Validation Report

Site: Bennett Street, Manchester
Reference: 15-974-R6-4
Date: February 2025



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Report reference	**15-974-R6**

REV REF:	DESCRIPTION	AUTHOR	CHECKED	AUTHORISED	DATE
R6-1	First issue – Phase 1	JB	MSD	MD	March 2024
R6-2	Phase 1	JB	MSD	MD	April 2024
R6-3	Draft - Full Validation of Site Wide Works	GC	MSD	MD	January 2025
R6-4	Full Validation of Site Wide Works	GC	MSD	MD	February 2025

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EXECUTIVE SUMMARY

REMEDIATION AND ENABLING WORK OBJECTIVES:

RE-NUMBER	OBJECTIVE	SUMMARY
RE-1	Pre-commencement Regulatory Compliance	**Complete No Further Action:** Overview provided in Section 2
RE-2	Environment and Nuisance Control	**Complete No Further Action:** Overview provided in Section 2
RE-3	Risk to Infrastructure and Culverts	**Complete No Further Action:** Overview provided in Section 2
RE-4	Identification, Isolation and Treatment of Invasive Plants	**Complete No Further Remedial Action:** Overview provided in Japanese Knotweed Solutions Report: JK23/9266 Ongoing monitoring by Nightingale Environmental Limited over 2 year period.
RE-5	Site Clearance Operations	**Complete No Further Action:** Overview provided in Section 2
RE-6	Delineation, Excavation and Treatment of Identified Asbestos Impact	**Complete No Further Action:** Overview provided in Section 2
RE-7	Delineation, Excavation, Treatment and Disposal of Visual and Olfactory Semi-volatile Impacted Material – TPH, Naphthalene, SVOC	**Complete No Further Action:** Overview provided in Section 2
RE-8	Excavation, Breaking and Processing of All Above- and Below-Ground Structures	**Complete No Further Action:** Overview provided in Section 2
RE-9	Delineation, Excavation and Treatment of Infilled Historical Ponds	**Complete No Further Action:** Overview provided in Section 2
RE-10	Removal of Deleterious Material	**Complete No Further Action:** Overview provided in Section 2
RE-11	Removal of Above Ground Storage Tanks (ASTs)	**Complete No Further Action:** Overview provided in Section 2
RE-12	Investigation and Removal of Underground Storage Tanks (USTs)	**Complete No Further Action:** Overview provided in Section 2
RE-13	Cut-And-Filling of MADE GROUND to Development Levels	**Complete No Further Action:**

RE-NUMBER	OBJECTIVE	SUMMARY
		Overview provided in Section 2
RE-14	Placement and Compaction of Upfill Material to Facilitate Ground Improvement by Vibro Stone Column (VSC)	**Complete No Further Action:** Overview provided in Section 2
RE-15	Construction of Temporary Working Platform	**Complete No Further Remedial Action:** Overview provided in Section 2. Civil contractor to undertake further CBR testing on roads for adoption – not required as part of remediation works package.
RE-16	Replacement of Materials, Geotechnical Engineering Requirements	**Complete No Further Action:** Overview provided in Section 2
RE-17	Preparation of Ground for Vibro-Stone Columns Within Tree Influence	**Complete No Further Action:** Overview provided in Section 2
RE-18	Importation of Bulk Fill	**Complete No Further Action:** No Imported Fill Required
RE-19	Preparation of Garden for Cover System	**Complete No Further Action:** Overview provided in Section 2
RE-20	Provision of Subsoil	**Build Phase Item** -Not part of remediation works package. -Compliance testing of subsoil will be included within garden validation letters for each plot as agreed with Manchester City Council. -CL:AIRE MMP will be updated for each additional subsoil donor site. -Summary of testing undertaken to date included within Section 2.
RE-21	Provision of Topsoil	**Build Phase Item** -Not part of remediation works package. -Compliance testing of topsoil will be included within garden validation letters for each plot as agreed with Manchester City Council. -CL:AIRE MMP will be updated for each additional topsoil donor site. -Summary of testing undertaken to date included within Section 2.
RE-22	Independent Validation: Watching Brief	**Complete No Further Action:** Overview provided in Section 2
RE-23	Waste Soils Surplus to Requirements	**Complete No Further Action:** Overview provided in Section 2
RE-24	Validation of Materials for Potable Water Supply Infrastructure	**Complete No Further Action:** Overview provided in Section 2

RE-NUMBER	OBJECTIVE	SUMMARY
RE-25	Remedial Verification Report	**Complete No Further Action:** Overview provided in Section 2

1. INTRODUCTION

1.1. BACKGROUND

This report details the remediation and enabling works operations that were undertaken by Total Demolition & Remediation (August 2022 – April 2024) and Urban Regen (May 2024 – October 2024) under the supervision of E3P to facilitate the preparation of the residential development on a parcel of former industrial land off Bennett Street, Manchester, M12 5NL; herein referred to as the site.

E3P was appointed by Kellen Homes as an independent Geo-Environmental Consultant for the site remediation, enabling and validation works, and the subsequent production of a suitably detailed report to ensure the satisfaction of the relevant planning conditions.

This report has been prepared to discharge planning condition 11 as part of the planning application 134504/FO/2022 with Manchester City Council. Below is the relevant text taken from the planning decision letter under condition 11:

"….. b) When the development commences, the development shall be carried out in accordance with the previously agreed Remediation Strategy and a Completion/Verification Report shall be submitted to and approved in writing by the City Council as local planning authority.

In the event that ground contamination, groundwater contamination and/or ground gas, not previously identified, are found to be present on the site at any time before the development is occupied, then development shall cease and/or the development shall not be occupied until, a report outlining what measures, if any, are required to remediate the land (the Revised Remediation Strategy) is submitted to and approved in writing by the City Council as local planning authority and the development shall be carried out in accordance with the Revised Remediation Strategy, which shall take precedence over any Remediation Strategy or earlier Revised Remediation Strategy.

Reason - To ensure that the presence of or the potential for any contaminated land and/or groundwater is detected and appropriate remedial action is taken in the interests of public safety, pursuant to policies DM1 and EN18 of the Manchester Core Strategy (2012)."

This report documents the completion of all necessary land remediation and enabling works and has been completed to record the presence of any variation in ground conditions or previously unidentified sources of potential contamination, environmental impact, or potential nuisance to the wider environ.

The proposed remediation activities were detailed within the E3P Remediation and Enabling Works Strategy (15-974-R1; dated December 2023) and supplementary supporting documents provided by E3P.

1.2. PROPOSED DEVELOPMENT

Kellen Homes will construct 272 residential homes and apartments (Class C3) with buildings between two and six storeys in height, a community centre and up to 317 sqm of flexible use Commercial Hub floorspace (Class E). Kellen will form associated open space and landscaping. Access will be gained via two altered access points off Bennett Street.

E3P has been provided with final approved planning layout detailing the proposed layout presented in Figure 1.1.

FIGURE 1.1 SNAPSHOT OF PROPOSED DEVELOPMENT



1.3. SUMMARY OF PARTIES INVOLVED

Function/interest	Name of Party
Local Planning Authority	Manchester City Council
Developer	Kellen Homes
Geoenvironmental Consultant	E3P
Main Contractor	Kellen Homes
Remediation/Enabling Works Contractor	Total Demolition & Remediation (August 2022 – April 2024) Urban Regen (May 2024 – October 2024)
Human Health Regulator	Manchester City Council
Controlled Waters and Waste Regulator	Environment Agency
Highways Adoption Authority	Manchester City Council

1.4. PREVIOUS WORKS

The following previous phases of site investigation and assessment have been completed at the subject site:

- **WYG** – *Phase II Geo-Environmental Ground Investigation Interpretative Report*. Reference E11056-1, January 2008. Prepared for Braidwater Ltd.
- **E3P** – *Phase I and II Geoenvironmental Site Assessment*. Ref: 15-974-R1-2, dated December 2022, prepared for Kellen Homes.
- **E3P** – *Ground Gas Addendum Report.* Ref: 15-974-R3-1, dated January 2023, prepared for Kellen Homes.

These documents were utilised to development the following Remediation and Enabling Works Strategy:

- **E3P** – *Remediation and Enabling Works Strategy*. Ref: 15-974-R2-2, dated January 2023, prepared for Kellen Homes.
- **E3P** – *Response to EA comments received 19th April 2023, Ref 15-974-L3-1, dated 11th May 2023;*
- **E3P** – *Response to EA comments received 9th June 2023, Ref 15-974-L4-1, dated 13th June 2023;*
- **E3P** – *Build Phase Contamination Mitigation Strategy*. Ref: 15-974-R3-6, dated November 2023, prepared for Kellen Homes.

The above documents should be read in conjunction with this Validation Report.

2. DETAILED REMEDIATION AND ENABLING WORKS ACTIVITIES

The focus of the remediation and enabling works is to address the contaminant issues previously identified within the site investigations that presented an unacceptable risk to human health following the redevelopment of the site.

No previously unknown contamination types were identified during the remediation and enabling works. All remediation technologies utilised were previously agreed and outlined within the E3P Remediation Strategy (Ref: 15-974-R2-2, dated January 2023).

For completeness, each of these activities has been discussed below within the context of the actual remediation works that were undertaken on-site.

The Remediation and Site Enabling works commenced on the 6th July 2023 and were completed in by 31st October 2024, with the exception of a final asbestos pipe removal undertaken in December 2025.

RE-1 – PRE-COMMENCEMENT REGULATORY COMPLIANCE

DATE OF WORKS UNDERTAKEN
August 2022 – April 2023

OVERVIEW OF WORKS

The site was granted planning permission under application number 134504/FO/2022, for the development of 272 residential homes and apartments (Class C3) with buildings between two and six storeys in height, a community centre and up to 317 sqm of flexible use Commercial Hub floorspace (Class E) with two altered access points off Bennett Street; vehicular access from Anthony Close; and associated open space and landscaping. A decision was issued on 9th August 2022.

Before any works on site commenced, E3P and Kellen Homes had extensive correspondence and consultation with the Environment Agency (EA) and Local Planning Authority (LPA). Full written approval of the E3P Remediation Strategy (Ref: 15-974-R2-2, Dated January 2023) was obtained from the LPA and EA.

As the proposed volume of soils to be reused (excluding crushed materials) exceeds the parameters of the Standard Rules Permit, a CL:AIRE Materials Management Plan (MMP)-qualified declaration was obtained and kept up to date throughout the works (E3P document Ref: 14-554-R4-1, April 2023).

Conclusion
No Further Action.

RE-2 – ENVIRONMENT AND NUISANCE CONTROL

DATE OF WORKS UNDERTAKEN
August 2022 – October 2024

OVERVIEW OF WORKS

Background
Management of all works to ensure that no environmental nuisance is created through dust emissions, noise or vibration levels and to ensure no disturbance to water courses present below the site (RE-3).

Works Undertaken
During remediation, it was a requirement for works to be restricted to between 8.00am and 5.30pm, however, E3P do not have information to confirm this.

A road sweeper was present to keep the access and Bennett Street clean and clear of debris during the importation of materials to site.

Heras fencing was erected around the site boundary with appropriate health and safety signage. An out of hours site security team was in place to ensure site security and prevent injury to the public.

During prolonged periods of dry weather, a mist sprayer and bowser were utilised to dampen down materials to limit dust generation. Additionally, materials were damped down during the excavation and delineation of asbestos hotspots.

During piling activities Roger Bullivant undertook vibration monitoring to ensure no structural risk to the culverts, adjacent highways and rail infrastructure.

Vibration reports are available upon request to Kellen Homes.

Throughout the works scrap metal, timber/wood and waste streams were segregated and placed into allotted stockpiles and skips for removal off-site.

Monthly water sampling of Blackbrook and Cornbrook Culvert was undertaken and is discussed in RE-3.

Conclusion
Completed in line with the remediation strategy, **no further action.**

RE-3 – RISK TO INFRASTRUCTURE AND CULVERTS

DATE OF WORKS UNDERTAKEN
May 2023 – October 2024

CHEMICAL TESTING
I2 Analytical Report ref: 23-43785 (May 2023; baseline)
I2 Analytical Report ref: 23-47897 (July 2023)
I2 Analytical Report ref: 23-50842 (August 2023)
I2 Analytical Report ref: 23-59942 (September 2023)
I2 Analytical Report ref: 23-66926 (October 2023)
I2 Analytical Report ref: 23-72754 (November 2023)
I2 Analytical Report ref: 23-76129 (December 2023)
I2 Analytical Report ref: 24-81005 (January 2024)
I2 Analytical Report ref: 24-006553 and 24-008820 (February 2024)
I2 Analytical Report ref: 24-09948 (March 2024)
Eurofins Report ref: 24-13863 (April 2024)
Eurofins Report ref: 24-17365 (May 2024)
Eurofins Report ref: 24-17365 (June 2024)
Eurofins Report ref: 24-24980 (July 2024)
Eurofins Report ref: 24-27697 (August 2024)
Eurofins Report ref: 24-32045 (September 2024)
Eurofins Report ref: 24-35026 (October 2024)
I2 Analytical Report ref: 23-59931 (SW Leachate Samples)
Eurofins Report Ref: 24-16336 (NW Leachate Samples)
Eurofins Report Ref: 24-27345-(NE Leachate Samples)

OVERVIEW OF WORKS

Background

Site works were to be completed in a manner that ensures no risk of disturbance to the adjacent infrastructure.

A new Blackbrook Culvert was installed and diverted by WPI working outside of the E3P validation scope.

