Content (%)	Dry Density (Mg/m ³)	Compaction (%)*
41	Test 41	N/A	1.592	8.7	1.61	83.2
42	Test 42	N/A	1.714	8.7	1.74	89.6
43	Test 43	N/A	1.723	8.7	1.75	90.1
44	Test 44	N/A	1.649	8.7	1.67	86.2
45	Test 45	N/A	1.621	8.7	1.64	84.7
46	Test 46	N/A	1.676	8.7	1.70	87.6
47	Test 47	N/A	1.672	8.7	1.70	87.4
48	Test 48	N/A	1.647	8.7	1.67	86.1
49	Test 49	N/A	1.599	8.7	1.62	83.6
50	Test 50	N/A	1.688	8.7	1.71	88.2

LABORATORY TEST REPORT
In-Situ Density By Nuclear Method - BS 1377-9: 1990

Site:	Trinity One Huddersfield	Job Ref.	69234
Client :	Stainforth Construction	Lab Ref.	69234
	Former Kirklees Street	Date Tested	30/08/2023
	114 Fitzwillian Street	Date Reported	28/09/2023
	HD1 5PH	Date of Issue:	03/10/2023
Originator:	Allison Holden		

Test Location:	Various	Test Depth:	300
Material:	6F2	Technician:	RD
Visual Description:	Recycled sand and gravel	Gauge Reference	37200
Supplier/Source:	Delivered	Weather:	Overcast

Test Ref.	Location/GPS	Chainage	Bulk Density (Mg/m ³)	Laboratory Moisture Content (%)	Dry Density (Mg/m ³)	Compaction (%)*
1	Test 1	N/A	1.753	7.6	1.80	92.6
2	Test 2	N/A	1.668	10.0	1.67	86.2
3	Test 3	N/A	1.659	12.3	1.63	83.9
4	Test 4	N/A	1.656	9.1	1.67	86.2
5	Test 5	N/A	1.689	11.0	1.68	86.4
6	Test 6	N/A	1.620	8.7	1.64	84.6
7	Test 7	N/A	1.577	8.6	1.60	82.5
8	Test 8	N/A	1.571	10.2	1.57	81.0
9	Test 9	N/A	1.759	8.1	1.79	92.5
10	Test 10	N/A	1.671	11.4	1.65	85.2
11	Test 11	N/A	1.832	12.5	1.79	92.5
12	Test 12	N/A	1.889	9.2	1.91	98.3
13	Test 13	N/A	1.854	10.9	1.84	95.0
14	Test 14	N/A	1.837	10.5	1.83	94.4
15	Test 15	N/A	1.872	7.7	1.92	98.8
16	Test 16	N/A	1.849	8.2	1.88	97.1
17	Test 17	N/A	1.856	8.9	1.88	96.8
18	Test 18	N/A	1.851	9.1	1.87	96.4
19	Test 19	N/A	1.880	8.7	1.91	98.2
20	Test 20	N/A	1.866	10.4	1.86	96.0

The stated result only relates to the item/location tested, this report shall not be reproduced except in full.

Bulk Density Applied from Material Calibration in accordance with BS 1377-9: 1990

Laboratory Moisture Content carried out in accordance with BS 1377-2: 1990: Oven Dried Method

*Percentage compaction calculated using Maximum Dry Density (Mg/m³) of 1.94

Optimum Moisture Content/Dry Density Relationship Laboratory Sample Reference:

PN69234

Optimum Moisture Content/Dry Density Relationship:

Determined by CMTL

Tested in accordance with BS 1377-9: 1990



CMTL Limited Approved Signature
 Ryan Hobson

LABORATORY TEST REPORT

In-Situ Density By Nuclear Method - BS 1377-9: 1990

Site:	Trinity One Huddersfield	Job Ref.	69234
Client :	Stainforth Construction	Lab Ref.	69234
	Former Kirklees Street	Date Tested	31/08/2023
	114 Fitzwillian Street	Date Reported	28/09/2023
	HD1 5PH	Date of Issue:	03/10/2023
Originator:	Allison Holden		

Test Ref :	69234	Supplier/Source:	Delivered
Test Location:	Various	Test Depth:	300
Material:	6F2	Technician:	RD
Visual Description:	Recycled sand and gravel	Weather:	Overcast

Test Ref.	Location/GPS	Chainage	Bulk Density (Mg/m ³)	Laboratory Moisture Content (%)	Dry Density (Mg/m ³)	Compaction (%)*
21	Test 21	N/A	1.867	8.0	1.73	89.1
22	Test 22	N/A	1.794	7.9	1.66	85.7
23	Test 23	N/A	1.817	8.0	1.68	86.7
24	Test 24	N/A	1.811	9.5	1.65	85.2
25	Test 25	N/A	1.817	8.6	1.67	86.2
26	Test 26	N/A	1.813	8.1	1.68	86.4
27	Test 27	N/A	1.815	8.5	1.67	86.2
28	Test 28	N/A	1.843	9.2	1.69	87.0
29	Test 29	N/A	1.901	8.7	1.75	90.1
30	Test 30	N/A	1.860	9.5	1.70	87.6
31	Test 31	N/A	1.761	7.9	1.63	84.1
32	Test 32	N/A	1.766	8.0	1.63	84.3
33	Test 33	N/A	1.751	8.3	1.62	83.3
34	Test 34	N/A	1.783	9.8	1.62	83.7
35	Test 35	N/A	1.818	8.8	1.67	86.1
36	Test 36	N/A	1.805	8.4	1.66	85.8
37	Test 37	N/A	1.840	9.0	1.69	87.0
38	Test 38	N/A	1.796	9.1	1.65	84.8
39	Test 39	N/A	1.834	9.7	1.67	86.2
40	Test 40	N/A	1.804	10.9	1.63	83.8

The stated result only relates to the item/location tested, this report shall not be reproduced except in full.

Bulk Density Applied from Material Calibration in accordance with BS 1377-9: 1990 Slope/Intercept 1.0000 0.0000

Laboratory Moisture Content carried out in accordance with BS 1377-2: 1990: Oven Dried Method

*Percentage compaction calculated using Maximum Dry Density (Mg/m³) of 1.94

Optimum Moisture Content/Dry Density Relationship Laboratory Sample Reference: PN69234

Optimum Moisture Content/Dry Density Relationship: Determined by CMTL

Tested in accordance with BS 1377-9: 1990



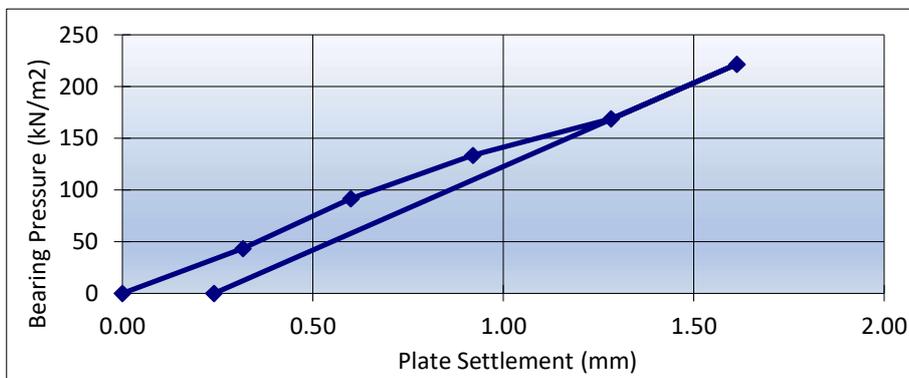
CMTL Limited Approved Signature
 Ryan Hobson

LABORATORY TEST REPORT

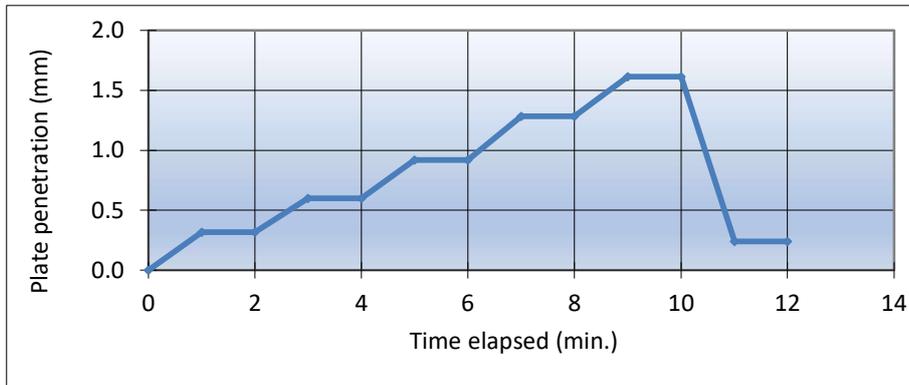
Determination of the vertical deformation and strength characteristics of soil by the plate loading test

Project :	Trinity One Huddersfield	Job Ref No.	69234
Client :	Stainforth Construction	Lab Ref No	69234
	Former Kirklees Street	Date Tested	25/08/2023
	114 Fitzwillian Street	Date Reported	25/08/2023
	HD1 5PH	Date Issued	25/08/2023
Originator :	Allison Holden		

Test Ref :	5	Test Depth:	0
Test Location:	CBR	Technician:	TJ
Material:	6F5	Weather:	Clear
Visual Description:	0	Reaction Load:	22T 360
Supplier/Source:	0	Plate Diameter:	450



Pressure (kN/m ²)	Deformation (mm)
0.0	0.00
43.4	0.32
91.5	0.60
133.4	0.92
168.9	1.28
221.7	1.61
0.0	0.24
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-



Maximum Applied Pressure (kPa) :	221.7
Maximum deformation (mm) :	1.61
Modulus of subgrade reaction K (kN/m²/mm) :	133
K₇₆₂ (kN/m²/mm) :	83
Calculated Equivalent CBR (%) :	20
Moisture Content (%) :	Not Required

The stated result only relates to the item/location tested, this report shall not be reproduced except in full.

Incremental Plate Load - Tested in accordance with BS 1377-9: 1990: Clause 4.1.6.4.2

Moisture Content - Tested in accordance with BS 1377: Part 2 : 1990, oven drying method

Values K₇₆₂, K and CBR(%) calculated in accordance with Interim Advice Note 73/06 (Draft HD25)



Approved Signature CMTL Limited
 Ryan Hobson

APPENDIX 07
Contamination Testing



ANALYTICAL TEST REPORT

Contract no: 125993

Contract name: Stainforth Construction LLP, Trinity Project, Huddersfield

Client reference: Mieshaft Excavations

Clients name: Black Rock Environmental Associates

Clients address: 16 Buckingham Crescent
Clayton, Bradford
West Yorkshire
BD14 6EJ

Samples received: 18 August 2023

Analysis started: 18 August 2023

Analysis completed: 30 August 2023

Report issued: 13 February 2024

This is a supplementary report to report number 125993 issued 30 August 2024.

Key

- U UKAS accredited test
- M MCERTS & UKAS accredited test
- \$ Test carried out by an approved subcontractor
- I/S Insufficient sample to carry out test
- N/S Sample not suitable for testing
- NAD No Asbestos Detected

Approved by:

E. McCulloch

Ellis McCulloch
Senior Reporting Administrator

Chemtech Environmental Limited

SAMPLE INFORMATION

MCERTS (Soils):

Soil descriptions are only intended to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions. MCERTS accreditation applies for sand, clay and loam/topsoil, or combinations of these whether these are derived from naturally occurring soils or from made ground, as long as these materials constitute the major part of the sample. Other materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Lab ref	Sample id	Depth (m)	Sample description	Material removed	% Removed	% Moisture
125993-1	Mineshaft Excavations	-	Sand with Gravel & Roots	-	-	5.7

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SOILS

Lab number	125993-1		
Sample id	Mineshaft Excavations		
Depth (m)	16/08/2023		
Date sampled			
Test	Method	Units	
Chromium (III)	CE208	mg/kg CrIII	19.7
Chromium (VI)	CE263	mg/kg CrVI	<0.04
Arsenic	\$ ^M	mg/kg	8.5
Cadmium	\$ ^M	mg/kg	0.2
Chromium	\$ ^M	mg/kg	19.7
Copper	\$ ^M	mg/kg	26.7
Lead	\$ ^M	mg/kg	75.0
Mercury	\$ ^M	mg/kg	0.2
Nickel	\$ ^M	mg/kg	7.1
Selenium	\$ ^M	mg/kg	< 1.0
Zinc	\$ ^M	mg/kg	69.7
pH	CE004 ^M	units	8.4
Cyanide (free)	CE077	mg/kg CN	<1
Phenols (total)	CE078	mg/kg PhOH	1.5
PAH			
Naphthalene	CE087 ^M	mg/kg	2.12
Acenaphthylene	CE087 ^M	mg/kg	0.14
Acenaphthene	CE087 ^M	mg/kg	2.77
Fluorene	CE087 ^U	mg/kg	2.07
Phenanthrene	CE087 ^M	mg/kg	18.43
Anthracene	CE087 ^U	mg/kg	4.85
Fluoranthene	CE087 ^M	mg/kg	21.19
Pyrene	CE087 ^M	mg/kg	19.06
Benzo(a)anthracene	CE087 ^U	mg/kg	9.01
Chrysene	CE087 ^M	mg/kg	9.42
Benzo(b)fluoranthene	CE087 ^M	mg/kg	9.77
Benzo(k)fluoranthene	CE087 ^M	mg/kg	3.88
Benzo(a)pyrene	CE087 ^U	mg/kg	7.54
Indeno(123cd)pyrene	CE087 ^M	mg/kg	5.70
Dibenz(ah)anthracene	CE087 ^M	mg/kg	1.28
Benzo(ghi)perylene	CE087 ^M	mg/kg	4.82
PAH (total of USEPA 16)	CE087	mg/kg	122
BTEX & TPH			
MTBE	CE192 ^U	mg/kg	0.16
Benzene	CE192 ^U	mg/kg	<0.01
Toluene	CE192 ^U	mg/kg	<0.01
Ethylbenzene	CE192 ^U	mg/kg	<0.01
m & p-Xylene	CE192 ^U	mg/kg	<0.02
o-Xylene	CE192 ^U	mg/kg	<0.01
VPH Aromatic (>EC5-EC7)	CE067	mg/kg	<0.01
VPH Aromatic (>EC7-EC8)	CE067	mg/kg	<0.01

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SOILS

Lab number	125993-1		
Sample id	Mineshaft Excavations		
Depth (m)	16/08/2023		
Date sampled			
Test	Method	Units	
VPH Aromatic (>EC8-EC10)	CE067	mg/kg	<0.01
EPH Aromatic (>EC10-EC12)	CE250	mg/kg	<10
EPH Aromatic (>EC12-EC16)	CE250	mg/kg	<10
EPH Aromatic (>EC16-EC21)	CE250	mg/kg	89
EPH Aromatic (>EC21-EC35)	CE250	mg/kg	156
EPH Aromatic (>EC35-EC44)	CE250	mg/kg	29
VPH Aliphatic (>C5-C6)	CE067	mg/kg	<0.1
VPH Aliphatic (>C6-C8)	CE067	mg/kg	<0.1
VPH Aliphatic (>C8-C10)	CE067	mg/kg	<0.1
EPH Aliphatic (>C10-C12)	CE250	mg/kg	<6
EPH Aliphatic (>C12-C16)	CE250	mg/kg	<6
EPH Aliphatic (>C16-C35)	CE250	mg/kg	23
EPH Aliphatic (>C35-C44)	CE250	mg/kg	<10
Subcontracted Analysis			
Asbestos (qualitative)	\$	-	NAD

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METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE208	Chromium (III)	Calculation: Cr (total) - Cr (VI)	Dry		1	mg/kg CrIII
CE263	Chromium (VI)	Discrete Analyser	Dry			mg/kg CrVI
\$ ^M	Arsenic	Aqua regia digest, ICP-MS	Dry	M	0.5	mg/kg
\$ ^M	Cadmium	Aqua regia digest, ICP-MS	Dry	M	0.2	mg/kg
\$ ^M	Chromium	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg
\$ ^M	Copper	Aqua regia digest, ICP-MS	Dry	M	4	mg/kg
\$ ^M	Lead	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg
\$ ^M	Mercury	Aqua regia digest, ICP-MS	Dry	M	0.1	mg/kg
\$ ^M	Nickel	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg
\$ ^M	Selenium	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg
\$ ^M	Zinc	Aqua regia digest, ICP-MS	Dry	M	4.5	mg/kg
CE004	pH	Based on BS 1377, pH Meter	As received	M	-	units
CE077	Cyanide (free)	Extraction, Continuous Flow Colorimetry	As received		1	mg/kg CN
CE078	Phenols (total)	Extraction, Continuous Flow Colorimetry	As received		0.5	mg/kg PhOH
CE087	Naphthalene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Acenaphthylene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Acenaphthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Fluorene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Phenanthrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Anthracene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Fluoranthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Pyrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(a)anthracene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Chrysene	Solvent extraction, GC-MS	As received	M	0.03	mg/kg
CE087	Benzo(b)fluoranthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(k)fluoranthene	Solvent extraction, GC-MS	As received	M	0.03	mg/kg
CE087	Benzo(a)pyrene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Indeno(123cd)pyrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Dibenz(ah)anthracene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(ghi)perylene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	PAH (total of USEPA 16)	Solvent extraction, GC-MS	As received		0.34	mg/kg
CE192	MTBE	Headspace GC-FID	As received	U	0.02	mg/kg
CE192	Benzene	Headspace GC-FID	As received	U	0.01	mg/kg
CE192	Toluene	Headspace GC-FID	As received	U	0.01	mg/kg
CE192	Ethylbenzene	Headspace GC-FID	As received	U	0.01	mg/kg
CE192	m & p-Xylene	Headspace GC-FID	As received	U	0.02	mg/kg
CE192	o-Xylene	Headspace GC-FID	As received	U	0.01	mg/kg
CE067	VPH Aromatic (>EC5-EC7)	Headspace GC-FID	As received		0.01	mg/kg
CE067	VPH Aromatic (>EC7-EC8)	Headspace GC-FID	As received		0.01	mg/kg
CE067	VPH Aromatic (>EC8-EC10)	Headspace GC-FID	As received		0.01	mg/kg
CE250	EPH Aromatic (>EC10-EC12)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC12-EC16)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC16-EC21)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC21-EC35)	Solvent extraction, GCxGC-FID	As received		1	mg/kg

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METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE250	EPH Aromatic (>EC35-EC44)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE067	VPH Aliphatic (>C5-C6)	Headspace GC-FID	As received		0.1	mg/kg
CE067	VPH Aliphatic (>C6-C8)	Headspace GC-FID	As received		0.1	mg/kg
CE067	VPH Aliphatic (>C8-C10)	Headspace GC-FID	As received		0.1	mg/kg
CE250	EPH Aliphatic (>C10-C12)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C12-C16)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C16-C35)	Solvent extraction, GCxGC-FID	As received		15	mg/kg
CE250	EPH Aliphatic (>C35-C44)	Solvent extraction, GCxGC-FID	As received		10	mg/kg
\$	Asbestos (qualitative)	HSG 248, Microscopy	Dry	U	-	-

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DEVIATING SAMPLE INFORMATION

Comments

Sample deviation is determined in accordance with the UKAS note "Guidance on Deviating Samples" and based on reference standards and laboratory trials.