It was proposed that monthly sampling of the underground culverts at upstream and downstream points should be undertaken to ensure no detrimental effect to the surface waters is taking place during enabling works.

Works Undertaken

Due to the shallow depth to Cornbrook Culvert in the east of the site, no turnover works were undertaken above the culvert to ensure no disturbance.

A set of baseline samples were collected in May 2023 to indicate background contaminant levels within the culverts prior to works commencing on site. Baseline samples indicate elevated heavy metals (copper, zinc and cyanide), toluene and benzene upstream of the site compared to Environmental Quality Standards (EQS), which can be attributed to the wider industrial history and current activities in this area of Manchester.

Throughout the works monthly water sampling of Blackbrook and Cornbrook culverts was undertaken to ensure no detrimental effect to the surface waters is taking place during enabling works. Upstream, midstream and downstream sampling was undertaken at agreed locations along both the Blackbrook and Cornbrook culverts. Sample locations are given in Figure 4.1 and Drawing 15-974-027 in APPENDIX III.

Samples were scheduled for a full suite of analysis, including heavy metals, suspended solids, polycyclic aromatic hydrocarbons (PAH) and total petroleum hydrocarbons (TPH).

FIGURE 4.1 – CULVERT WATER SAMPLE LOCATIONS



Cornbrook Culvert
Results of monthly sampling within the Cornbrook culvert show consistent elevations of heavy metals copper, zinc, cyanide, and nickel within upstream, on site and downstream samples compared to the EQS. No obvious or consistent increase between upstream and downstream values has been recorded, indicating this was background concentrations in the watercourse or the source was located upstream.

Due to programmed build phase works throughout May 2024 no access to on-site sample locations (CB Mid or CB Downstream) were accessible. As such, no samples for Cornbrook were obtained within May 2024 with sampling re-commencing upon completion of build phase works in this area in June 2024.

No elevations of benzene, toluene, ethylbenzene and xylene (BTEX) or TPH compounds have been identified within any of the Cornbrook samples. Additionally, no suspended soils were visually observed within water samples obtained.

Given the above, no detrimental impact to Cornbrook Culvert has been recorded during the remediation and enabling work activities, as such, **no further action is required.**

Blackbrook Culvert
Results of monthly water sampling within Blackbrook culvert show consistent elevations of heavy metals copper, zinc and cyanide within upstream, on site and downstream samples compared to the EQS values. No obvious or consistent increase in between upstream and downstream values has been recorded, indicating this was background concentrations in the watercourse or the source was located upstream.

Results from the July sampling of the downstream location within Blackbrook culvert indicate elevated TPH compounds C12-16, C16-21 and C21-35 when compared to the EQS values. This is attributed to the high suspended solids within the sample (470 ppm). Silt removal works were undertaken in the culvert undertaken throughout July and early August, resulting in increased sediment within samples. Following the completion of the culvert works in early August 2023, no further TPH impact was recorded; additionally, suspended solids within the watercourse returned to normal lower volumes and were not visually observed in samples obtained.

Given the above, no detrimental impact to Blackbrook Culvert has been recorded during the remediation and enabling work activities, as such, **no further action is required.**

Chemical certificates of water sampling undertaken to date are included within APPENDIX IV.

Perched Groundwater in Southwest
Perched groundwater was encountered within Made Ground deposits beneath the former bus depot in the south west of the site. As per Action 1, agreed with the Environment agency within E3P letter report 15-974-L4, impacted perched or shallow groundwater associated with the shallow made ground was pumped into IBC's and removed from site.

E3P can confirm all impacted shallow groundwater was removed to a suitably licensed waste management facility by Oil Salvage Ltd on 21st September 2023. Waste Transfer Notes, inclusive of impacted groundwater removal, are available on request from Total Demolition & Remediation and Kellen Homes.

Leachates of the Made Ground soils (I2 Ref: 23-59931) remaining within this area did not record any elevations when compared to remediation target concentrations. As such, these soils were utilised in the bulk earthworks.

Perched Groundwater in Northwest
Perched groundwater was encountered within Made Ground deposits beneath proposed plots 118-120 in the north west. As per Action 1, agreed with the Environment agency within E3P letter report 15-974-L4, impacted perched or shallow groundwater associated with the shallow made ground was pumped into IBC's and removed from site.

E3P can confirm all impacted shallow groundwater was removed to a suitably licensed waste management facility by Oil Salvage Ltd on 17th April 2024. Waste Transfer Notes, inclusive of impacted groundwater removal, are available on request from Total Demolition & Remediation and Kellen Homes.

Leachates of the Made Ground soils (Eurofins Ref: 24-16336) remaining within this area did not record any elevations when compared to remediation target concentrations. As such, these soils were utilised in the bulk earthworks.

Perched Groundwater in North East
Perched groundwater was encountered within Made Ground deposits beneath the former vehicle repair garage in the north east. As per Action 1, agreed with the Environment agency within E3P letter report 15-974-L4, impacted perched or shallow groundwater associated with the shallow made ground was pumped into IBC's and removed from site.

E3P can confirm all impacted shallow groundwater was removed to a suitably licensed waste management facility by Oil Salvage Ltd. Waste Transfer Notes, inclusive of impacted groundwater removal, are available on request from Urban Regen and Kellen Homes.

Leachates of the Made Ground soils (SW-MG-014-018) remaining within this area did not record any elevations when compared to remediation target concentrations. As such, these soils were utilised in the bulk earthworks.

Conclusion
Completed in line with the remediation strategy, **no further action.**

RE-4 – IDENTIFICATION, ISOLATION AND TREATMENT OF INVASIVE PLANTS

DATE OF WORKS UNDERTAKEN
July 2023– February 2024

SUPPORTING DOCUMENTS
Japanese Knotweed Solutions Report: JK23/9266

CHEMICAL TESTING
I2 Reports: 23-52624-1, 23-52626-1

PHOTOGRAPHS
Plate 1

OVERVIEW OF WORKS

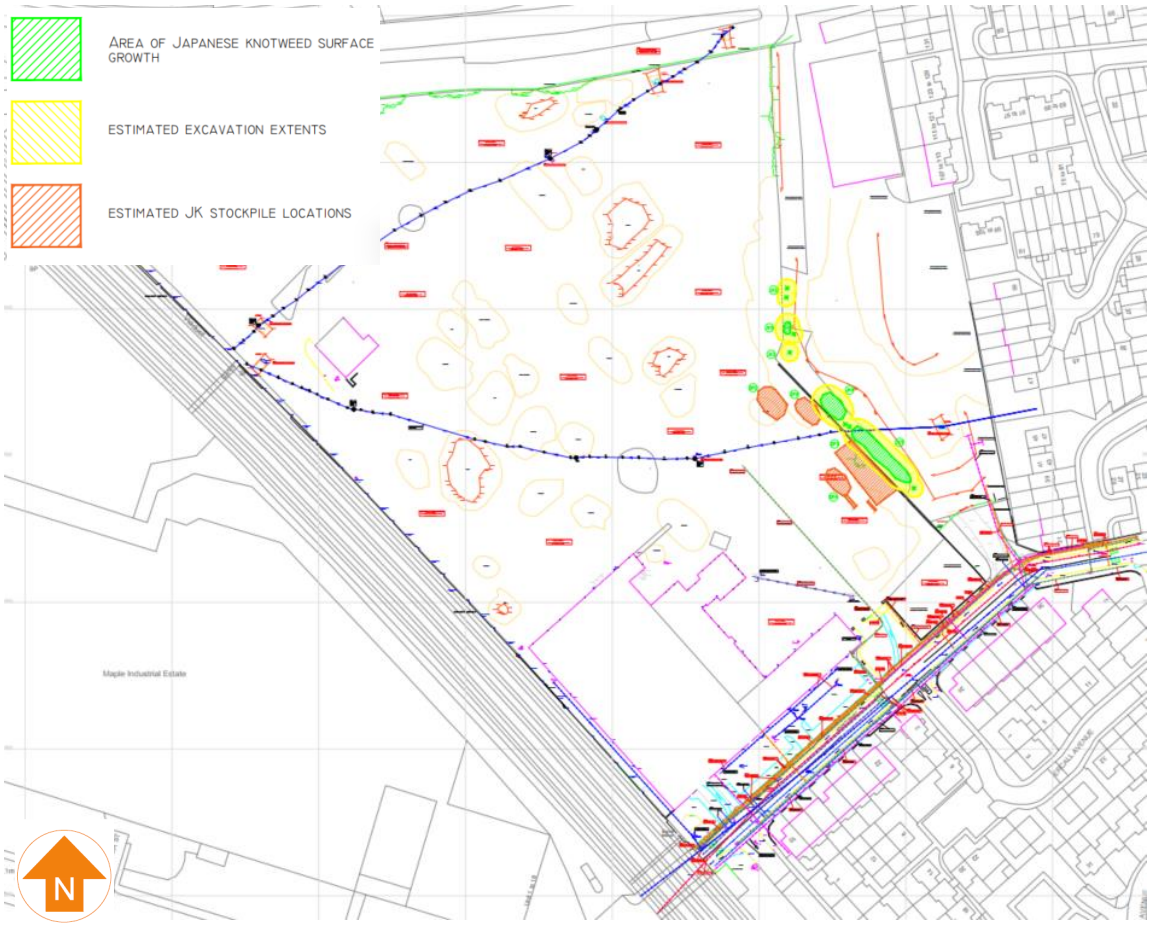
Background
Invasive plant species were identified within the east of the site. The remediation contractor was to satisfy themselves with respect to the extent of all species deemed invasive prior to the commencement of works on site.

Works Undertaken

Kellen Homes employed Japanese Knotweed Solutions (JKS), a qualified invasive species expert, to investigate the presence of invasive plant species on or adjacent to the site. JKS undertook a site inspection in July 2023 and identified areas of Japanese knotweed impact within the site boundary. Areas were fenced off with appropriate signage erected to ensure no disturbance.

The location of Japanese knotweed impact is shown as areas of green, orange and yellow in the east of the site on Figure 4.2 below and within Japanese Knotweed Solutions report (ref: JK23/9266).

FIGURE 4.2 – JAPANESE KNOTWEED LOCATION



Japanese Knotweed impacted materials were excavated under the supervision of JKS in January 2024 with works completed by 2nd February 2024. Material excavated was placed in a temporary stockpile area on visqueen sheeting, tested by E3P, and subsequently removed from site.

A validation report was prepared by Japanese Knotweed Solutions (report ref: JK23/9266) that is available upon request to Kellen Homes.

It is understood that Nightingale Environmental Limited are undertaking a program of monitoring for the next two years to inspect for any regrowth.

Conclusion

Completed in line with the remediation strategy, **no further remedial action** – ongoing monitoring by Nightingale Environmental Limited.

RE-5 – SITE CLEARANCE OPERATIONS

DATE OF WORKS UNDERTAKEN
June 2024 – September 2024

PHOTOGRAPHS
Plate 2-10

OVERVIEW OF WORKS

Background
Post-demolition general site clearance and provision of welfare, offices and site security were to be determined as per the contract requirements.

Works Undertaken
Provision of welfare, offices and site security by Total Demolition and Remediation (TDR), Urban Regen (UR) and Kellen Homes throughout the works. An out of hours site security team was in place to ensure site security and prevent injury to the public.

Prior to the commencement of remediation and enabling works, all building on site were demolished between July 2022 and May 2023.

Trees and vegetation were removed by a specialist contractor, shredded and subsequently removed off-site.

Across the site concrete slabs were present and required removal. E3P observed the hardstanding being broken out and inspected soils beneath the slabs. No visual or olfactory evidence was identified directly underlying the historic slabs across the site. The hardcore arisings from historic slab removal were crushed and screened on site for re-use as 6F2 for haul roads and temporary works mats.

Across the site former roads were lined with sandstone cobble setts. The cobble setts had historically been set within a coal tar. E3P observed the setts being broken out and inspected soils beneath the slabs. Visible coal tar was identified, where encountered coal tar impacted soil was stockpiled on visqueen and subsequently removed to a licenced waste facility (RE-7 provides further detail). Sandstone setts were bagged and removed from site for re-use by an external contractor. No cobble setts were re-used on site within the crushed aggregate.

Across the site areas of vegetation were present. Where previous self-seeded vegetation was present the material was excavated to the base of shallow root beds, stockpiled separately as per the MMP and subsequently removed from the site.

Throughout the enabling works, scrap metal, vegetation and other waste streams were separated from demolition materials and placed into allocated skips for subsequent disposal off-site. Suitable hardcore from demolition of former structures was stockpiled and crushed for use as 6F5 on site.

Conclusion
Completed in line with the remediation strategy, **no further action**.