For samples identified as deviating, test result(s) may be compromised and may not be representative of the sample at the time of sampling.

Chemtech Environmental Ltd cannot be held responsible for the integrity of sample(s) received if Chemtech Environmental Ltd did not undertake the sampling. Such samples may be deviating.

Key

N	No (not deviating sample)
Y	Yes (deviating sample)
NSD	Sampling date not provided
NST	Sampling time not provided (waters only)
EHT	Sample exceeded holding time(s)
IC	Sample not received in appropriate containers
HP	Headspace present in sample container
NCF	Sample not chemically fixed (where appropriate)
OR	Other (specify)

Lab ref	Sample id	Depth (m)	Deviating	Tests (Reason for deviation)
125993-1	Mineshaft Excavations	-	Y	BTEX (IC), Phenols (IC), PAH (IC), TPH (IC), VPH (IC), PCB (IC)

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ADDITIONAL INFORMATION

Notes

Opinions and interpretations expressed herein are outside the UKAS accreditation scope.

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

This report shall not be reproduced except in full, without prior written approval.

Samples will be disposed of 4 weeks from initial receipt unless otherwise instructed.

BTEX compounds are identified by retention time only and may include interference from co-eluting compounds.

For soils and solids, all results are reported on a dry basis. Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones, where applicable.

Moisture Content Calculated on a Wet Weight basis

Chemtech Environmental Limited

TEST REPORT REVISIONS

The table below identifies amendments that have been made to this test report for each revision.

Test Report Reference	Details of amendments to test report	Issue Date
125993	Original report issued	30 August 2024
125993(1)	Amended reference and sample ID	13 February 2024

Waste Acceptance Criteria Testing BS EN 12457-Part 3, 2 Stage Process

Sample Details

Contract Name	Stainforth Construction LLP, Trinity Project
Lab Number	125993-1
Sample ID	Mineshaft Excavations
Date Sampled	16 August 2023
Date Received	18 August 2023
Particle Size (<4mm)	-
Method of size reduction	N/A
Non-crushable matter	N/A

Test Values

Mass of Raw Test Portion (MW) kg	0.186
Mass of Dried Test Portion (MD) kg	0.175
Moisture Content Ratio (MC) %	6.05
Dry Matter Content Ratio (DR) %	94.30
Leachant Volume (1) (L2) Litre	0.339
Leachant Volume (2) (L8) Litre	1.400
Eluate Volume (1) (VE1) Litre	0.220
Eluate Volume (2) (VE2) Litre	1.260

Eluate Analysis	Conc in Eluate	
	2:1	8:1
Liquid : Waste Ratio	2:1	8:1
pH (units) ²	7.5	8.4
Temperature (°C)	20	20
Conductivity (µS/cm) ²	966	267
Antimony (µg/l Sb) ²	2.99	2.54
Arsenic (µg/l As) ²	4.51	7.41
Barium (µg/l Ba) ²	55.9	9.7
Cadmium (µg/l Cd) ²	<0.1	7.15
Chromium (µg/l Cr) ²	31.4	10.1
Copper (µg/l Cu) ²	24.8	22.6
Lead (µg/l Pb) ²	<0.6	<0.6
Mercury (µg/l Hg) ²	0.024	<0.05
Molybdenum (µg/l Mo) ²	29.4	5.7
Nickel (µg/l Ni) ²	2.4	0.6
Selenium (µg/l Se) ²	4.23	2.76
Zinc (µg/l Zn) ²	<3.5	<3.5
Chloride (mg/l Cl) ²	12	1.7
Fluoride (mg/l F) ²	0.9	0.4
Sulphate (mg/l SO ₄) ²	629	76
Total Dissolved Solids (mg/l TDS)	734	203
Phenol Index (µg/l PhOH)	<10	<10
Dissolved Organic Carbon (mg/l C)	34	29

Amount Leached		Council Decision 2003/33/EC Limit Values mg/kg at L:S 10:1		
2:1	10:1	Inert Waste	Non-reactive Hazardous Waste	Hazardous Waste
mg/kg	mg/kg			
0.006	0.026	0.06	0.7	5
0.009	0.070	0.5	2	25
0.112	0.155	20	100	300
<0.0002	<0.0626	0.04	1	5
0.063	0.128	0.5	10	70
0.050	0.229	2	50	100
<0.0004	<0.006	0.5	10	50
0.00005	<0.00047	0.01	0.2	2
0.059	0.087	0.5	10	30
0.005	0.008	0.4	10	40
0.008	0.030	0.1	0.5	7
<0.002	<0.035	4	50	200
24	30	800	15000	25000
1.8	4.3	10	150	500
1259	1453	1000	20000	50000
1468	2697	4000	60000	100000
<0.02	<0.1	1		
68	296	500	800	1000

Waste Analysis	Units	Result			
Total Organic Carbon	% w/w	1.4	3%	5%	6%
Loss on Ignition	% w/w	2.7			10%
BTEX	mg/kg	<0.06	6		
PCBs (7 congeners)	mg/kg	<0.045	1		
Mineral Oil (C10 - C40)	mg/kg	531	500		
PAH (total)	mg/kg	123	100		
pH ¹	pH units	8.4		>6	
Acid Neutralisation Capacity (pH4)	mol/kg	0.74		To be evaluated	
Acid Neutralisation Capacity (pH7)	mol/kg	0.08		To be evaluated	

Units	Result			
% w/w	1.4	3%	5%	6%
% w/w	2.7			10%
mg/kg	<0.06	6		
mg/kg	<0.045	1		
mg/kg	531	500		
mg/kg	123	100		
pH units	8.4		>6	
mol/kg	0.74		To be evaluated	
mol/kg	0.08		To be evaluated	

¹ Results are accredited to MCERTS if matrix confirmed as soil

² Results in leachate are accredited to ISO17025

Disclaimer: The Landfill Waste Acceptance Criteria limits in this report are provided for guidance only and values are transcribed from the Council Decision annex 2003/33/EC. Chemtech Environmental Ltd does not take responsibility for any errors or omissions in the transcription, and all data should be verified by the end user. Results will be colour flagged to the lowest threshold value breached. Any assessments made are based on the published results from the Laboratory and make no assessment of uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. Method uncertainty levels can be provided. Interpretation/assessment is outside the scope of the laboratory's UKAS accreditation. Moisture Content Calculated on Wet Weight Basis

Comments

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Vat Reg No. 772 5703 18 Registered in England number 4284013

Chemtech Environmental Limited

METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE001	Moisture Content	Gravimetry, reported on Wet Weight basis	As received		0.1	% w/w
CE004	pH	Based on BS 1377, pH Meter	As received	M	-	units
CE083	Acid Neutralisation Capacity	Titration	Dry		0.01	mol/kg
CE144	Ammoniacal Nitrogen as N	KCl extraction, Colorimetry	As received		1	mg/kg N
CE007	Electrical conductivity	Conductivity Meter	As received	U	10	µS/cm
CE197	Total Organic Carbon (TOC)	Carbon Analyser	Dry		0.1	% w/w C
CE006	Loss On Ignition at 440°C	Based on BS 1377, Gravimetry	Dry	U	0.1	% w/w
CE087	PAH (total of 17)	Solvent extraction, GC-MS	As received		0.36	mg/kg
CE192	BTEX (total)	Headspace GC-FID	As received		0.06	mg/kg
CE194	Mineral Oil (>C10-C40) silica clean up	Solvent extraction, clean-up, GC-FID	As received		16	mg/kg
CE137	PCB (total of ICES 7)	Solvent extraction, GC-MS	As received		0.045	mg/kg
CE128	Antimony (dissolved)	ICP-MS		U	0.1	µg/l Sb
CE128	Arsenic (dissolved)	ICP-MS		U	0.06	µg/l As
CE128	Barium (dissolved)	ICP-MS		U	0.6	µg/l Ba
CE128	Cadmium (dissolved)	ICP-MS		U	0.07	µg/l Cd
CE128	Chromium (dissolved)	ICP-MS		U	0.2	µg/l Cr
CE128	Copper (dissolved)	ICP-MS		U	0.4	µg/l Cu
CE128	Lead (dissolved)	ICP-MS		U	0.2	µg/l Pb
CE128	Mercury (dissolved)	ICP-MS		U	0.008	µg/l Hg
CE128	Molybdenum (dissolved)	ICP-MS		U	0.3	µg/l Mo
CE128	Nickel (dissolved)	ICP-MS		U	0.5	µg/l Ni
CE128	Selenium (dissolved)	ICP-MS		U	0.07	µg/l Se
CE128	Zinc (dissolved)	ICP-MS		U	1	µg/l Zn
CE213	pH	Based on BS 1377, pH Meter		U	-	units
CE214	Electrical conductivity	Conductivity Meter		U	10	µS/cm
CE049	Chloride	Ion Chromatography		U	0.5	mg/l Cl
CE049	Fluoride	Ion Chromatography		U	0.1	mg/l F
CE049	Sulphate	Ion Chromatography		U	1.7	mg/l SO ₄
CE148	Phenols (total)	Continuous Flow Colorimetry			10	µg/l PhOH
CE039	Total dissolved solids	TDS meter			10	mg/l TDS
CE247	Total Organic Carbon	Filtration, Combustion TOC analyser			5	mg/l C

Statement of Conformity

Statement of Conformity

Where Chemtech reports a statement of conformity to a specification, the decision rules applied are derived from the Ilac document ILAC G8:09/2019.

Acceptance limits (AL), applied are derived from the tolerance limits (TL) by you the client or applicable standard (e.g. 2003.33.EC Council Decision, BS3882, BS8601)

Agreed and reported Decision Rule:

"PASS" if the result < TL, and the bias / precision values for the process meet the targets defined within the methodology and/or applied accreditation.

Reported Decisions:

Result < TL for determinands: PASS

Result > TL for determinands: FAIL

Definitions Used:

Acceptance limit (AL) Specified upper or lower bounds of permissible measured quantity values.

Tolerance limit (TL) Specified upper or lower bound of permissible values of a property.

Accreditation of WAC/BS3882/BS8601

Accreditation in Soil to MCERTS is only applicable for specific matrix types identified as soil (Sand/Loam/Clay) during the sample assessment

If the sample is classified as not soil, not accreditation is conveyed

Certificate of Bulk Analysis for Asbestiform Materials

The samples were analysed using polarised light microscopy with dispersion staining in accordance with Acorn Analytical Services Limited documented in-house procedures based upon HSE document 'HSG248: The Analyst Guide'. Where Acorn Analytical Services Limited did not take the sample(s), the results given are based upon information supplied by those taking the sample(s). In this instance, Acorn Analytical Services Limited guarantees the accuracy of the sample analysis only. This test report should not be reproduced, except in full, without written permission from Acorn Analytical Services Limited. Opinions and interpretations raised on this certificate are outside the scope of UKAS accreditation, including product type.

Client and Site Details

Client Details	Site Address	Project Number
Black Rock Environmental Associates Ltd 16 Buckingham Crescent Clayton, Bradford West Yorkshire BD14 6EJ	Stainforth Construction Trinity Project	B-42384

Samples Taken By

Samples Taken By	Company	Date Samples Received
Client	Black Rock	24 May 2023

Bulk Analysis Results

Sample Reference	Product Type	Location	Description and Location of Material	Analysis Result
S001	Insulating Board	Trinity Project, Huddersfield	Thick wall board	No Asbestos Detected
S002	Insulating Board	Trinity Project, Huddersfield	Thin wall board	No Asbestos Detected

Signatures

Analysed and Issued By	Signature	Date
Darren Whitham		25 May 2023

Bulk samples are retained at the laboratory for a period of 6 months.

Certificate of Bulk Analysis for Asbestiform Materials

The samples were analysed using polarised light microscopy with dispersion staining in accordance with Acorn Analytical Services Limited documented in-house procedures based upon HSE document 'HSG248: The Analyst Guide'. Where Acorn Analytical Services Limited did not take the sample(s), the results given are based upon information supplied by those taking the sample(s). In this instance, Acorn Analytical Services Limited guarantees the accuracy of the sample analysis only. This test report should not be reproduced, except in full, without written permission from Acorn Analytical Services Limited. Opinions and interpretations raised on this certificate are outside the scope of UKAS accreditation, including product type.

Client and Site Details

Client Details	Site Address	Project Number
Black Rock Environmental Associates Ltd 16 Buckingham Crescent Clayton, Bradford West Yorkshire BD14 6EJ	Stainforth Construction Trinity Project	B-43556

Samples Taken By

Samples Taken By	Company	Date Samples Received
Client	Black Rock	10 August 2023

Bulk Analysis Results

Sample Reference	Product Type	Location	Description and Location of Material	Analysis Result
S001	Cement	Trinity Project Huddersfield	Flat sheet shards	Chrysotile
S002	Cement	Trinity Project Huddersfield	Ripped sheet shards	Chrysotile
S003	Cement	Trinity Project Huddersfield	Black pipes	No Asbestos Detected

Signatures

Analysed and Issued By	Signature	Date
Darren Whitham		10 August 2023

Bulk samples are retained at the laboratory for a period of 6 months.

Certificate of Bulk Analysis for Asbestiform Materials

The samples were analysed using polarised light microscopy with dispersion staining in accordance with Acorn Analytical Services Limited documented in-house procedures based upon HSE document 'HSG248: The Analyst Guide'. Where Acorn Analytical Services Limited did not take the sample(s), the results given are based upon information supplied by those taking the sample(s). In this instance, Acorn Analytical Services Limited guarantees the accuracy of the sample analysis only. This test report should not be reproduced, except in full, without written permission from Acorn Analytical Services Limited. Opinions and interpretations raised on this certificate are outside the scope of UKAS accreditation, including product type.

Client and Site Details

Client Details	Site Address	Project Number
Black Rock Environmental Associates Ltd 16 Buckingham Crescent Clayton, Bradford West Yorkshire BD14 6EJ	Stainforth Construction Trinity Project	B-43556

Samples Taken By

Samples Taken By	Company	Date Samples Received
Client	Black Rock	10 August 2023

Bulk Analysis Results

Sample Reference	Product Type	Location	Description and Location of Material	Analysis Result
S001	Cement	Trinity Project Huddersfield	Flat sheet shards	Chrysotile
S002	Cement	Trinity Project Huddersfield	Ripped sheet shards	Chrysotile
S003	Cement	Trinity Project Huddersfield	Black pipes	No Asbestos Detected

Signatures

Analysed and Issued By	Signature	Date
Darren Whitham		10 August 2023

Bulk samples are retained at the laboratory for a period of 6 months.

APPENDIX 08

Waste Removal Dockets



ANALYTICAL TEST REPORT

Contract no: 125993

Contract name: Stainforth Construction LLP, Trinity Project, Huddersfield

Client reference: -

Clients name: Black Rock Environmental Associates

Clients address: 16 Buckingham Crescent
Clayton, Bradford
West Yorkshire
BD14 6EJ

Samples received: 18 August 2023

Analysis started: 18 August 2023

Analysis completed: 30 August 2023

Report issued: 30 August 2023

Key

- U UKAS accredited test
- M MCERTS & UKAS accredited test
- \$ Test carried out by an approved subcontractor
- I/S Insufficient sample to carry out test
- N/S Sample not suitable for testing
- NAD No Asbestos Detected

Approved by:

E. McCulloch

Ellis McCulloch
Senior Reporting Administrator

Chemtech Environmental Limited

SAMPLE INFORMATION

MCERTS (Soils):

Soil descriptions are only intended to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions. MCERTS accreditation applies for sand, clay and loam/topsoil, or combinations of these whether these are derived from naturally occurring soils or from made ground, as long as these materials constitute the major part of the sample. Other materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Lab ref	Sample id	Depth (m)	Sample description	Material removed	% Removed	% Moisture
125993-1	Sample 1	-	Sand with Gravel & Roots	-	-	5.7

Chemtech Environmental Limited

SOILS

Lab number			125993-1
Sample id			Sample 1
Depth (m)			-
Date sampled			16/08/2023
Test	Method	Units	
Chromium (III)	CE208	mg/kg CrIII	19.7
Chromium (VI)	CE263	mg/kg CrVI	<0.04
Arsenic	\$ ^M	mg/kg	8.5
Cadmium	\$ ^M	mg/kg	0.2
Chromium	\$ ^M	mg/kg	19.7
Copper	\$ ^M	mg/kg	26.7
Lead	\$ ^M	mg/kg	75.0
Mercury	\$ ^M	mg/kg	0.2
Nickel	\$ ^M	mg/kg	7.1
Selenium	\$ ^M	mg/kg	< 1.0
Zinc	\$ ^M	mg/kg	69.7
pH	CE004 ^M	units	8.4
Cyanide (free)	CE077	mg/kg CN	<1
Phenols (total)	CE078	mg/kg PhOH	1.5
PAH			
Naphthalene	CE087 ^M	mg/kg	2.12
Acenaphthylene	CE087 ^M	mg/kg	0.14
Acenaphthene	CE087 ^M	mg/kg	2.77
Fluorene	CE087 ^U	mg/kg	2.07
Phenanthrene	CE087 ^M	mg/kg	18.43
Anthracene	CE087 ^U	mg/kg	4.85
Fluoranthene	CE087 ^M	mg/kg	21.19
Pyrene	CE087 ^M	mg/kg	19.06
Benzo(a)anthracene	CE087 ^U	mg/kg	9.01
Chrysene	CE087 ^M	mg/kg	9.42
Benzo(b)fluoranthene	CE087 ^M	mg/kg	9.77
Benzo(k)fluoranthene	CE087 ^M	mg/kg	3.88
Benzo(a)pyrene	CE087 ^U	mg/kg	7.54
Indeno(123cd)pyrene	CE087 ^M	mg/kg	5.70
Dibenz(ah)anthracene	CE087 ^M	mg/kg	1.28
Benzo(ghi)perylene	CE087 ^M	mg/kg	4.82
PAH (total of USEPA 16)	CE087	mg/kg	122
BTEX & TPH			
MTBE	CE192 ^U	mg/kg	0.16
Benzene	CE192 ^U	mg/kg	<0.01
Toluene	CE192 ^U	mg/kg	<0.01
Ethylbenzene	CE192 ^U	mg/kg	<0.01
m & p-Xylene	CE192 ^U	mg/kg	<0.02
o-Xylene	CE192 ^U	mg/kg	<0.01
VPH Aromatic (>EC5-EC7)	CE067	mg/kg	<0.01
VPH Aromatic (>EC7-EC8)	CE067	mg/kg	<0.01