RE-6 – DELINEATION, EXCAVATION AND TREATMENT OF IDENTIFIED ASBESTOS IMPACT

DATE OF WORKS UNDERTAKEN

Throughout works

SUPPORTING DOCUMENTS

Lucion Air Monitoring : Certificate 101965 and Report 609650
Scopus : Inspection and Re-Occupation Certificates RC-20241219083055 and HF-20241219140305
North Star Environmental: Certificates J114063/FX01, J114063/FX02, J114063/FX03, J114063/FX04, J114063/FZ01, J114063/GL01, J114063/GL02

PHOTOGRAPHS

Plate 11-16

CHEMICAL TESTING

Site Won Made Ground (in-situ)
I2 Analytical Report Ref: 23-41464 (SW-MG-001-002)
Eurofins Report Ref: 24-24013 (SW-MG-014-017)
Eurofins Report Ref: 24-35015 (SW-MG-019-021)

Stockpiled Made Ground
I2 Analytical Report Ref: 23-38011 (SP1-01 – SP11-01 and SP13-01)
I2 Analytical Report Ref: 23-38003 (SP5-01 – SP8-01 and SP12-01)
I2 Analytical Report Ref: 23-41067 (Bund 1-5)
I2 Analytical Report Ref: 23-54584 (Bund 6-8)
I2 Analytical Report Ref: 23-61056 (Bund 9-11)
Eurofins Report Ref: 23-35498 (Bund 12-14)
I2 Analytical Report Ref: 24-75932 (Bund 15-17)
Eurofins Report Ref: 24-12813 (SP07 and SP12A)

Visual Asbestos Stockpile
I2 Analytical Report Ref: 23-74533 (ASB-001)
I2 Analytical Report Ref: 24-77955 (ASB Bund)

Made Ground Soils in Area of WS125
Eurofins Report Ref:24-12813 (SW-MG-014(A)-SW-MG-017(A)

Material from "burial pits" in north and south of the Site
Eurofins Report Ref:24-27684 (ASB A and ASB B)
Eurofins Report Ref: 24-35015 (SW-MG-019-021)

OVERVIEW OF WORKS

Background

During the Phase II Geo-Environmental Assessment completed in December 2022 asbestos containing soils were encountered within WS125 at 0.5 m bgl. The Phase II report detailed that the asbestos impacted material must be buried in line with the E3P Conceptual Site Model, with material placed below 1.0m below final finished levels beneath plots, gardens or POS.

Due to the nature and age of the filled material, it must be assumed that trace fibres are present throughout the Made Ground.

Works Undertaken

Site Won Made Ground

Areas of the site were known to be impacted by asbestos. As such, Made Ground soils were tested for asbestos identification and quantification at a frequency 1 per 5000m3 across the site (turnover of c.105,000 m3) in line with the E3P Remediation Strategy (Ref: 15-974-R2-2, Dated January 2023). Generally, Made Ground was excavated, stockpiled, sampled and screened prior to placement, additional in-situ Made Ground testing was undertaken on soils utilised in the bulk earthworks to be appropriately conservative.

In June 2023 18no. stockpiles of site won Made Ground, generated from enabling works, were tested prior to placement (SP1-01 to SP13-01 and Bund 1 - 5) and a further two samples of in-situ Made Ground obtained (SW-MG-101 and SW-MG-102). Only trace asbestos fibres were detected in stockpiled Made Ground, within SP1-01 (0.013%); SP2-01, SP7-01, SP8-01, SP9-01 (<0.001%) and Bund 2 (0.011%). In all instances stockpiled soils recorded asbestos <0.1% w/w, as such, this material was utilised as bulk upfill with placement >1.0 m bgl, as per the agreed asbestos in soils conceptual site model, a copy of this model is provided as Drawing 15-974-035 in APPENDIX III.

In September and October 2023, 14.no. stockpiles of site won Made Ground, generated from enabling works, were tested prior to placement (Bund 1 - 14). Only trace asbestos fibres were detected in Stockpile 11 (Bund-11 <0.001%), as such, these soils were re-used as bulk upfill placed at depths >1.00 m bgl as discussed above.

Within Stockpile 7 (Bund 7) visible asbestos cement was noted, testing confirmed the presence of 0.172% chrysotile loose fibrous debris and cement. Stockpile 7 was fenced off with appropriate warning signs erected. A Joint Industry Working Group (JIWG) assessment was undertaken that recorded the receptor pathway was low with the overall ranking ''negligible''. Using the JIWG the works were determined to be non-licensed work with the following precautions being suitable - EN149 type FFP3 disposable masks as RPE, manual localised dust suppression and localised basic decontamination facilities. Due to wet weather during the works further dust suppression was not required, visual asbestos was handpicked, double bagged and removed from site in December 2023. Following the removal of visual asbestos, E3P obtained samples of the remaining soils and recorded trace chrysotile 0.021% (ASB-Bund) and 0.036 (ASB-001). Due to only trace fibres remaining within the processed Made Ground in Stockpile 7, this material was deemed suitable for placement >1.0 m bgl and utilised as bulk upfill across the development.

During the mechanical movement of these soils asbestos air monitoring was undertaken by Lucion Services in the works area and excavators cabin the reported concentrations were <0.100 f/ml within the cab and <0.010 f/ml within the works area. Lucion Air Monitoring Certificate 101965 and Report 609650 are available upon request to Kellen Homes.

From January 2024 to July 2024 8no. stockpiles of site won Made Ground were tested prior to placement (Bund 15 – 17, SP16-A and SP16-B, SP07, SP12A) with a further four samples of in-situ Made Ground obtained (SW-MG-014-017). Only trace asbestos fibres were detected in stockpiled Made Ground, within Bund 15 (0.004%); Bund 16 (0.002), Bund 17 and SP07 (<0.001%). Due to trace fibres present within the stockpiled Made Ground this material was utilised as bulk fill, placed at dpeths >1.0 m bgl.

Historic 'Asbestos Burial Pits'

During turnover works on 1st July 2024 an area with visible asbestos containing materials (predominantly asbestos cement sheeting) was identified in the south of the site below plots 155-156 – referred to as 'southern asbestos burial pit'. The asbestos burial pit was not known about; however, asbestos as a contaminant was known to be presence within the Made Ground soils. As such, remedial technologies for the delineation and treatment of asbestos had already been outlined and agreed within the E3P Remediation Strategy (Ref: 15-974-R2-2, Dated January 2023). The location of

this ACM infill is shown as a purple outline on UR AsBuilt Sheet 4, UR drawing ref 395-004 in Appendix III and Figure 4.3. The location was identified as two small pits adjacent to each other, due to the limited soils between the pits and likely asbestos impact of these soils, the two locations were treated as one large ''hotspot''. Fencing with appropriate health and safety signage was erected around the area, with soils remaining undisturbed until updated RAMS were produced by the appointed contractor.

Additionally, during turnover on 19th August 2024, an area containing a layers of clearly visible asbestos cement sheeting was identified in the north of the site, referred to as 'northern asbestos burial pit' was identified below the proposed location of plots 60-63. The location of this ACM infill is shown as a purple outline on UR AsBuilt Sheet 2, UR drawing ref 395-002 in Appendix III and Figure 4.3. Fencing with appropriate health and safety signage was erected around the area, with soils remaining undisturbed until updated RAMS were produced by the appointed contractor.

FIGURE 4.3 LOCATION OF ASBESTOS BURIAL PITS (NORTH – LEFT & SOUTH – RIGHT)



E3P obtained a sample of the fine soil matrix for both the northern (ASB-B) and southern (ASB-A) asbestos pits. Sample of soils obtained from the southern asbestos area (ASB-A) recorded 3.6% w/w of chrysotile cement. No asbestos fibres were recorded within the soil matrix in the northern asbestos area (ASB-B).

In both instances work was ceased and a JIWG undertaken. The JIWG assessment concluded that the works were determined to be non-licensed work with the following precautions being suitable - EN149 type FFP3 disposable masks as RPE, manual localised dust suppression and localised basic decontamination facilities.

Visually impacted soils were load loaded directly into wagons and removed from site to a licenced waste facility by Braidwood. A total of 13no. loads (circa 90 m3) of impacted soils were removed from the southern asbestos area between 14th to 16th August 2024. A total of 46no. loads (circa 320 m3) of impacted soils were removed from the northern asbestos area between 11th and 9th September 2024. Waste consignment notes and tracking notes were made available to E3P and are available held by to Kellen Homes and UR.

Personal and boundary asbestos air monitoring was undertaken by North Star Environmental during the mechanical movement of the soils within the northern and southern asbestos impacted areas. In all locations the concentrations were <0.010 f/cm3. Asbestos air monitoring results are provided on North Star Environmental Certificates J114063/FX01, J114063/FX02, J114063/FX03, J114063/FX04, J114063/FZ01, J114063/GL01 and J114063/GL02, held by Kellen Homes.

Following the removal of impacted soils, remaining soils were tested in-situ in the north (SW-MG-019 and SW-MG-020) and south (SW-MG-021), no asbestos was identified within the soils.

Soils in Vicinity of WS125
Trace fibres of chrysolite were identified during the initial site investigation quantified at just above laboratory LOD at <0.001% within the area of WS125 and suitable for use in areas of upfill outside of gardens. E3P undertook a watching brief of the turnover works within this area, where no further impacted material was identified. Further Made Ground samples were taken from this area SW-MG-014-017 and chemical analysis confirmed no asbestos present within the samples. Therefore, the soils were utilised as bulk upfill in line with the Asbestos CSM (E3P Drawing: 15-974-035 in APPENDIX III).

Asbestos Lagged Pipe
During turnover in the south of the site in October 2024, a historic underground brick lined pipe chamber was identified, likely associated with the historic bus depot. A pipe was present within the chamber with asbestos lagged insulation present. Given the loose and friable nature of the asbestos containing material, removal works were undertaken by Scopus, an ISO accredited asbestos contractor in December 2024. Asbestos air monitoring, removal and de-contamination procedures undertaken are provided in Scopus Inspection and Re-Occupation Certificates RC-20241219083055 and HF-20241219140305, held by Kellen Homes.

Conclusion
Completed in line with the remediation strategy, **no further action**.

RE-7 – DELINEATION, EXCAVATION, TREATMENT AND DISPOSAL OF VISUAL AND OLFACTORY SEMI-VOLATILE IMPACTED MATERIAL, TPH, NAPTHALENE, SVOC

DATE OF WORKS UNDERTAKEN
Throughout works and during build phase

PHOTOGRAPHS
Plate 17-20

CHEMICAL TESTING
Coal Tar
I2 Analytical Report ref: 23-69190 and 23-69196 (CT-001)

Historic Infilled Chimney Base
I2 Analytical Report ref: 23-53713 (CB-001)

Northwest Hotspot
Eurofins Analytical Report ref: 24-005764 (SP16-LA,LB,LC,A,B)
Eurofins Analytical Report ref: 24-16336 (NWHS A-E)

OVERVIEW OF WORKS
Background
Semi-volatile contamination has been identified within the shallow Made Ground soils across the site; this was attributed to a residue from the coal tar sealant used within the former cobble sets across the site. The cobble sets and layer of coal tar sealant has been removed during the site demolition works.

The remediation works include the full depth turnover of all Made Ground under the part time supervision of E3P. During turnover works, frequent monitoring utilising a PID was to be undertaken with turnover soils chemically validated in line with section 3.8 of the E3P Remediation Strategy (Ref: 15-974-R2-2, Dated January 2023).

The impact of semi-volatile contamination is site wide and so hotspot removals were not required unless a point source was identified. As such, at build phase, a provision for the installation of vapour resistant membranes has been made for all dwellings.

Material deemed to be impacted through either visual or olfactory observations or because of notable PID readings (> 50 ppm) were to be excavated and stockpiled on an impermeable membrane. Detailed laboratory analysis of the soils was to be undertaken to determine the level of semi-volatile contamination present and establish whether it is suitable for reuse or requires off-site disposal.

Works Undertaken
Historically the site was lined with sandstone setts placed within a coal tar binding. During the demolition phase E3P observed the setts being broken out and inspected soils beneath the slabs. Where visible coal tar was encountered this was segregated and stockpiled on an impermeable membrane and subsequently removed to a licenced waste facility by TDR.

A circa 0.15 m thick layer of residual coal tar was encountered below the sandstone setts in the northwest of the site circa 5 m by 5 m in size. The extent of the coal tar was delineated by visual and PID inspection, prior to excavation and placement on an impermeable membrane. The material underwent WAC testing and a WM3 assessment prior to removal from site to a hazardous waste facility by Kenny Waste Managements. Waste consignment notes relating to the removal of coal tar are held by the client.

E3P maintained part time supervision during the full depth turnover of Made Ground. Made ground soils were visually inspected by an E3P engineer with frequent PID monitoring undertaken throughout the excavation of Made Ground. Generally, throughout the turnover of made ground soils elevated PID readings (>50 ppm) were not recorded. However, within a former chimney base in the west of the site and an area of historically infilled anthropogenic materials in the northwest of the site, elevated PID readings were recorded, as discussed below.

Chimney Base
During turnover works a suspected historically infilled chimney base was noted below the proposed parking area, north of apartment block 3. This feature was excavated in its entirety (5 m bgl) under the supervision of E3P. The soil arisings were deemed visually impacted by the on-site E3P engineer due to the presence of a hydrocarbon sheen. Additionally, elevated PID readings of 75-145 ppm were recorded, above the target threshold of 50ppm. The arisings were segregated and stockpiled on an impermeable membrane as per the remediation strategy. Once excavated E3P undertook chemical sampling (CB-001) that recorded elevated PAH's (including naphthalene of 77 mg/kg), TPH C12-C16 (260 mg/kg), TPH C16-21 (1200 mg/kg) and TPH C21-C35 (1900 mg/kg). Given the human health and controlled waters risk associated with the elevated volatile and non-volatile PAH's the soils were removed from site to a licenced waste facility. Waste consignment notes are held by the client and TDR.

Northwest Hotspot
During turnover works in the northwest, a volatile hotspot containing black ash, tar deposits and anthropogenic materials was encountered in the vicinity of proposed plots 118–121. Soils were noted to have a hydrocarbon sheen and recorded elevated PID readings of 62-185 ppm, above the target threshold of 50ppm. The extent of the impacted soils was delineated using the PID and visual inspection and excavated in its entirety to a depth of circa 2.50 m bgl. Arisings were stockpiled on an impermeable membrane as per the remediation strategy.