Chemtech Environmental Limited

SOILS

Lab number	125993-1		
Sample id	Sample 1		
Depth (m)	-		
Date sampled	16/08/2023		
Test	Method	Units	
VPH Aromatic (>EC8-EC10)	CE067	mg/kg	<0.01
EPH Aromatic (>EC10-EC12)	CE250	mg/kg	<10
EPH Aromatic (>EC12-EC16)	CE250	mg/kg	<10
EPH Aromatic (>EC16-EC21)	CE250	mg/kg	89
EPH Aromatic (>EC21-EC35)	CE250	mg/kg	156
EPH Aromatic (>EC35-EC44)	CE250	mg/kg	29
VPH Aliphatic (>C5-C6)	CE067	mg/kg	<0.1
VPH Aliphatic (>C6-C8)	CE067	mg/kg	<0.1
VPH Aliphatic (>C8-C10)	CE067	mg/kg	<0.1
EPH Aliphatic (>C10-C12)	CE250	mg/kg	<6
EPH Aliphatic (>C12-C16)	CE250	mg/kg	<6
EPH Aliphatic (>C16-C35)	CE250	mg/kg	23
EPH Aliphatic (>C35-C44)	CE250	mg/kg	<10
Subcontracted Analysis			
Asbestos (qualitative)	\$	-	NAD

Chemtech Environmental Limited

METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE208	Chromium (III)	Calculation: Cr (total) - Cr (VI)	Dry		1	mg/kg CrIII
CE263	Chromium (VI)	Discrete Analyser	Dry			mg/kg CrVI
\$ ^M	Arsenic	Aqua regia digest, ICP-MS	Dry	M	0.5	mg/kg
\$ ^M	Cadmium	Aqua regia digest, ICP-MS	Dry	M	0.2	mg/kg
\$ ^M	Chromium	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg
\$ ^M	Copper	Aqua regia digest, ICP-MS	Dry	M	4	mg/kg
\$ ^M	Lead	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg
\$ ^M	Mercury	Aqua regia digest, ICP-MS	Dry	M	0.1	mg/kg
\$ ^M	Nickel	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg
\$ ^M	Selenium	Aqua regia digest, ICP-MS	Dry	M	1	mg/kg
\$ ^M	Zinc	Aqua regia digest, ICP-MS	Dry	M	4.5	mg/kg
CE004	pH	Based on BS 1377, pH Meter	As received	M	-	units
CE077	Cyanide (free)	Extraction, Continuous Flow Colorimetry	As received		1	mg/kg CN
CE078	Phenols (total)	Extraction, Continuous Flow Colorimetry	As received		0.5	mg/kg PhOH
CE087	Naphthalene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Acenaphthylene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Acenaphthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Fluorene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Phenanthrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Anthracene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Fluoranthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Pyrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(a)anthracene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Chrysene	Solvent extraction, GC-MS	As received	M	0.03	mg/kg
CE087	Benzo(b)fluoranthene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(k)fluoranthene	Solvent extraction, GC-MS	As received	M	0.03	mg/kg
CE087	Benzo(a)pyrene	Solvent extraction, GC-MS	As received	U	0.02	mg/kg
CE087	Indeno(123cd)pyrene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Dibenz(ah)anthracene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	Benzo(ghi)perylene	Solvent extraction, GC-MS	As received	M	0.02	mg/kg
CE087	PAH (total of USEPA 16)	Solvent extraction, GC-MS	As received		0.34	mg/kg
CE192	MTBE	Headspace GC-FID	As received	U	0.02	mg/kg
CE192	Benzene	Headspace GC-FID	As received	U	0.01	mg/kg
CE192	Toluene	Headspace GC-FID	As received	U	0.01	mg/kg
CE192	Ethylbenzene	Headspace GC-FID	As received	U	0.01	mg/kg
CE192	m & p-Xylene	Headspace GC-FID	As received	U	0.02	mg/kg
CE192	o-Xylene	Headspace GC-FID	As received	U	0.01	mg/kg
CE067	VPH Aromatic (>EC5-EC7)	Headspace GC-FID	As received		0.01	mg/kg
CE067	VPH Aromatic (>EC7-EC8)	Headspace GC-FID	As received		0.01	mg/kg
CE067	VPH Aromatic (>EC8-EC10)	Headspace GC-FID	As received		0.01	mg/kg
CE250	EPH Aromatic (>EC10-EC12)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC12-EC16)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC16-EC21)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE250	EPH Aromatic (>EC21-EC35)	Solvent extraction, GCxGC-FID	As received		1	mg/kg

Chemtech Environmental Limited

METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE250	EPH Aromatic (>EC35-EC44)	Solvent extraction, GCxGC-FID	As received		1	mg/kg
CE067	VPH Aliphatic (>C5-C6)	Headspace GC-FID	As received		0.1	mg/kg
CE067	VPH Aliphatic (>C6-C8)	Headspace GC-FID	As received		0.1	mg/kg
CE067	VPH Aliphatic (>C8-C10)	Headspace GC-FID	As received		0.1	mg/kg
CE250	EPH Aliphatic (>C10-C12)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C12-C16)	Solvent extraction, GCxGC-FID	As received		6	mg/kg
CE250	EPH Aliphatic (>C16-C35)	Solvent extraction, GCxGC-FID	As received		15	mg/kg
CE250	EPH Aliphatic (>C35-C44)	Solvent extraction, GCxGC-FID	As received		10	mg/kg
\$	Asbestos (qualitative)	HSG 248, Microscopy	Dry	U	-	-

Chemtech Environmental Limited

DEVIATING SAMPLE INFORMATION

Comments

Sample deviation is determined in accordance with the UKAS note "Guidance on Deviating Samples" and based on reference standards and laboratory trials.

For samples identified as deviating, test result(s) may be compromised and may not be representative of the sample at the time of sampling.

Chemtech Environmental Ltd cannot be held responsible for the integrity of sample(s) received if Chemtech Environmental Ltd did not undertake the sampling. Such samples may be deviating.

Key

N	No (not deviating sample)
Y	Yes (deviating sample)
NSD	Sampling date not provided
NST	Sampling time not provided (waters only)
EHT	Sample exceeded holding time(s)
IC	Sample not received in appropriate containers
HP	Headspace present in sample container
NCF	Sample not chemically fixed (where appropriate)
OR	Other (specify)

Lab ref	Sample id	Depth (m)	Deviating	Tests (Reason for deviation)
125993-1	Sample 1	-	Y	BTEX (IC), Phenols (IC), PAH (IC), TPH (IC), VPH (IC), PCB (IC)

Chemtech Environmental Limited

ADDITIONAL INFORMATION

Notes

Opinions and interpretations expressed herein are outside the UKAS accreditation scope.

Unless otherwise stated, Chemtech Environmental Ltd was not responsible for sampling.

All testing carried out at Unit 6 Parkhead, Stanley, DH9 7YB, except for subcontracted testing.

Methods, procedures and performance data are available on request.

Results reported herein relate only to the material supplied to the laboratory.

This report shall not be reproduced except in full, without prior written approval.

Samples will be disposed of 4 weeks from initial receipt unless otherwise instructed.

BTEX compounds are identified by retention time only and may include interference from co-eluting compounds.

For soils and solids, all results are reported on a dry basis. Samples dried at no more than 30°C in a drying cabinet.

For soils and solids, analytical results are inclusive of stones, where applicable.

Moisture Content Calculated on a Wet Weight basis

Waste Acceptance Criteria Testing BS EN 12457-Part 3, 2 Stage Process

Sample Details

Contract Name	Stainforth Construction LLP, Trinity Project
Lab Number	125993-1
Sample ID	Sample 1
Date Sampled	16 August 2023
Date Received	18 August 2023
Particle Size (<4mm)	-
Method of size reduction	N/A
Non-crushable matter	N/A

Test Values

Mass of Raw Test Portion (MW) kg	0.186
Mass of Dried Test Portion (MD) kg	0.175
Moisture Content Ratio (MC) %	6.05
Dry Matter Content Ratio (DR) %	94.30
Leachant Volume (1) (L2) Litre	0.339
Leachant Volume (2) (L8) Litre	1.400
Eluate Volume (1) (VE1) Litre	0.220
Eluate Volume (2) (VE2) Litre	1.260

Eluate Analysis	Conc in Eluate	
	2:1	8:1
Liquid : Waste Ratio	2:1	8:1
pH (units) ²	7.5	8.4
Temperature (°C)	20	20
Conductivity (µS/cm) ²	966	267
Antimony (µg/l Sb) ²	2.99	2.54
Arsenic (µg/l As) ²	4.51	7.41
Barium (µg/l Ba) ²	55.9	9.7
Cadmium (µg/l Cd) ²	<0.1	7.15
Chromium (µg/l Cr) ²	31.4	10.1
Copper (µg/l Cu) ²	24.8	22.6
Lead (µg/l Pb) ²	<0.6	<0.6
Mercury (µg/l Hg) ²	0.024	<0.05
Molybdenum (µg/l Mo) ²	29.4	5.7
Nickel (µg/l Ni) ²	2.4	0.6
Selenium (µg/l Se) ²	4.23	2.76
Zinc (µg/l Zn) ²	<3.5	<3.5
Chloride (mg/l Cl) ²	12	1.7
Fluoride (mg/l F) ²	0.9	0.4
Sulphate (mg/l SO ₄) ²	629	76
Total Dissolved Solids (mg/l TDS)	734	203
Phenol Index (µg/l PhOH)	<10	<10
Dissolved Organic Carbon (mg/l C)	34	29

Amount Leached		Council Decision 2003/33/EC Limit Values mg/kg at L:S 10:1		
2:1 mg/kg	10:1 mg/kg	Inert Waste	Non-reactive Hazardous Waste	Hazardous Waste
0.006	0.026	0.06	0.7	5
0.009	0.070	0.5	2	25
0.112	0.155	20	100	300
<0.0002	<0.0626	0.04	1	5
0.063	0.128	0.5	10	70
0.050	0.229	2	50	100
<0.0004	<0.006	0.5	10	50
0.00005	<0.00047	0.01	0.2	2
0.059	0.087	0.5	10	30
0.005	0.008	0.4	10	40
0.008	0.030	0.1	0.5	7
<0.002	<0.035	4	50	200
24	30	800	15000	25000
1.8	4.3	10	150	500
1259	1453	1000	20000	50000
1468	2697	4000	60000	100000
<0.02	<0.1	1		
68	296	500	800	1000

Waste Analysis	Units	Result			
Total Organic Carbon	% w/w	1.4	3%	5%	6%
Loss on Ignition	% w/w	2.7			10%
BTEX	mg/kg	<0.06	6		
PCBs (7 congeners)	mg/kg	<0.045	1		
Mineral Oil (C10 - C40)	mg/kg	531	500		
PAH (total)	mg/kg	123	100		
pH ¹	pH units	8.4		>6	
Acid Neutralisation Capacity (pH4)	mol/kg	0.74		To be evaluated	
Acid Neutralisation Capacity (pH7)	mol/kg	0.08		To be evaluated	

Units	Result			
% w/w	1.4	3%	5%	6%
% w/w	2.7			10%
mg/kg	<0.06	6		
mg/kg	<0.045	1		
mg/kg	531	500		
mg/kg	123	100		
pH units	8.4		>6	
mol/kg	0.74		To be evaluated	
mol/kg	0.08		To be evaluated	

¹ Results are accredited to MCERTS if matrix confirmed as soil

² Results in leachate are accredited to ISO17025

Disclaimer: The Landfill Waste Acceptance Criteria limits in this report are provided for guidance only and values are transcribed from the Council Decision annex 2003/33/EC. Chemtech Environmental Ltd does not take responsibility for any errors or omissions in the transcription, and all data should be verified by the end user. Results will be colour flagged to the lowest threshold value breached. Any assessments made are based on the published results from the Laboratory and make no assessment of uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. Method uncertainty levels can be provided. Interpretation/assessment is outside the scope of the laboratory's UKAS accreditation. Moisture Content Calculated on Wet Weight Basis

Comments

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Vat Reg No. 772 5703 18 Registered in England number 4284013

Chemtech Environmental Limited

METHOD DETAILS

METHOD	SOILS	METHOD SUMMARY	SAMPLE	STATUS	LOD	UNITS
CE001	Moisture Content	Gravimetry, reported on Wet Weight basis	As received		0.1	% w/w
CE004	pH	Based on BS 1377, pH Meter	As received	M	-	units
CE083	Acid Neutralisation Capacity	Titration	Dry		0.01	mol/kg
CE144	Ammoniacal Nitrogen as N	KCl extraction, Colorimetry	As received		1	mg/kg N
CE007	Electrical conductivity	Conductivity Meter	As received	U	10	µS/cm
CE197	Total Organic Carbon (TOC)	Carbon Analyser	Dry		0.1	% w/w C
CE006	Loss On Ignition at 440°C	Based on BS 1377, Gravimetry	Dry	U	0.1	% w/w
CE087	PAH (total of 17)	Solvent extraction, GC-MS	As received		0.36	mg/kg
CE192	BTEX (total)	Headspace GC-FID	As received		0.06	mg/kg
CE194	Mineral Oil (>C10-C40) silica clean up	Solvent extraction, clean-up, GC-FID	As received		16	mg/kg
CE137	PCB (total of ICES 7)	Solvent extraction, GC-MS	As received		0.045	mg/kg
CE128	Antimony (dissolved)	ICP-MS		U	0.1	µg/l Sb
CE128	Arsenic (dissolved)	ICP-MS		U	0.06	µg/l As
CE128	Barium (dissolved)	ICP-MS		U	0.6	µg/l Ba
CE128	Cadmium (dissolved)	ICP-MS		U	0.07	µg/l Cd
CE128	Chromium (dissolved)	ICP-MS		U	0.2	µg/l Cr
CE128	Copper (dissolved)	ICP-MS		U	0.4	µg/l Cu
CE128	Lead (dissolved)	ICP-MS		U	0.2	µg/l Pb
CE128	Mercury (dissolved)	ICP-MS		U	0.008	µg/l Hg
CE128	Molybdenum (dissolved)	ICP-MS		U	0.3	µg/l Mo
CE128	Nickel (dissolved)	ICP-MS		U	0.5	µg/l Ni
CE128	Selenium (dissolved)	ICP-MS		U	0.07	µg/l Se
CE128	Zinc (dissolved)	ICP-MS		U	1	µg/l Zn
CE213	pH	Based on BS 1377, pH Meter		U	-	units
CE214	Electrical conductivity	Conductivity Meter		U	10	µS/cm
CE049	Chloride	Ion Chromatography		U	0.5	mg/l Cl
CE049	Fluoride	Ion Chromatography		U	0.1	mg/l F
CE049	Sulphate	Ion Chromatography		U	1.7	mg/l SO ₄
CE148	Phenols (total)	Continuous Flow Colorimetry			10	µg/l PhOH
CE039	Total dissolved solids	TDS meter			10	mg/l TDS
CE247	Total Organic Carbon	Filtration, Combustion TOC analyser			5	mg/l C

Statement of Conformity

Statement of Conformity

Where Chemtech reports a statement of conformity to a specification, the decision rules applied are derived from the Ilac document ILAC G8:09/2019.

Acceptance limits (AL), applied are derived from the tolerance limits (TL) by you the client or applicable standard (e.g. 2003.33.EC Council Decision, BS3882, BS8601)

Agreed and reported Decision Rule:

"PASS" if the result < TL, and the bias / precision values for the process meet the targets defined within the methodology and/or applied accreditation.

Reported Decisions:

Result < TL for determinands: PASS

Result > TL for determinands: FAIL

Definitions Used:

Acceptance limit (AL) Specified upper or lower bounds of permissible measured quantity values.

Tolerance limit (TL) Specified upper or lower bound of permissible values of a property.

Accreditation of WAC/BS3882/BS8601

Accreditation in Soil to MCERTS is only applicable for specific matrix types identified as soil (Sand/Loam/Clay) during the sample assessment

If the sample is classified as not soil, not accreditation is conveyed

The Hazardous Waste Regulations 2005: Consignment Note

PART A Notification details

1 Consignment note code: 3 The waste will be taken to (name, address and postcode):
 Foxhall Environmental Ltd Foxhall Farm Owler Lane Birstall WF17 9BW

2 The waste described below is to be removed from (name, address, postcode, telephone, e-mail, facsimile):
 Trinity One , Fitzwilliam Street, Huddersfield, United Kingdom, HD1 5PH

4 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):

PART B Description of the waste

If continuation sheet used, tick here

1 The process giving rise to the waste(s) was: Removal 2 SIC (2007) for process giving rise to the waste: /

3 WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of waste	List of wastes (EWC code)(6 digits)	Quantity (kg)	The chemical/biological components in the waste and their concentrations are:		Physical form (gas, liquid, solid, powder, sludge or mixed)	Hazard code(s)	Container type, number and size
			Component	Concentration (% or mg/kg)			
Asbestos	1 7 0 6 0 5	12 Bags/	Chrysotile	Less than 25%	Solid	HP5/7	VanVan

The information given below is to be completed for each EWC identified

EWC code	UN identification numbers(s)	Proper shipping name(s)	UN Class(es)	Packing group(s)	Special handling requirements
1 7 0 6 0 5	2590	Chrysotile	9	III	Manual Only

PART C Carrier's certificate

PART D Consignor's certificate

(If more than one carrier is used, please attach schedule for the subsequent carriers. If schedule of carriers is attached tick here:)