E3P undertook an initial phase of sampling (24-005764), with results recording exceedances of remediation targets for non-volatile and volatile PAH compounds in leachate samples (SP16-LA and SP16-LB). Following this, E3P completed a hotspot validation, with samples obtained from the base and side walls of the excavation (24-16336) to confirm the removal of impact. Samples obtained from the side walls and base recorded no exceedances in leachate samples against site specific remediation thresholds. It is therefore considered the source of contamination has been removed.

Soil arisings were sampled by E3P with completion of WAC prior to the removal from site (23-69190 and 23-69196).

Conclusion.
All works completed as per the Remediation Strategy.
Vapour membranes will be installed on all plots as part of the build phase requirements, as per the Remediation Strategy.

RE-8 – EXCAVATION, BREAKING AND PROCESSING OF ALL ABOVE- AND BELOW-GROUND STRUCTURES

DATE OF WORKS UNDERTAKEN
Throughout works

PHOTOGRAPHS
Plate 21-26

CHEMICAL TESTING
I2 Analytical Report ref: 23-44843 (SW-CRUSH-001-003)
I2 Analytical Report ref: 23-47263 (SW-CRUSH-004-006)
I2 Analytical Report ref: 23-51589 (SW-CRUSH-007-008)
Eurofins Report ref: 24-27347 (SW-CRUSH-007-011)

GEOTECHNICAL TESTING
Murray Rix Report ref: 4588/90 (SW-CRUSH)
Murray Rix Report ref: 4588/91 (CRUSH-002)
Murray Rix Report ref: MRN 24005-219 (Crush 005-006)

OVERVIEW OF WORKS

Background
Obstructions, relict foundations and infrastructure (apart from live services) were to be removed in their entirety, inclusive of below proposed plot footprints, rear gardens, private driveways, adopted highway and utilities infrastructure (road box).

Works Undertaken
TDR was contracted by Kellen Homes to undertake the controlled demolition of previous structures on site. Following demolition, the removal of concrete slabs and oversized material started within the southeast and progressed north before moving west. All sub-structures were excavated using controlled mechanical techniques under the strict control of the TDR site manager and under part time supervision of E3P.

The site was subject to a turnover to the top of the natural stratum to ensure the full removal and excavation of all below ground obstructions and relict foundations. This process allowed for the removal of any oversize materials and the identification of any previously unidentified areas of contamination. Areas of visual or olfactory contamination that were identified are discussed in RE-6

and RE-7. E3P undertook PID sampling of soils beneath slabs with no elevated PID readings recorded, areas of elevated PID readings are discussed in RE-7.

A new Blackbrook Culvert was installed and diverted by Westfields working outside of the E3P validation scope. Once diverted the historic Blackbrook culvert was grubbed out in its entirety by TDR under the part time supervision of E3P. Soils from within areas of reduced level excavation (inclusive of the grubbed-out culvert) underwent careful selection prior to placement in a manner that accords with the geotechnical engineering specification & contamination compliance criteria in areas of upfill (RE-16).

Any steel re-enforcements present within the concrete hardstanding, or waste in the form of wood, scrap metal and plastic was removed prior to the crushing of demolition material stockpiles. Waste streams were segregated and placed within allocated skips for subsequent disposal.

Suitable oversized hardcore materials were stockpiled prior to crushing/processing to nominal 6F5 grading with chemical validation in accordance with the validation sampling protocol (11 samples obtained at a frequency of 1 per 1000m3). Chemical testing results are included in Appendix IV.

Chemical analysis of site won crush used across the site identified elevated non-volatile PAHs including Benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(a)pyrene and dibenzo(a,h)anthracene, volatile PAH (naphthalene) and heavy metals (lead and mercury). With the exception of naphthalene, identified elevated concentrations have primary exposure pathways related to dermal contact and ingestion. Crush was placed beneath areas of future hardstanding (roads and plots) which will serve to cut the contamination pathway. Naphthalene has a primary exposure pathway through vapour inhalation, to mitigate the residual risk from SVOCs across the site, vapour membranes are to be installed on all proposed plots. This will remove the pathway and mitigate the risk to the end-user against indoor vapour inhalation. Therefore, no human health risk will be present, and the crush is suitable for use.

Elevated mercury concentrations have been identified within Crush 008 at 5.1 mg/kg. Crush was placed beneath areas of future hardstanding (roads and plots) which will serve to cut the contamination pathway. Mercury has a primary exposure pathway through vapour inhalation, to mitigate the residual risk from SVOCs across the site, vapour membranes are to be installed on all proposed plots. This will remove the pathway and mitigate the risk to the end-user against indoor vapour inhalation. Therefore, no human health risk will be present, and the crush is suitable for use.

Given the placement of crush beneath hardstanding, construction of surface water drainage and the lack of a high groundwater table, no surface or groundwater interaction will occur with these soils and as such, no leaching of potentially mobile contaminant will occur. Therefore, no controlled waters risk will be present from the use of crush on site.

Particle size distribution testing showed the crushed material complied with 6F2 grading (Murray Rix Report: MRN 4588/90, 4588/91and 24005-219).

Conclusion
Completed in line with the remediation strategy, **no further action**.

RE-9 – DELINEATION, EXCAVATION, AND TREATMENT OF INFILLED HISTORICAL PONDS

DATE OF WORKS UNDERTAKEN
Throughout works

PHOTOGRAPHS

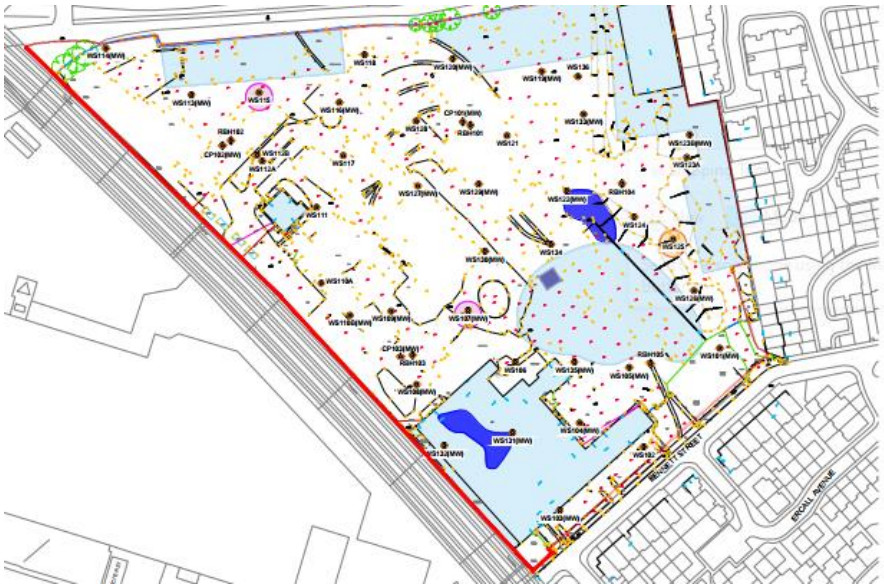
Plates 42-43

OVERVIEW OF WORKS

Background

Two historic infilled ponds were identified on site during the previous phases of investigation. All known former infilled ponds were to be delineated and investigated to assess the nature of materials and the extent of any deleterious elements. The location of historic ponds is shown as areas of dark blue in Figure 4.4.

FIGURE 4.4 – HISTORICAL FEATURES PLAN (HISTORICAL PONDS SHOWN IN DARK BLUE)



Works Undertaken

E3P maintained part time supervision during the excavation and turnover of materials across the site.

Pond 1 – Southwest

During turnover works, the former pond feature in the southwest (Pond 1) was identified through a change in the colour of clay soils beneath apartment blocks one and two. E3P maintained full time supervision during the removal of soft grey CLAY backfill and undertook hand shear vane testing (HSV) on the base of the excavation(s) to confirm competent natural stratum (>50 cu).

The base of Pond 1 was noted to be 1.50 m below the wider natural level.

No organic pond base was identified, it is likely this was historically grubbed out and nominally backfilled during construction of the historical structures. The resulting excavation was backfilled with geotechnically suitable site won Made Ground in line with the agreed specification for a piled foundation (RE-16).

Pond 2 – Northeast

During turnover works, the former pond feature in the northeast (POND 2) was identified through a change in the colour of clay soils beneath Plots 68-71. Pond 2 was recorded slightly north of the mapped location. E3P maintained full time supervision during the removal of soft greyish brown CLAY backfill and undertook hand shear vane testing (HSV) on the base of the excavation(s) to confirm competent natural stratum (>50 cu).

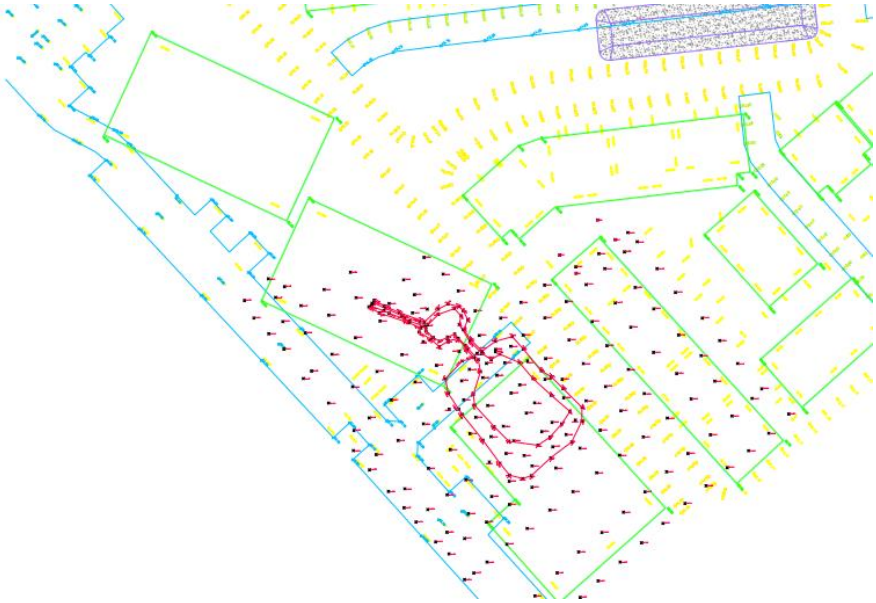
The base of Pond 2 was noted to be 1.75 m below the wider natural level.

No organic pond base was identified, it is likely this was historically grubbed out and nominally backfilled during construction of the historical structures. The resulting excavation was backfilled with geotechnically suitable site won Made Ground in line with the agreed specification for a vibrio stone column foundation with in situ density testing conducting to confirm compliance with the specification (RE-16 & RE-17).

The location and depth of Pond 1 excavation is provided in red on the left of Figure 4.4 (below Apartment Blocks 1 and 2) and within Drawing 15-974-032 in Appendix III. The location and depth of the northeast pond excavation is provided in red on the right of Figure 4.5 (below plots 68-71) and within Drawing 15-974-032 and 15-974-036 in Appendix III.

FIGURE 4.5 – POND 1 (TOP) AND POND 2 (BOTTOM)

Pond 1 Location :



Pond 2 Location:



Conclusion
Completed in line with the remediation strategy, **no further action**.

RE-10 – REMOVAL OF DELETERIOUS MATERIAL

DATE OF WORKS UNDERTAKEN
Throughout works

PHOTOGRAPHS
Plate 27-29

OVERVIEW OF WORKS

Background
All potentially deleterious materials were to be delineated, stockpiled and removed from the site by the contractor to a licensed waste facility.

Works Undertaken
Following the demolition of structures across the site, demolition materials were segregated with waste materials removed from site.

E3P maintained part-time supervision during excavation and turnover works, E3P witnessed the separation of deleterious materials with materials segregated and placed in appropriate skips or stockpiles.

E3P witnessed the removal of coal tar (RE-5 and RE-7), Japanese Knotweed impacted soils (RE-4), asbestos containing materials (RE-6) and anthropogenic wastes across the site (RE-7).

The majority of Made Ground soils were screened on two-way screeners prior to re-use on site. Where oversized materials were segregated, inert hardcore was separated for use on site. Remaining anthropogenic oversized materials including wood, roots, metal, plastic and building waste was delineated, stockpiled and removed from the site by the contractor to a licensed waste facility. Where the materials could not be recycled (such as building wastes) bulk waste wagons were utilised to remove the anthropogenic soils to landfill sites.

Where applicable, E3P undertook WM3 or WAC testing prior to removal of wastes from site (RE-23).

Copies of waste transfer notes are held by TDR, UR and Kellen Homes.

E3P undertook visual inspections and analysis of Made Ground soils utilised in the earthworks across the site to confirm the suitability for use.

Conclusion
Completed in line with the remediation strategy, **no further action**.