I certify that today I collected the consignment and that the details in A2, A3 and B3 are correct and I have been advised of any specific handling requirements

Where this note comprises part of a multiple collection the round number and collection number are:

/

1 Carrier name: Brad Brannan
 On behalf of (name, address, postcode, telephone, e-mail, facsimile)

Foxhall Environmental Services Ltd, Owler Lane, Birstall, WF17 9BW, +443301188777, info@foxhall-ltd.co.uk

2 Carrier registration no./reason for exemption: CBDU220386

3 Vehicle registration no. (or mode of transport, if not road): DA18 VRK

Signature

Date: 21-08-2023

Time 12:18

I certify that the information in A, B and C has been completed and is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

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

1 Consignor name: chris
 On behalf of (name, address, postcode, telephone, e-mail, facsimile):

Signature

Date 21-08-2023

Time 12:19

PART E Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s) received	Quantity of each EWC code received (kg)	EWC code accepted/rejected	Waste management operation (R or D code)
1 7 0 6 0 5	12 Bags/ pipes	Accepted	D5

1 I received this waste at the address given in A3 on:

Date 21-08-2023

Time 12:58

2 Vehicle registration no. (or mode of transport is not road): DA18 VRK

Name: taylor
 On behalf of (name, address, postcode, telephone, e-mail, facsimile)

3 Where waste is rejected please provide details:

Foxhall Environmental Services Ltd, Owler Lane, Birstall, WF17 9BW, +443301188777

I certify that waste/permit exempt waste operation number:

Foxhall FP3297LP

authorises the management of the waste described in B at the address given in A3.

Signature

Where the consignment forms part of a multiple collection, as identified in part C, I certify that the total number of consignments forming the collection are:

Date 21-08-2023

Time 12:59

APPENDIX 09
Air Monitoring Results

Daily Analytical Paperwork

Daily Site Reference Log

Project No.:	B-42226	Report No.:	77583	Page	1	of	3
Client Details		Site Details		Start Time:			
Client Name:	Black Rock	Site Address:	Former Trinity College Huddersfield HD1 5JY	Contractor:		N/A	
Address:	Environmental Associates LTD 16 Buckingham Crescent BD14 6EJ			Contract Foreman:		N/A	
				No. Additional Operatives:		N/A	
Contact:	Hywel Wilcox			Start Time:		0800	
Tel No.:	01274 814 384			Finish Time:		1200	
Email:	hfwilcox@aol.com						

Description of Works

Acorn Analytical Services are on site at the Former Trinity College for the provision of Air Monitoring during the ripping up and crushing of concrete slabs and foundations.

Site Diary:

Acorn arrive on site and sign in at site cabins.

Air Monitoring commences 0929.

Air Monitoring completed 1042.

All Air test results are satisfactory, With a fibre concentration level of <0.010f/ml.

Acorn leave site.

Analyst Name:	Rayhaan Bhana	Signed:	<i>Rbhana</i>	Date:	15/05/2023
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Daily Analytical Paperwork Air Monitoring Certificate



Project No.:	B-42226	Certificate No.:	77583	Page Number	2	of	3	
Client Details			Site Details			Microscope No		600775
Name:	Black Rock	Site Address:	Former Trinity College Huddersfield HD1 5JY	Stage Micrometer		SM29		
Address:	Environmental Associates LTD 16 Buckingham Crescent BD14 6EJ			NPL Test Slide Number		7796		
				Visible Bands		5		
Contact:	Hywel Wilcox			Flow Meter		HF67		
Tel No.:	01274 814 384	Contractor			Measured Graticule Diameter (um) - d		100	
Email:	hfwilcox@aol.com	N/A			Tally Counters		53&54	Stopwatch ##SW64
				Diameter of exposed filter (mm) - D		22.4	Batch No 4797	

This certificate is issued in accordance with the documented in-house method for carrying out air sampling and fibre analysis procedures which is accredited by UKAS and follows the guidance set out in HSG248 (Edition 2)

Test Conditions						
BT	LT	RT	SF	FS	NS	
Background Test	Leakage Test	Reassurance Test	Site Field Blank	Far Source Monitoring	Near Source Monitoring	

Sample No.	Pump No.	Cowl No.	Test	Pump Location	Time		Sample Time (T)	Flow Rate (l/m)			Volume (V) (V=T*F)	Fibres (N)	Fields (n)	Limit of Quantification	Respirable fibre concentration		Analyst
					Start	Finish		Initial Flow	Final Flow	Average Flow (F)					Calculated Result f/ml	Recorded Result f/ml	
1	N/A	284	SF	To area of work and back	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5	100	Satisfactory		RB	
2	AC14	34	FS	Adjacent to Site Cabins	0929	1035	66	8.5	8.5	8.5	561	0.5	172	0.010	0.000	<0.010	RB
3	AC78	108	FS	Adjacent to Remedial Works	0931	1038	67	8.5	8.5	8.5	570	1	169	0.010	0.001	<0.010	RB
4	AC98	248	FS	Within Site Perimeter	0932	1039	67	8.5	8.3	8.4	563	0.5	171	0.010	0.000	<0.010	RB
5	AC120	270	FS	Within Site Perimeter	0933	1041	68	8.5	8.0	8.3	561	0.5	172	0.010	0.000	<0.010	RB
6	AC293	271	FS	Adjacent to Remedial Works	0934	1042	68	8.5	8.5	8.5	578	0.5	167	0.010	0.000	<0.010	RB
7				END													
8																	
9																	
10																	
11																	
12																	
Analyst Name:				Rayhaan Bhana	Signed:			<i>Rbhana</i>					Date:		15/05/2023		

Daily Analytical Paperwork Diagram Photo Reference Sheet

Project No.:	B-42226	Report No.:	77583	Page	3	of	3
Client Details		Site Details		Key to Diagram			
Client Name:	Black Rock	Site Address:	Former Trinity College Huddersfield HD1 5JY		Airlock/Baglock Chamber	- - - -	Enclosure Material
Address:	Environmental Associates LTD 16 Buckingham Crescent BD14 6EJ				Negative Pressure Unit	2	Pump Location and Sample No.
Contact:	Hywel Wilcox			Contractor:			
Tel No.:	01274 814 384	N/A					
Email:	hfwilcox@aol.com						

Diagram



Analyst Name:	Rayhaan Bhana	Signed:	Rbhana	Date:	15/05/2023
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APPENDIX 10

Blackrock Environmental Associates Ltd Asbestos Remediation Report

Company Reg: 03560476

VAT Reg: 708 2839 21

EA Reg: CB DU 118222

Telephone: 01274 814384

BLACK ROCK
ENVIRONMENTAL ASSOCIATES LTD

Fax: 01274 413906

Mobile: 07831 509131

16 Buckingham Crescent
Clayton
Bradford
West Yorkshire
BD14 6EJ

Email: hfwilcox@aol.com

8th March 2023

HFW/no/StC/Trinity/37

Stainforth Construction LLP – Former Trinity College Project – Huddersfield Asbestos Remediation Exercises 2023-2024

PREAMBLE

Stainforth Construction LLP was/is the Main Contractor for the Project at the Former Trinity College Complex, at North Road in Huddersfield. The Contract was/is to progressively demolish certain residual buildings and use processed aggregate to lay an engineered construction base for a proposed supermarket.

The Environmental and Engineering Consultant for the Project was/is WML Consultants Ltd of Cheshire.

Stainforth and WML remained in contact and consultation throughout the exercise. WML conveyed the progress and details of planning compliance, controls and conditions that had been agreed with Kirklees Council etc.

THE PROGRAMMED REMOVAL OF ASBESTOS

- (1) The bulk of the Asbestos arose from the soft-stripping and hard-stripping of the inherited college buildings. This work was conducted by a specialist Demolition and Asbestos-Removal Contractor... Messrs Metropolitan Ltd of Horbury, Wakefield.

- (2) The residual masonry and concrete fabric of stripped buildings was crushed by Metropolitan to create a (Highways Agency) 6F2 – Grade Aggregate. The 6F2 Aggregate was the product laid to create an engineered (vibro-rolled) construction base for the programmed Supermarket construction.

The processed aggregate was compacted in designated layers and tested on a grid basis as the elevation increased. Black Rock was not involved in the on-site testing programme.

- (3) The Asbestos stripped by Metropolitan was double-bagged and exported as Hazardous Waste in sealed rolloff skip containers provided by Foxhall Ltd of Batley.

Metropolitan produced progress reports and completion reports during the overall demolition and stripping project.

Initial Phase of Remediation: Demolition Proceeding on Site



STAINFORTH CHECKS ON FEEDSTOCK

- (4) Stockpiles of feedstock concrete and masonry, generated by the demolition programme, were monitored by Stainforth for Visual Residual Asbestos presence. Trace Asbestos presence was determined by laboratory Analysis of Crushed 6F2 Construction Aggregate.

- (5) Some pieces of broken board outside a stripped building were suspected to comprise Asbestos-Bearing Panelling. The area was quarantined until samples were assayed by Acorn Ltd and shown to be free of Asbestos. The material was exported from Site.



EXTERNAL PHYSICAL AND CHEMICAL TESTING

- (6) The physical testing programme (grading-compliance) was contracted to White Rose Laboratory of Castleford. The procedure included external Asbestos Assay by a specialist UKAS-registered Laboratory.

Representative Samples of Crushed Aggregate Removed for Physical and Chemical Testing	Vibro-rolled Aggregate Laid in Layers of Nominated Depth with Nominated Passes	Strength-Tested by California Bearing Ratio ('CBR')
		

- (7) The chemical testing programme for Crushed Aggregates was delegated to Black Rock. Representative samples were analysed by Chemtech Ltd, an MCERTS-registered Laboratory in Durham.

Chemtech relayed the samples for Asbestos Assay at a specialist UKAS-registered Laboratory within its parent group. The minimum turnaround for results is now set (by recent legislation) at 5 working days.

- (8) The examination and assay of discrete shards of suspected Asbestos was conducted by Acorn Ltd of Cleckheaton. The company offers a 24-hour turnaround service.

- (9) Airborne Fibre Monitoring was conducted at boundaries and sensitive points by Acorn (for a routine monitoring of the crushing operation) and by Inspectas Ltd, of Ossett, (when pockets of historically buried broken shards were found in excavations to cap a former Mineshaft).

In both cases, the Airborne Fibre Count was below 0.01 Fibres per Millilitre (f/ml). This is the accepted concentration that allows office workers etc to re-occupy an Asbestos-stripped building.

Precautionary Airborne Fibre Monitoring was Conducted at Sensitive Positions During Concrete Crushing and during a Treatment / Removal Operation for Asbestos-Contaminated Made ground.



The Air Quality Proved to Retain Less Than 0.01 Fibres per Millilitre



WML CONSULTING LTD: INTRUSIVE GROUND INVESTIGATION

(10) In advance of the Earthworks and Groundworks Programmes, WML commissioned an intrusive investigation of the recumbent Made Ground and underlying Natural Ground. Trial Pits were dug by Stainforth and representative Soil Samples were removed by Black Rock at the direction of WML.

(11) No Asbestos presence was visible and/or revealed by Assay under the Trial Pitting Programme.

Initial WML Consulting Ltd Sampling of Inherited Natural Ground and Made Ground at the Site.



Initial WML Consulting Ltd Sampling of Inherited Natural Ground and Made Ground at the Site



TRAMP ASBESTOS CEMENT SHARDS STRUCK IN MADE GROUND

(12) A pocket of broken Asbestos Cement Shards was struck in Made Ground being excavated for Boundary Concrete Works, including the capping of a former Mineshaft.

The Contaminated Excavations:

- were initially inspected, picked and bagged at the point of arising
- the picked matrix was removed to a Quarantine Zone and spread for manual secondary picking by Black Rock.

(13) Manually-Picked Shards were double-bagged in specialist Asbestos Sacks ... red inner bag and clear "white" outer bag. The Bags were removed as Hazardous Waste by Foxhall Ltd, a specialist Hazardous Waste Transfer and Transport Contractor.

Asbestos Shards Struck in Made-Ground Excavated for Boundary Concrete Foundation Works



Shards Initially Picked and Double-Bagged at Source.



Manually-Picked Soil Matrix Transferred to a Quarantine Zone for Secondary Picking



**The Double-Picked Made Ground Matrix was Sealed in Membrane Pending 5-Day Asbestos Assay Results.
The Residual Stockpile Recorded no Asbestos Fibres in the Sampled Matrix**



**The Made Ground Matrix was Eligible to Remain on Site beneath a programmed Landscape Area
It was Preferentially Buried at a Suitable Depth (Red Line) and Clad with Compacted Natural Soil at the Site.**



SUSPECTED ASBESTOS ARISING: TESTED TO BE FREE OF ASBESTOS

- (14) Excavations for the capping of a historic Mineshaft, allied to preparatory works for pedestrian access to the Supermarket struck a series of historical drainage pipes.

The Composite Tarmac /Plastic Pipes looked Identical to Asbestos Bearing Pipes previously struck at a (different site) former filling station.

The pipes were immediately segregated double-wrapped in "Asbestos"-labelled plastic sacks but were assayed to Free of Asbestos.

To prevent concern at a "routine" disposal outlet, the Pipes were exported along with the Bagged Asbestos Shards segregated from neighbouring excavations

Composite Tarmac /Plastic Water Pipes were Segregated on Exposure and Double-Wrapped in Asbestos Sacks. They were Assayed to be Free of Asbestos but Exported along with other bagged Asbestos Shards



NB1: Copies of Analysis Reports and a detailed Photoplate are provided as separate documents in the overall Validation Package

NB2: Black Rock had no involvement or responsibility regarding Asbestos-bearing components arising from the stripping and/or demolition of former College buildings at the development.

CONCLUSION

Black Rock has no reason to doubt that the overall Asbestos Identification & Remediation Exercise has been conducted with best endeavour by Stainforth Construction LLP. The Monitoring and Remedial exercises for contaminated excavations have been applied in line with standard practice within the construction industry. No Asbestos residues have been found in sample batches of crushed aggregate. As such, any identified Asbestos presence has been addressed, with control measures implemented.

Hywel Wilcox

Director

The Hazardous Waste Regulations 2005: Consignment Note



PART A Notification details

- 1 Consignment note code:
- 2 The waste described below is to be removed from (name, address, postcode, telephone, email, facsimile):
Foxhall Environmental Ltd Foxhall Farm Ower Lane Birstall WF17 9BW
- 3 The waste will be taken to (name, address and postcode):
Tunstall Cms, Flaxwellian Street, Huddersfield, United Kingdom, HD1 5PH
- 4 The waste producer was (if different from 2) (name, address, postcode, telephone, e-mail, facsimile):

PART B Description of the waste

- 1 The process giving rise to the waste(s) was: Removal
- 2 SIC (2007) for process giving rise to the waste: 36.00 /
- 3 WASTE DETAILS (where more than one waste type is collected all of the information given below must be completed for each EWC identified)

Description of waste	List of wastes (EWC code(s) (5 digits))	Quantity (kg)	The chemical/biological components in the waste and their concentrations are:					Physical form (pails, liquids, solid, powder, sludge or mixed)	Hazard code(s)	Container type, number and size
			Component	Concentration (% or mg/kg)	Less than 36%	Solid	HPS7			
Asbestos	1 7 0 6 0 5	12 Bags/	Chrysotile	Less than 36%	Solid	HPS7	Van/Van			

The information given below is to be completed for each EWC identified

EWC code	UN identification number(s)	Proper shipping name(s)	UN Class(es)	Packing group(s)	Special handling requirements
1 7 0 6 0 5	2500	Chrysotile	9	III	Manual Only

PART C Carrier's certificate

If more than one carrier is used, please attach schedule for the subsequent carrier(s). If schedule of carriers is attached tick here:

I certify that today I collected the consignment and that the details in A2, A3 and B6 are correct and I have been advised of any specific handling requirements

Where this note comprises part of a multiple collection the round number and collection number are:

1 Carrier name: Brett Brennan
On behalf of (name, address, postcode, telephone, email, facsimile)

Foxhall Environmental Services Ltd, Ower Lane, Birstall, WF17 9BW, +443301188777, info@foxhall.co.uk

2 Carrier registration no./exemption (or exemption: CBED1220185)

3 Vehicle registration no. (or mode of transport, if not road): DA16 YRK

Signature:  Date: 21-06-2023 Time: 12:16

PART D Consignor's certificate

I certify that the information in A, B and C has been completed and is correct, that the carrier is registered or exempt and I was advised of the appropriate precautionary measures. All of the waste is packaged and labeled correctly and the carrier has been advised of any special handling requirements.

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12.9 of the Waste (England and Wales) Regulations 2011.

1 Consignor name, chris
On behalf of (name, address, postcode, telephone, email, facsimile):

Signature:  Date: 21-06-2023 Time: 12:19

PART E Consignee's certificate (where more than one waste type is collected all of the information given below must be completed for each EWC)

Individual EWC code(s)

Quantity of each EWC code received (kg)

EWC code accepted/rejected

Waste management operation (R or D code)

1 7 0 6 0 5

12 Bags/

Accepted

D6

1 I received this waste at the address given in A3 or:

Signature:  Time: 12:58

2 Vehicle registration no. (or mode of transport is not road): DA16 YRK

3 Where waste is rejected please provide details:

Name: Taylor
On behalf of (name, address, postcode, telephone, email, facsimile)

Foxhall Environmental Services Ltd, Ower Lane, Birstall, WF17 9BW, +443301188777

I certify that waste permit exempt waste operation number:

Signature: 

I authorise the management of the waste described in B at the address given in A3.

Where the consignment forms part of a multiple collection, as identified in part C, I certify that the total number of consignments forming the collection are:

Date: 21-06-2023 Time: 12:59



1-11 Compliance Group Ltd
1200 Century Park
Leeds

www.111cgl.co.uk

0844 3722 826

info@111cgl.co.uk



Non-Licensed Refresher - Manager

Candidate: Hywel Wilcox

The candidate named above has attended and passed, via assessment the above titled asbestos training course in line with requirements of Regulation 10 of the Control of Asbestos Regulations 2012

Trainer : Paul Beaumont

Date of Training : 25/08/2023

Date of Expiry : 24/08/2024

(This certificate expires 12 months from date of issue)

Certificate Number : IATP0000044036



To check the validity of this certificate, scan the QR Code or visit: <https://www.iatp.org.uk>