RE-11 – REMOVAL OF ASTS

DATE OF WORKS UNDERTAKEN
June 2024

CHEMICAL TESTING
Eurofins Report ref: 24-20643-1

PHOTOGRAPHS
Plate 30

OVERVIEW OF WORKS

Background

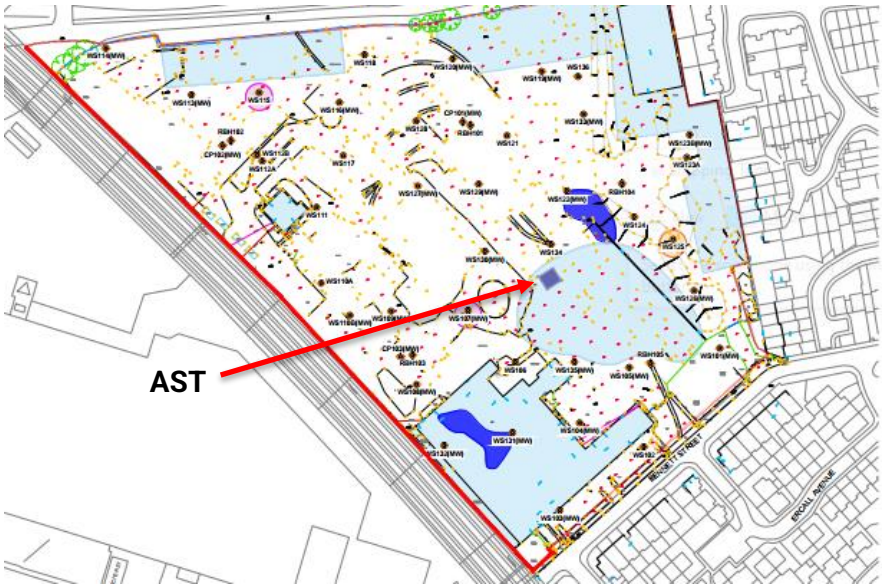
The remediation strategy required that any redundant above-ground storage tanks (ASTs) require emptying, decommissioning and removal from the site. Should the tanks contain any residual liquids, this should then be uplifted by the vacuum tanker or a surface-mounted pump (peristaltic or double-diaphragm).

Any soils with visual or olfactory evidence of hydrocarbon impact will be excavated, delineated and placed on impermeable MDPE for subsequent chemical validation. Any soils that exceed these site-specific screening values will be disposed of off-site in accordance with UK waste management legislation.

Overview of work

One redundant above-ground storage tanks (ASTs) was present in the central/eastern area of site, the location of which is shown as a purple square on E3P Drawing 15-974-004 and Figure 4.6.

FIGURE 4.6 – HISTORICAL FEATURES PLAN (AST SHOWN IN PURPLE)



The tank was noted to be empty with no residual fluids present. PID monitoring of tank openings and surrounding area did not record elevated readings (all readings <50 ppm).

E3P undertook a watching brief during the breaking out of the concrete base in June 2024. No visual or olfactory evidence of contamination was noted within Made Ground soils below the concrete subbase. Additionally, all PID readings were recorded <50ppm.

E3P obtained three validation samples of underlying soils and submitted the samples for a full suite of soil and leachate analysis inclusive of heavy metal, PAH, TPH, SVOC and VOC analysis to ensure no residual contamination from the historic tank remained. Elevated naphthalene was identified within AST102 at 5.4mg/kg. However, due to the soil organic matter (SOM) content being recorded above 2.5%, the chemical results were compared to modified naphthalene screening values for 2.5% SOM (5.6mg/kg), using the modified naphthalene value, no exceedance of human health screening criteria was recorded, and no further works were required.

Leachate analysis recorded no exceedances when compared to site specific remedial targets.

Given the above, no contamination associated with the AST was deemed to have occurred. The tank was removed from site, with the concrete sub-based processed and re-used as crush (aggregate) within the development.

Conclusion
Completed in line with the remediation strategy, **no further action**.

RE-12 – INVESTIGATION AND REMOVAL OF HISTORIC USTS

DATE OF WORKS UNDERTAKEN

June 2023 – July 2023

PHOTOGRAPHS

Plate 31

CHEMICAL TESTING

Tank Soil Validation
I2 Analytical Report Ref: 23-41682 (Tank-B1,B2,N,S,E,W)

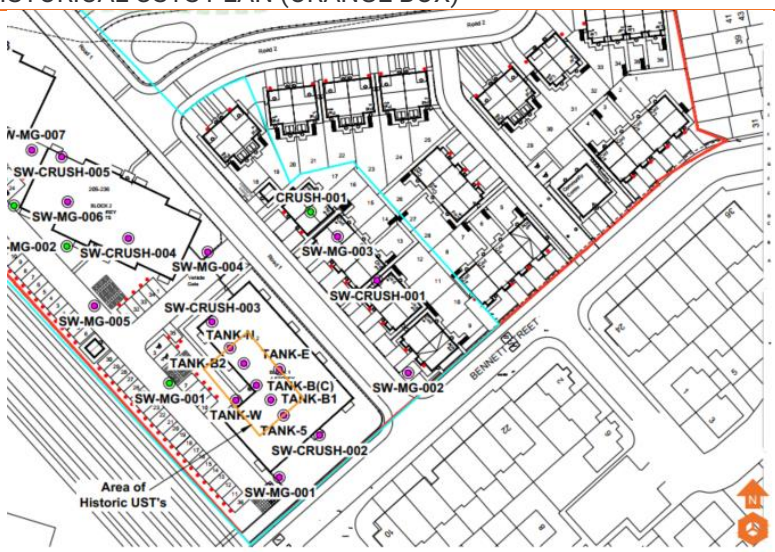
Tank Leachate Validation
I2 Analytical Report Ref: 23-43859 (Tank (L)-B1,B2,N,S,E,W)

OVERVIEW OF WORKS

Background
The remediation strategy required that during remediation and enabling works, any tanks identified were to be investigated. Prior to works starting the contents of any USTs were unknown and no evidence was provided to suggest decommissioning. The sides and bases of excavations required chemical validation to ensure that soils are below the site-specific remedial validation criteria for the protection of human health and controlled waters.

Works Undertaken
Following the demolition of the former bus depot in the south east, two adjacent underground storage tanks (UST) were encountered beneath/recessed within the floor slab. The location of the tanks is shown on Figure 4.7.

FIGURE 4.7 – HISTORICAL USTS PLAN (ORANGE BOX)



Tanks were noted to be empty with no residual fluids present. PID monitoring of tank openings and surrounding area did not record elevated readings (all readings <50 ppm).

Following the removal of the tanks, E3P undertook a visual and olfactory inspection with no visual, olfactory or PID readings above 50ppm noted. Concrete tank bases were broken out and added to the oversize stockpile for crushing and re-use on site (RE-8).

Following removal of tank bases E3P undertook further inspection of the underlying soils, no evidence of visual or olfactory evidence was recorded. E3P obtained soil and leachate samples from the base, north, south, east and west walls of the excavation in the area of the historic tank(s). Results show no elevated contaminants when compared to soil remediation targets with respect to human health. Additionally, leachate analysis did not record any exceedances of remedial values agreed within E3P Letter Report 15-974-L4, Table 1.4 (15m compliance) and Table 1.5 (50m compliance). As such, no residual effect on the surrounding soils from the historic USTs has been recorded. The soils are considered suitable for use as upfill for the creation of the development platform.

Conclusion
Completed in line with the remediation strategy, **no further action**.

RE-13 – CUT-AND-FILLING OF MADE GROUND TO DEVELOPMENT LEVELS

DATE OF WORKS UNDERTAKEN

Throughout works

PHOTOGRAPHS

Plate 32-35

CHEMICAL TESTING

Site investigation soil testing
I2 Analytical Report Ref: 21-30518 (WS107, WS109, WS110)
I2 Analytical Report Ref: 22-31069 (WS104, WS131, WS135)

Site Won Made Ground (in-situ)
I2 Analytical Report Ref: 23-41464 (SW-MG-001-002)
Eurofins Report Ref: 24-24013 (SW-MG-014-017)
Eurofins Report Ref: 24-35015 (SW-MG-019-021)

Stockpiled Made Ground
I2 Analytical Report Ref: 23-38011 (SP1-01 – SP11-01 and SP13-01)
I2 Analytical Report Ref: 23-38003 (SP5-01 – SP8-01 and SP12-01)
I2 Analytical Report Ref: 23-41067 (Bund 1-5)
I2 Analytical Report Ref: 23-54584 (Bund 6-8)
I2 Analytical Report Ref: 23-61056 (Bund 9-11)
Eurofins Report Ref: 23-35498 (Bund 12-14)
I2 Analytical Report Ref: 24-75932 (Bund 15-17)
Eurofins Report Ref: 24-12813 (SP07 and SP12A)

Leachate testing
I2 Analytical Report Ref: 23-44732 (SW-MG-001-002)
I2 Analytical Report Ref: 23-49287 (SW-MG-003-007)
I2 Analytical Report Ref: 23-59931 (SW-MG-008-009)
I2 Analytical Report Ref: 23-70619 (SW-MG-010)
Eurofins Analytical Report Ref: 24-18029 (SW-MG-011 – SW-MG-013)
Eurofins Analytical Report Ref: 24-27345 (SW-MG-014 – SW-MG-018)
Eurofins Analytical Report Ref: 24-29961 (SW-MG-019 – SW-MG-021)

GEOTECHNICAL TESTING

Murray Rix Report Ref: MRN 24005/29 (Clay Upfill)
Murray Rix Report Ref: MRN 4588-87 (SW-MG-001-002)
Murray Rix Report Ref: MRN 4588-97 (SW-MG-003)
Murray Rix Report Ref: MRN 4588-146 (SW-MG-004)
Murray Rix Report Ref: MRN 24005-77 (SW-MG-005-006)
Murray Rix Report Ref: MRN 24005-78 (SP07)
Murray Rix Report Ref: MRN 24005/211 (SW-MG-007-016)

OVERVIEW OF WORKS

Background

As part of the remediation and enabling works, a full depth turnover of Made Ground to the top of natural stratum was required in order to cut and fill the site to the required development levels.

The overarching aim of the remediation and enabling earthworks was the construction of a development platform that will ensure suitability for vibro stone columns (VSC) across the majority of the site and a piled foundation for apartment blocks 1-3 and plots 87-91 and 130-135 (controlled flight auger piled).

Where the development levels require material to be filled, site derived Made Ground were to be sorted in a controlled manner prior to replacement, in accordance with the requirements of the remediation and enabling works geotechnical specification.

Works Undertaken

The area was subject to a process of enabling earthworks completed by the appointed contractors, TDR August 2022 – April 2024) and UR (May 2024 – October 2024), under the supervision of E3P.

The ground levels for the subject site were subject to cut (blue) and fill (red) as shown on Figure 4.5 (Kellen Drawing: KH006-003 in Appendix III).

In order to provide the final development platforms there was a requirement to undertake a significant cut and filling process of Made Ground across the site. Excavated materials and imported materials were used to build final development levels.

The ground levels for the subject site were subject to cut and fill with circa 105,000 m3 of Made Ground material turned over across the site. Generally, Made Ground was excavated, stockpiled, sampled and screened prior to placement, additional in-situ Made Ground testing was undertaken on soils utilised in the bulk earthworks.

All unsuitable materials were removed in their entirety to ensure the removal of relict hardstanding, foundations and infrastructure. A new Blackbrook Culvert was installed and diverted by Westfields working outside of the E3P validation scope. Once diverted the historic Blackbrook culvert was grubbed out in its entirety by TDR under the part time supervision of E3P. Soils from within areas of reduced level excavation (inclusive of the grubbed out culvert) underwent careful selection prior to placement in a manner that accords with the geotechnical engineering specification & contamination compliance criteria in areas of upfill.

Where the proposed enabling works levels required the current landform to be cut, extreme care was taken so as not to disturb the underlying stratum prior to the placement of the appropriate platform, in compliance with the E3P Geotechnical Specification.

Where the development levels required material to be filled, site derived Made Ground and natural clays were utilised. Upfill materials were sorted in a controlled manner prior to replacement, in accordance with the requirements of the specification for the intended land use.

FIGURE 4.5 KELLEN HOMES CUT AND FILL SITE MODEL



Chemical soil testing

Validation sampling of site won Made Ground was completed in line with the testing frequency (1 sample per 5000 m^3) outlined in the remediation and enabling works strategy. A total of 41 samples were obtained from stockpiled and placed Made Ground soils. Samples were scheduled for a full suite of analysis, including heavy metals, asbestos quantification, polycyclic aromatic hydrocarbons (PAH) and total petroleum hydrocarbons (TPH).

Results confirmed the initial site model, with site wide minor elevations of non-volatile PAH (Benzo(b)fluoranthene, Dibenz(a,h)anthracene, Benzo(a)anthracene and Benzo(a)pyrene) and heavy metals (lead). Minor elevations of volatile contaminants (naphthalene and mercury) were recorded associated with the historical industrial use and coal tar leaching.

Exceedances of non-volatile PAH and heavy metals have primary exposure pathways related to dermal contact and ingestion. Soils were used as upfill and therefore any risk to human health is mitigated by the installation of a chemically suitable cover systems within all proposed garden areas and areas of soft standing, additionally, where hardstanding is present (plots, driveways and roads) the pathway is cut.

Volatile contaminants have a primary exposure pathway related to vapour inhalation. All dwellings are to be installed with an appropriate vapour membrane to ensure no vapour ingress into dwellings, preventing harmful vapour build up and removing the risk to end users.

Trace asbestos was encountered within Made Ground soils, where encountered, was asbestos quantified and re-used/removed as per RE-5 to ensure no future risk.

Chemical leachate testing

Leachate analysis has been undertaken at a frequency of 1 sample per 5000 m^3 in order to ensure site won Made Ground is not likely to have a detrimental effect to the on-site surface water courses.

A total of 21no. Made Ground leachate samples were obtained from stockpiled and placed soils, results of leachate testing are presented in the analytical reports referenced above.

Results were compared to Environmental Quality Standards (EQS) and site-specific remedial targets agreed within E3P Letter Report 15-974-L4, Table 1.4 (15m compliance) and Table 1.5 (50m compliance). Within 20no. of the 21no. samples (with the exception of SW-MG-020), minor copper exceedances above EQS and 15m compliance were recorded. Eleven of 21no samples (SW-MG-001 to 004, 008-009, 011 and 019-020) recorded copper values below the 50m compliance threshold for copper. Two minor exceedances above the 15m compliance threshold for lead were recorded within SW-MG-005 and SW-MG-006, as such, these soils were placed over 15 m from the culvert in the south west of the site below Apartment Block 1. Given the lack of point source for heavy metals and low solubility of the determinants, the risk associated with relatively low-level metalloid impact on the Cornbrook Culvert(s) is considered to be insignificant and representative of urbanised watercourses due to the industrial legacy of the immediate area and not specifically attributed to the subject site, as agreed with the EA letter dated 9th June 2023.

Results show no elevations of PAH or TPH compounds compared to the EQS values.

Where potential point sources were identified (USTs, coal tar and TPH impacted soils), the point sources were removed and subsequent leachate analysis undertaken as detailed in RE-12 and RE-7 to ensure no risk to controlled waters. Additionally, as per RE-3, no detrimental impact to Cornbrook or Blackbrook Culvert has been recorded during the remediation and enabling work activities.

Geotechnical testing
E3P undertook laboratory geotechnical sampling involving particle size distribution (PSD), moisture content and dry density/water content relationship. PSD testing confirms the Made Ground material generally complies as class 2C cohesive fill. Dry density/moisture content relationship results indicated the natural moisture content of the material to be outside the 2% (+/-) requirement in relation to the optimum moisture content. As such, during dry weather periods the soils were stockpiled, dried and subsequently placed as detailed in RE-14 and RE-16. During wetter months, ordinary Portland cement (OPC) and pelletised lime were added to Made Ground soils to control the moisture content.

In-situ HSV testing was undertaken at the top of natural stratum to ensure a shear strength >45 Cu. As discussed in RE-9, material with a shear strength <45 Cu encountered within the former pond area(s) was removed and backfilled with suitable site won Made Ground.

E3P maintained part time supervision of the works to ensure materials were engineered in line with the E3P Geotechnical Engineering Specification as detailed within Section 6 of the Remediation Strategy (Ref: 15-974-R2-2, Dated January 2023).

Where site-won Class 2 materials have been used as fill beneath proposed VSC plots, externals driveways and rear gardens, NNDG testing of upfill was undertaken, detailed in RE-16.

Conclusion
Completed in line with the remediation strategy and EA correspondence letters, **no further action**.

RE-14 – PLACEMENT AND COMPACTION OF UPFILL MATERIAL TO FACILITATE GROUND IMPROVEMENT BY VSC

DATE OF WORKS UNDERTAKEN
Throughout works

PHOTOGRAPHS
Plate 32-36

Geotechnical TESTING
Murray Rix Report Ref: MRN 24005/29 (Clay Upfill) Murray Rix Report Ref: MRN 4588-87 (SW-MG-001-002) Murray Rix Report Ref: MRN 4588-97 (SW-MG-003) Murray Rix Report Ref: MRN 4588-146 (SW-MG-004) Murray Rix Report Ref: MRN 24005-77 (SW-MG-005-006) Murray Rix Report Ref: MRN 24005-78 (SP07) Murray Rix Report Ref: MRN 24005/211 (SW-MG-007-016)

OVERVIEW OF WORKS

Background

Where plots were to be prepared in a manner that would facilitate ground improvement by vibro-stone column, materials must be either compliant with the specified grading requirements for a nominally placed and tracked granular aggregate, or alternatively, they should be engineered to a defined geotechnical standard to achieve 95% compaction of the laboratory determined maximum dry density (DD).

Works Undertaken

Where the proposed enabling works levels required the current landform to be cut, extreme care was taken so as not to disturb the underlying stratum prior to the placement of the appropriate platform, in compliance with the E3P Geotechnical Specification. E3P maintained part time supervision of throughout turnover works. Where the natural formation was exposed, E3P undertook in-situ HSV testing was undertaken to ensure competent strata (shear strength >45 Cu). As discussed in RE-9, material with a shear strength <45 Cu encountered within the former pond area was removed and backfilled with geotechnically suitable site won Made Ground.

Dry density/moisture content relationship results indicated the natural moisture content of the material to be outside the 2% (+/-) requirement in relation to the optimum moisture content. As such, during dry weather periods the soils were stockpiled, dried and subsequently placed and engineered in line with MCHW as detailed in RE-16. During wetter months, OPC and pelletised lime were added to Made Ground soils to control the moisture content prior to placement and engineering.

PSD testing of site won Made Ground confirms the material complies as class 2C cohesive fill. Given the backfill material has more than 10% fines, soils were engineered in line the E3P Geotechnical Engineering Specification as detailed within Section 5 of the Remediation Strategy (Ref: 15-974-R2-2, Dated January 2023) to achieve >95% compaction of the laboratory determined maximum dry density (DD). To confirm engineering compliance, where site-won Class 2 materials have been utilised as fill beneath proposed VSC plots, external driveways and rear gardens NNDG testing of was undertaken every 750mm of upfill. NNDG testing confirms that the soils have been engineered and achieved compaction >95% of the maximum dry density, determined from lab derived OMC/DD testing. Plans showing the locations of NNDG testing across layers is given as E3P Drawings 15-974-038 to 041 in Appendix III. Results from NNDG testing are included within Appendix V.

Conclusion

Completed in line with the remediation strategy, **no further action**.

RE-15 – CONSTRUCTION OF TEMPORARY WORKING PLATFORM

DATE OF WORKS UNDERTAKEN
Throughout works

PHOTOGRAPHS
Plate 37-41

CHEMICAL ANALYSIS
I2 Analytical Report ref: 23-44843 (SW-CRUSH-001-003) I2 Analytical Report ref: 23-47263 (SW-CRUSH-004-006) I2 Analytical Report ref: 23-51589 (SW-CRUSH-007-008)

GEOTECHNICAL TESTING
Murray Rix Reports: 4588/90 & 4588/91 Murray Rix Report: MRN 24005-219 & 24005-301 (CRUSH 005-007) E3P CBR testing certificates included in Appendix V CBR Test Results – E3P Drawings 15-974-037 and 042

OVERVIEW OF WORKS

Background

Where plots were to be prepared in a manner that will facilitate ground improvement by vibro-stone column, and those utilising piled foundations, a temporary working platform was to be constructed.

Works Undertaken

A temporary working platform was constructed comprising 300mm of 6F5 from site won crush material. 6F5 was tested to confirm chemical suitability (RE-8).

Particle size distribution testing showed the crushed material complied with 6F5 grading (Murray Rix Report: MRN 4588/90 and 4588/91).

TDR (August 2022 – April 2024) and UR (May 2024 – October 2024) had full-time supervision with E3P providing part-time supervision of the following:

- CBR plate load tests to be completed on roads and piling mats to ensure compaction of 5%.
- Geotechnical testing of the site won material was undertaken for PSD.

The results of the CBR tests confirm that all piling locations mats met the compaction specification and are given in Appendix III and IV, except for the mat in the area of Plot 115/116, however, given the deformation recorded during the test, the VSC contractor was happy to proceed. The location and result of CBR testing on piling mats is provided on E3P Drawing 15-974-042 in APPENDIX III.

CBR testing was undertaken on the formation of highways to be adopted, generally CBRs on road/highways achieved the required 5% CBR. However, Road 1 CBRs 103 (3%) and 104 (2%), Road 3 CBR Pl134E (4%) and Road 4 +40m (0.7%), +60m (3%) and + 70m (2%) failed to meet the required 5%. Where less than 5% CBR was achieved, capping thickness was increased in line with highways guidance. Caldwell's construction (build phase civil contractor) will excavate the current temporary road box, install infrastructure and complete validation CBR testing on the `final highways formation, sub-grade and capping for future highways adoption. The location and result of CBR testing on piling mats is provided on E3P Drawing 15-974-037 in APPENDIX III.

Conclusion

Completed in line with the remediation strategy, **no further action**.

RE-16 – REPLACEMENT OF MATERIALS, GEOTECHNICAL ENGINEERING REQUIREMENTS

DATE OF WORKS UNDERTAKEN
Throughout works

PHOTOGRAPHS

Plates 32-36

GEOTECHNICAL TESTING

E3P CBR & NNDG testing certificates included in Appendix V
Murray Rix Report Ref: MRN 4588-87 (SW-MG-001-002)
Murray Rix Report Ref: MRN 4588-97 (SW-MG-003)
Murray Rix Report Ref: MRN 4588-146 (SW-MG-004)
Murray Rix Report Ref: MRN 24005-77 (SW-MG-005-006)
Murray Rix Report Ref: MRN 24005-78 (SP07)
Murray Rix Report Ref: MRN 24005/211 (SW-MG-007-016)

OVERVIEW OF WORKS

Background

Material was to be backfilled in strict compliance with the E3P Geotechnical Engineering Specification as presented in detail within Section 6 of the E3P Remediation Strategy (Ref: 15-974-R2-2, Dated January 2023).

Works Undertaken

Site won general fill was placed and compacted in 225 mm layers in accordance with the E3P geotechnical engineering specification.

To achieve the proposed Enabling Works Levels (EWLs), TDR and UR undertook a process of cut/fill works including the careful selection of materials from within areas of reduced level excavation (cut) prior to placement in a manner that accords with the geotechnical engineering specification & contamination compliance criteria. Arisings from the foundations were re-used on site to build up levels.

TDR August 2022 – April 2024) and UR (May 2024 – October 2024), had full supervision with E3P providing part time supervision of the following:

- General cut and fill of natural and anthropogenic soils in accordance with the E3P geotechnical & contamination performance criteria to create a development platform for a combination of piled foundations (apartment blocks) and VSC foundations (low rise plots).
- Management of all materials to maximise the retention of soils on site to ensure suitable development.
- Turnover of any Made Ground soils to remove slabs, historic culvert, obstructions and historic foundations.
- CBR plate load tests completed on all roads and piling mats.
- NNDG testing on upfill to confirm compaction.
- Geotechnical testing of the site won material was undertaken for PSD and OMC/DD.

E3P undertook laboratory geotechnical sampling involving particle size distribution (PSD), moisture content and dry density/water content relationship. PSD testing confirms the Made Ground material generally complies as class 2C cohesive fill. Dry density/moisture content relationship results indicated the natural moisture content of the material to be outside the 2% (+/-) requirement in relation to the optimum moisture content. As such, during dry weather periods the soils were stockpiled, dried and subsequently placed as detailed in RE-14 and RE-16. During wetter months, OPC and pelletised lime were added to Made Ground soils to control the moisture content.

In-situ HSV testing was undertaken at the top of natural stratum to ensure a shear strength >45 Cu. As discussed in RE-9, material with a shear strength <45 Cu encountered within the former pond area(s) was removed and backfilled with suitable site won Made Ground.

E3P maintained part time supervision of the works to ensure materials were engineered in line with the E3P Geotechnical Engineering Specification as detailed within Section 6 of the Remediation Strategy (Ref: 15-974-R2-2, Dated January 2023).

To confirm engineering compliance, where site-won Class 2 materials have been utilised as fill beneath proposed VSC plots, external driveways and rear gardens NNDG testing of was undertaken every 750mm of upfill (RE-14). NNDG testing confirms that the soils have been engineered and achieved compaction >95% of the maximum dry density, determined from lab derived OMC/DD testing. Plans showing the locations of NNDG testing across layers is given as E3P Drawings 15-974-038 to 041 in Appendix III. Results from NNDG testing are included within Appendix V.

The results of the CBR and NNDG tests confirm that all locations met the compaction specification and are given in Appendix III and IV.

Conclusion
Completed in line with the remediation strategy, **no further action**.

RE-17 – PREPARATION OF GROUND FOR VIBRO-STONE COLUMNS WITHIN TREE INFLUENCE

DATE OF WORKS UNDERTAKEN
June 2024 – October 2024

PHOTOGRAPHS
Plates 32-36

OVERVIEW OF WORKS

Background
Where trees were present, or within their total zone of influence, the contractor was to ensure that all cohesive soils are removed to the required depth with the subsequent replacement with a granular blanket to fully mitigate the potential for volumetric instability in the clay soils.

AJP Consulting Engineers completed the FZP for the site (Drawing ref: BEN-AJP-XX-00-DR-S-2000), this should be read in conjunction with this validation report. The AJP Consulting Engineers FZP denotes plots affected by tree influence across the site.

Works Undertaken
Shallow natural CLAY was identified in the east of the site within the area of tree influence identified by AJP. The natural CLAY soils were excavated as per the UR cut and fill drawing 15-974-036, stockpiled and subsequently re-used as subsoils within the cover systems at the development (RE-20).

The resulting void was infilled with suitable site won Made Ground and engineered in accordance with the E3P Geotechnical Engineering Specification as detailed within Section 6 of the Remediation Strategy (Ref: 15-974-R2-2, Dated January 2023). Where site-won Class 2 Made Ground materials have been used as fill beneath proposed VSC plots, NNDG testing of upfill was undertaken (RE-14 & RE-16). NNDG testing confirms that the soils have been engineered and achieved compaction >95% of the maximum dry density, determined from lab derived OMC/DD testing.

Plans showing the locations of NNDG testing across different layers is given as E3P Drawings 15-974-030 in Appendix III.

Conclusion
Completed in line with the remediation strategy, **no further action**.

RE-18 – IMPORTATION OF BULK FILL

OVERVIEW OF WORKS

There was no requirement for the importation of bulk fill to the site throughout the remediation works.

RE-19 – PREPARATION OF GARDEN FOR COVER SYSTEM

DATE OF WORKS UNDERTAKEN

Throughout works

OVERVIEW OF WORKS

Background
As part of the land remediation works, garden areas were to be prepared in a manner that will facilitate the placement of the clean cover system during the development phase of the works.

Works Undertaken
All proposed rear gardens have been prepared in a manner that will facilitate the placement of a minimum 600 mm clean cover system over the geotextile membrane / no dig barrier during the development phase of the works.

Front garden areas have been left 450 mm below finished level to allow the placement of clean cover systems over a geotextile membrane.

POS areas have been left 450 mm below finished level to allow the placement of clean cover systems, no geotextile membranes is required below cover systems in POS areas as per the agreed Build Phase Mitigation Strategy (Ref: 15-974-R3-6, dated November 2023).

The agreed location and depth requirements for cover systems is provided on Kellen Homes Drawings KH006-SA1 and KHE-006-CSS01 in Appendix III.

The placement of certified subsoil and topsoil will be completed as part of the developer works/build-phase mitigation plan. All garden areas where a cover system is required will be subject to plot-specific independent validation.

Conclusion
No further remedial works.
Placement and validation of certified topsoil and subsoil above a geotextile membrane across the soft landscaped areas of site will be covered within build phase works package.

RE-20 – PROVISION OF SUBSOIL

DATE OF WORKS UNDERTAKEN
March 2024 - October2024

CHEMICAL ANALYSIS
I2 Analytical Report ref: 24-008736 (Mere Golf Club IMP-SS001-004)
I2 Analytical Report ref: 24-010773 (Mere Golf Club IMP-SS005)
I2 Analytical Report ref: 24-77927-1(Roman Way SS-001-003)
Eurofins Report ref: 24-25212(SW-CLAY 001-005)
Eurofins Report ref: 24-25843(SW-CLAY 006-010)
Eurofins Report ref: 24-27346(SW-CLAY 011-015)
Eurofins Report ref: 24-29407 (SW-CLAY 016-018)

OVERVIEW OF WORKS

Background

Underlying natural clay soils are suitable for use as subsoil, however, it is anticipated there will be a shortfall of suitable subsoils on-site, as such, there is likely to be a requirement to import additional suitable material for use within cover systems at the proposed development.

Overview of Works

Imported subsoils

Subsoils were imported to site from donor sites Roman Way, Preston and the Mere Golf Club. Prior to import both donor sites were added to the MMP with acceptance granted by CL:AIRE. To date circa 150m3 of subsoil from Roman Way and circa 200m3 of subsoil from the Mere Golf Club have been imported. A total of eight subsoil samples have been submitted for analysis, at a brownfield frequency of 1 per 50 m3 in line with the E3P remediation strategy, covering 400 m3 of imported subsoil.

The chemical analysis suite comprises heavy metals, sulphates, phenols, speciated Polycyclic Aromatic Hydrocarbons (PAHs), speciated and total Petroleum Hydrocarbons (TPH) and asbestos. No exceedances of human health screening values were recorded within the five samples, confirming the soils suitability for use within private garden cover systems.

Site won subsoils

Natural soils generated from road and sewer arisings as well as the clay removed from areas of tree influence were stockpiled in the east of the site.

To date, E3P have obtained 18no. samples of site won natural clay subsoils, won from civil excavations, cut/fill works and tree influence areas across the development site.

The chemical analysis suite comprises heavy metals, sulphates, phenols, speciated Polycyclic Aromatic Hydrocarbons (PAHs), speciated and total Petroleum Hydrocarbons (TPH) and asbestos.

Minor exceedance of non-volatile PAH thresholds were recorded within SW-CLAY-001- 002 and SW-CLAY-01, likely associated with the interface of the natural soils and Made Ground. Therefore, these soils were segregated and placed in areas of upfill and not gardens with additional subsoil tests confirming suitability for use of remaining soils. Remaining soils confirmed suitability for use in private garden cover systems. To date, a total of 16no. suitable subsoil samples have been submitted for analysis, at a site won subsoil frequency of 1 per 250 m3 in line with the E3P remediation strategy, covering 4,000 m3 of site won subsoil

Conclusion

No further remedial works.

As part of the build phase works, the MMP will be updated to include any future import of clean naturally occurring soils with validation testing of imported subsoils undertaken at agreed frequencies. All garden areas where a cover system is required will be subject to plot specific independent validation. The subsoil source and associated chemical testing for soils used within plots will be issued as part of the garden validation letters for these plots. Garden validation letters are to be submitted in batches as agreed with Manchester City Council.

RE-21 – PROVISION OF TOPSOIL

DATE OF WORKS UNDERTAKEN

April 2024 – October 2024

CHEMICAL ANALYSIS

Eurofins Report ref: 24-77927 (Roman Way TS001-003)
Eurofins Report ref: 24-12322 (Roman Way TS101-103)
Eurofins Report ref: 24-13816 (Roman Way TS104-113)
Eurofins Report ref: 24-29418 (Halewood IMP-TS-101-105)
Eurofins Report ref: 24-36526 (Viking Way CONG-TS-101-105)

OVERVIEW OF WORKS

Background

No material that would be deemed suitable for use as topsoil is present on-site and as such there will be a requirement to import suitable material for use within the proposed development.

Overview of Works

E3P have obtained imported topsoil deposits from Donor Site 'Roman Way, Preston', 'Halewood Consortium' and 'Viking Way, Congleton' which were analysed in line with the E3P Remediation Strategy.

To date, a total of 16no. topsoil samples have been submitted for analysis from Roman Way, at a brownfield frequency of 1 per 50 m3. Five topsoil samples have been submitted for analysis from Halewood Consortium at a greenfield frequency of 1 per 200m3. Five topsoil samples have been submitted for analysis from Viking Way, Congleton at a greenfield frequency of 1 per 200m3 in line with the E3P remediation strategy. Total samples obtained cover 2,800 m3 of imported topsoil.

Analysis for subsoil undertaken by I2 Analytical Laboratories and Eurofins Laboratories using UKAS accredited methods where applicable.

The chemical analysis suite comprises heavy metals, sulphates, phenols, speciated Polycyclic Aromatic Hydrocarbons (PAHs), speciated and total Petroleum Hydrocarbons (TPH) and asbestos. The sampling frequency follows the agreed Remediation Strategy. Laboratory analysis certificates are attached to this validation certificate.

Chemical analysis confirmed that these topsoil deposits were chemically suitable for use within the proposed garden areas.

Conclusion

No further remedial works.

As part of the build phase works, the MMP will be updated to include any future import of clean naturally occurring soils with validation testing of imported topsoils undertaken at agreed frequencies. All garden areas where a cover system is required will be subject to plot specific independent validation. The topsoil source and associated chemical testing for soils used within plots will be issued as part of the garden validation letters for these plots. Garden validation letters are to be submitted in batches as agreed with Manchester City Council

RE-22 – INDEPENDENT VALIDATION: WATCHING BRIEF

DATE OF WORKS UNDERTAKEN
Throughout works

OVERVIEW OF WORKS

Background
Given the site history and potential contamination sources identified within the ICSM, a degree of uncertainty remained with regard to the potential unidentified contamination impact within the near-surface soils and groundwater.

It will therefore be necessary to instigate the site-wide remediation and enabling works under the supervision of a suitably qualified and independent specialist.

Works Undertaken
E3P maintained a part-time watching brief throughout the duration of remediation and enabling works to monitor works, record ground conditions and fully investigate all potential sources of yet unidentified contamination. E3P's records and findings are summarised throughout this report.

E3P engineer site diaries are available upon request,

Conclusion
Completed in line with the remediation strategy, **no further action**.

RE-23 – WASTE SOILS SURPLUS TO REQUIREMENTS

DATE OF WORKS UNDERTAKEN
Throughout works

CHEMICAL ANALYSIS

Coal Tar
I2 Analytical Report ref: 23-69190
I2 Analytical Report ref: 23-69196
RJT Report Ref: 24-Nov-23

Knotweed
I2 Analytical Report ref: 23-52624
I2 Analytical Report ref: 23-52626
RJT Report Ref: 31-Aug-23

Historic Infilled Chimney Base
I2 Analytical Report ref: 23-53713

Visual Asbestos Stockpile
I2 Analytical Report Ref: 23-74533 (ASB-001)
I2 Analytical Report Ref: 24-77955 (ASB Bund)

Material from "burial pits" in north and south of the Site
Eurofins Report Ref:24-27684 (ASB A and ASB B)
Eurofins Report Ref: 24-35015 (SW-MG-019-021)

OVERVIEW OF WORKS

Background

In the event that a surplus of excavation material was present on-site, this, in most cases, was to be deemed a waste in accordance with the Waste Framework Directive (Article 3(1) Waste Framework Directive 2008/98/EE). The waste producer – but ultimately, the landowner – is responsible for the compliant disposal of such materials.

A formal waste classification assessment was required, irrespective of any future options or considerations for those materials that were to be removed from the site.

Works Undertaken

Across the development the earthworks have been designed to be in balance, as such, soils generated from excavation activities (cut) have been re-used on site within the earthworks balance in areas requiring upfill, as such, surplus soil generation was limited to contaminated soil sources.

In line with the above, where potential contamination sources have been identified and where bulk waste was extracted from Made Ground soils these materials were removed from site. Contamination sources identified on site included visible coal tar, TPH / SVOC impacted soils within historic chimney base infill and northwest hotspot (RE-7) knotweed impacted soils (RE-4) and asbestos impacted soils (RE-6).

Across the site former roads were lined with sandstone setts. The setts had historically been set within a coal tar. E3P observed the setts being broken out and inspected soils beneath the slabs. Visible coal tar was identified, where encountered coal tar impacted soil was stockpiled on visqueen and subsequently removed to a licenced waste facility (RE-7 provides further detail). Sandstone setts were bagged and removed from site for re-use by an external contractor. No cobble setts were re-used on site within the crushed aggregate.

Historic chimney base arisings were visually impacted with a hydrocarbon sheen. Additionally, PID elevated readings of 75-145 ppm were recorded. The arisings were segregated and stockpiled on an impermeable membrane. E3P undertook chemical sampling (CB-001) that recorded elevated PAH's (including naphthalene of 77 mg/kg), TPH C12-C16 (260 mg/kg), TPH C16-21 (1200 mg/kg) and TPH C21-C35 (1900 mg/kg). Circa 8m3 of backfill material from within the chimney base was removed from site.

Where soils were impacted with knotweed E3P undertook chemical (i2 report 23-52624), WAC (i2 report 23-52626) and WM3 sampling (RJT Report 31-Aug-23) in August 2023 prior to removal of knotweed impacted soils from site by TDR and UR.

Asbestos impacted soils were encountered within two "burial pits" as discussed in RE-6. Visually impacted soils were load loaded directly into wagons and removed from site to a licenced waste facility. A total of 13no. loads (circa 90 m3) of impacted soils were removed from the southern asbestos area between 14th to 16th August 2024. A total of 46no. loads (circa 320 m3) of impacted soils were removed from the northern asbestos area between 11th and 9th September 2024. Waste consignment notes and tracking notes are held by Kellen Homes and UR.

Deleterious materials (inclusive of tyres), unsuitable demolition material, metals, timber and vegetation were removed from site by TDR and UR.

Waste consignment notes and tracking notes are held by TDR and UR.

Conclusion

Completed in line with the remediation strategy, **no further action**.

RE-24 – VALIDATION OF MATERIALS FOR POTABLE WATER SUPPLY INFRASTRUCTURE

DATE OF WORKS UNDERTAKEN
July 2023

SUPPORTING DOCUMENT
15-974 - UURA – Bennett Street – July 2023

OVERVIEW OF WORKS
Background A contaminant risk assessment, completed during pervious works in accordance with the UKWIR assessment framework identified elevated concentrations of potentially volatile/soluble hydrocarbon compounds that necessitate the use of protected water supply pipe-work. **Works Undertaken** The site has been turned over and upfilled with site won made ground soils to create a development platform. A UKWIR assessment (15-974 - UURA – Bennett Street – July 2023) of Made Ground samples was undertaken by E3P, this assessment recommended barrier pipe was installed across the development due to the presence of site wide elevated SVOC, TPH EC10-16 & TPH EC16-40, Phenols and VOC have been recorded against PE Thresholds. **Conclusion** Assessment completed in line with the remediation strategy and confirms that the installation of barrier pipe is required across development.

RE-25 – REMEDIAL VERIFICATION REPORT

DATE OF WORKS UNDERTAKEN
July 2023 – October 2024

OVERVIEW OF WORKS
This report outlines works undertaken relating to site clearance, chemical testing, remedial works, remedial verification and waste transfer. This report should be submitted to the local authority for approval following completion. **Conclusion** **No further action.**

3. SECOND PHASE MITIGATION AND MANAGEMENT – BUILD PHASE

A second post remediation phase of works will be required to ensure the proposed development is constructed in a manner that incorporates the required mitigation measures to ensure the development is compliant with UK Building Regulations and the Local Authority Planning requirements.

These obligations, inclusive of vapour gas protective measures, are specified in more detail within the E3P Build Phase Contamination Risk Mitigation Strategy (15-974-R3-6, November 2023) that should be read as a precursor to this report.

4. CONCLUSION

The remediation elements identified within the approved Remediation and Enabling Works Strategy have been completed across the site, with validation testing confirming that the works have been completed to the required standard.

As part of the on-going construction works the developer will be required to construct and validate the items listed below in strict accordance with the requirements of the regulatory authorities as documented in detail within this report. Build phase validation certification will be issued to Manchester City Council in batches, as agreed with Sue Wills for Condition 11B.

- Installation and validation of specialist mitigation measures that will facilitate the dispersal of vapour accumulation within the sub-floor void with specialist membranes and construction design works to inhibit the ingress of hazardous volatile chemicals and ground gasses into the dwellings;
- Laboratory testing and chemical validation of imported or site-derived topsoil and subsoil;
- Placement of a 600 mm cover system using certified material and geotextile break layer with appropriate validation within all private rear garden areas;
- Placement of a 450 mm cover system using certified material and geotextile break layer with appropriate validation within all private front garden areas;
- Placement of 450 mm cover system within POS and landscaped areas; and,
- Installation of appropriate potable water supply pipework (barrier pipe – see United Utilities Risk Assessment for further detail).

END OF REPORT

APPENDIX I
LIMITATIONS

GENERAL

1. This report and any associated works (together comprising the "Services") were compiled and carried out by E3P for the client (as present in Section 1) under the E3P “Terms of Business” or with those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed and outlined in the body of the report.

2. Unless explicitly agreed otherwise, in writing, this report has been prepared under E3P Standard Terms and Business as included within our proposal to the Client.

3. Project-specific appointment documents may be agreed upon at our discretion and a charge may be levied for both the time to review and finalise appointment documents and also for associated changes to the appointment terms. E3P reserves the right to amend the fee should any changes to the appointment terms create an increased risk to E3P.

4. The report needs to be considered in light of the proposal and associated limitations of scope. The report needs to be read in full and isolated sections cannot be used without full reference to other elements of the report and any previous works referenced within the report.

PHASE 1 GEOENVIRONMENTAL AND PRELIMINARY RISK ASSESSMENTS

5. Coverage: This section covers reports with the following titles or combination of titles: Phase 1; Desktop Study; Geoenvironmental Assessment; Development Appraisal; Preliminary Environmental Risk Assessment; Constraints Report; Due Diligence Report; Geotechnical Development Review; Environmental Statement; Environmental Chapter; Baseline Environmental Assessment; Project Scope Summary Report (PSSR), Program Environmental Impact Report (PEIR), Geotechnical Development Risk Register; Agricultural Land Assessment; Mineral Safeguarding Assessment; Desk Top Coal Mining Risk Assessment; Hydrogeological Appraisal; Construction Environmental Management Plan; and Site Water Management Plan.

6. The works undertaken to prepare this report comprised a study of available and easily documented information from a variety of sources (including the Client), together with (where appropriate) a brief walkover inspection of the Site and correspondence with relevant authorities and other interested parties. Due to the short timescales associated with these projects responses may not have been received from all parties. E3P cannot be held responsible for any disclosures that are provided post-production of our report and will not automatically update our report.

7. The opinions given in this report have been dictated by the finite data on which they are based and are relevant only for the purpose for which the report was commissioned. The information reviewed should not be considered exhaustive and has been accepted in good faith as providing true and representative data pertaining to site conditions. Should additional information become available which may affect the opinions expressed in this report, E3P reserves the right to review such information and, if warranted, to modify the opinions accordingly.

8. It should be noted that any risks identified in this report are perceived risks based on the information reviewed. Actual risks can only be assessed following intrusive investigations of the site.

9. Where mention has been made to the identification of Japanese Knotweed and other invasive plant species and asbestos or asbestos-containing materials, this is for indicative purposes only and does not constitute or replace full and proper surveys completed by suitably qualified and experienced specialists in these fields.

10. E3P does not warrant work/data undertaken/provided by others.

INTRUSIVE INVESTIGATION REPORTS

11. Coverage: The following report titles (or combination) may cover this category of work: Geoenvironmental Site Investigation; Geotechnical Assessment; GIR (Ground Investigation Reports); Preliminary Environmental And Geotechnical Risk Assessment; Preliminary Summary; Coal Mining Risk Assessment, Ground Gas Addendum; and, Geotechnical Risk Register.

12. The investigation has been undertaken to provide information concerning either:

    I. The type and degree of contamination present at the site in order to allow a generic quantitative risk assessment to be undertaken; or

    II. Information on the soil properties present at the site to allow for geotechnical development constraints to be considered.

13. The scope of the investigation was selected on the basis of the specific development and land use scenario proposed by the Client and may be inappropriate to another form of development or scheme. If the development layout was not known at the time of the investigation the report findings may need revisiting once the development layout is confirmed.

14. Unless otherwise specified in the scope of works, any site drawing(s) provided in this report is (are) not meant to be an accurate base plan but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (intrusive and sample locations etc) annotated on site plans are not drawn to scale but are centred over the approximate location. Such features should not be used for setting out and should be considered indicative only.

15. For contamination purposes, the objectives of the investigation are limited to establishing the risks associated with potential contamination sources with the potential to cause harm to human health, building materials, the environment (including adjacent land), or controlled waters.

16. For geotechnical investigations, the purpose is to broadly consider potential development constraints associated with the physical property of the soils underlying the site within the context of the proposed future or continued use of the site, as stated within the report.

17. The amount of exploratory work, soil property testing and chemical testing undertaken has necessarily been restricted by various factors which may include accessibility, the presence of services; existing buildings; current site usage or short timescales. The exploratory holes completed assess only a small percentage of the area in relation to the overall size of the Site, and as such can only provide a general indication of conditions.

18. The number of sampling points and the methods of sampling and testing do not preclude the possible existence of contamination where concentrations may be significantly higher than those actually encountered or ground conditions that vary from those identified. In addition, there may be exceptional ground conditions elsewhere on the site which have not been disclosed by this investigation and which have therefore not been taken into account in this report.

19. The inspection, testing and monitoring records relate specifically to the investigation points and the timeframe that the works were undertaken. They will also be limited by the techniques employed. As part of this assessment, E3P has used reasonable skill and care to extrapolate conditions between these points based on assumptions to develop our interpretation and conclusions.

20. The assumption made in forming our conclusions is that the ground and groundwater conditions (both chemically and physically) are the same as have been encountered during the works undertaken at the specific points of investigation and at the time of the investigation.

21. Conditions can change between investigation points both spatially and over time and these interpretations should therefore be considered indicative. The assessment of extreme weather events and their impact on ground conditions is not within the scope of E3P's work.

22. The risk assessment and opinions provided are based on currently available guidance relating to acceptable contamination concentrations; no liability can be accepted for the retrospective effects of any future changes or amendments to these values. Specific assumptions associated with the risk assessment process have been outlined within the body or associated appendix of the report.

23. Additional investigations may be required in order to satisfy relevant planning conditions or to resolve any engineering and environmental issues.

24. Where soil contamination concentrations recorded as part of this investigation are used for commentary on the potential waste classification of soils for disposal purposes, these should be classed as indicative only. Due consideration should be given to the variability of contaminant concentrations taken from targeted samples versus bulk excavated soils and the potential variability of contaminant concentrations between sampling locations. Where major waste disposal operations are considered, targeted waste classification investigations should be designed and the waste classification and any subsequent disposal option agreed upon with licenced subcontractors and/or the relevant regulators.

25. The results of the asbestos testing are factually reported and interpretation is given as to how this relates to the previous use of the site, the types of ground encountered and site conceptualisation. This does not however constitute a formal asbestos assessment. These results should be treated cautiously and should not be relied upon to provide detailed and representative information on the delineation, type and extent of bulk ACMs and/or trace loose asbestos fibres within the soil matrix at the site.

26. If costs have been included in relation to additional site works, and/or site remediation works these must be considered as indicative only and must be confirmed by a qualified quantity surveyor.

EUROCODE 7: GEOTECHNICAL DESIGN

27. On 1st April 2010, BS EN 1997-1:2004 (Eurocode 7: Geotechnical Design – Part 1) became the mandatory baseline standard for geotechnical ground investigations.

28. In terms of geotechnical design for foundations, slopes, retaining walls and earthworks, EC7 sets guidance on design procedures including specific guidance on the numbers and spacings of boreholes for geotechnical design, there are limits to methods of ground investigation and the quality of data obtained and there are also prescriptive methods of assessing soil strengths and methods of design. Unless otherwise explicitly stated, the work has not been undertaken in accordance with EC7. A standard geotechnical interpretative report will not meet the requirements of the Geotechnical Design Report (GDR) under Eurocode 7. The GDR can only be prepared following confirmation of all structural loads and serviceability requirements. The report is likely to represent a Ground Investigation Report (GIR) under the Eurocode 7 guidance.

DETAILED QUANTITATIVE RISK ASSESSMENTS AND REMEDIATION AND ENABLING WORK STRATEGY REPORTS

29. These reports build upon previous report versions and associated notes. The scope of the investigation, further testing and monitoring and associated risk assessments were selected based on the specific development and land use scenario proposed by the Client and may not be appropriate to another form of development or scheme layout. The risk assessment and opinions provided are based on currently available approaches in the generation of Site Specific Assessment Criteria relating to contamination concentrations and are not considered to represent a risk in a specific land use scenario to a specific receptor. No liability can be accepted for the retrospective effects of any future changes or amendments to these values, associated models or associated guidance.

30. The outputs of the Detailed Quantitative Risk Assessments are based upon the manipulation of standard risk assessment models. These are our interpretation of the risk assessment criteria.

31. Before adoption on-site, assessment criteria will need to be discussed and agreed upon with the Regulatory Authorities prior to adoption on site. The regulatory discussion and engagement process may result in an alternative interpretation being determined and agreed. The process and timescales associated with the Regulatoy Authority engagement are not within the control of E3P. All costs and programmes presented as a result of this process should be validated by a quantity surveyor and should be presumed to be indicative.

32. E3P does not accept liability for any subcontract work that has not been completed in strict accordance with an approved E3P Remediation and Enabling Works Strategy.

GEOTECHNICAL DESIGN REPORT (GDR)

33. The GDR can only be prepared following confirmation of all structural loads and serviceability requirements. All the relevant information needs to be provided to allow for a GDR to be produced.

MONITORING (INCLUDING REMEDIATION MONITORING REPORTS AND BUILD PHASE MITIGATION)

34. These reports are factual and comprise monitoring, normally groundwater and ground gas and data provided by contractors as part of earthworks or remedial works.

35. The data is presented and will be compared with assessment criteria.

APPENDIX II
GLOSSARY

TERMS

ACM	Asbestos-containing material	**MMP**	Materials management plan
ADS	Acoustic design statement	**ND**	Not detected
AST	Above-ground storage tank	**NDP**	Nuclear density probe
BGS	British Geological Survey	**NMP**	Noise management plan
BSI	British Standards Institute	**NPSE**	Noise policy statement for England
BTEX	Benzene, toluene, ethylbenzene, xylenes	**NR**	Not recorded
CA	Coal Authority	**PAH**	Polycyclic aromatic hydrocarbon
CBR	California bearing ratio	**PCB**	Polychlorinated biphenyl
CIEH	Chartered Institute of Environmental Health	**PI**	Plasticity index
CIRIA	Construction Industry Research Association	**PID**	Photo ionisation detector
CLEA	Contaminated land exposure assessment	**POS**	Public open space
CML	Council of Mortgage Lenders	**PPE**	Personnel protective equipment
CoC	Contaminants of concern	**ProPG**	Professional practice guidance
CSM	Conceptual site model	**QA**	Quality assurance
DNAPL	Dense non-aqueous phase liquid (chlorinated solvents, PCB)	**SGV**	Soil guideline value
DWS	Drinking water standard	**SPH**	Separate-phase hydrocarbon
EA	Environment Agency	**SPT**	Standard penetration test
EQS	Environmental quality standard	**SVOC**	Semi-volatile organic compound
FFL	Finished floor level	**TPH**	Total and speciated petroleum hydrocarbon
GAC	General assessment criteria	**TPH CWG**	Total Petroleum Hydrocarbon (Criteria Working Group)
GL	Ground level	**UKWIR**	United Kingdom Water Infrastructure Risk
GSV	Gas screening value	**UST**	Underground storage tank
HCV	Health criteria value	**VCC**	Vibro-concrete column
ICSM	Initial conceptual site model	**VOC**	Volatile organic compound
LEL	Lower explosive limit	**VRSC**	Vibro-replacement stone columns
LMRL	Lower method reporting limit	**VSC**	Vibro-stone columns
LNAPL	Light non-aqueous phase liquid (petrol, diesel, kerosene)	**WHO**	World Health Organisation
MCV	Moisture condition value	**WRAP**	Waste and Resources Action Programme
MIBK	Methyl isobutyl ketone	**WTE**	Water table elevation

m	Metres	**ppm**	Parts per million
km	Kilometres	**mg/m^3**	Milligram per metre cubed
% v/v	Percent volume in air	**m bgl bgl**	Metres below ground level
mb	Millibars (atmospheric pressure)	**m bcl**	Metre below cover level
l/hr	Litres per hour	**mAOD**	Metres above ordnance datum (sea level)
µg/l	Micrograms per litre (parts per billion)	**kN/m^2**	Kilonewtons per metre squared
ppb	Parts per billion	**µm**	Micrometre
mg/kg	Milligrams per kilogram (parts per million)	**SSRT**	Site Specific Remediation Target
PSD	Particle Size Distribution	**DD**	Dry Density
CL:AIRE	Contaminated Land: Applications in Real Environments	**Mc**	Moisture Content
ρ	Bulk Density	**GPR**	Ground Penetrating Radar
NDP	Nuclear Density Probe	**FFL**	Finished Floor Level
LEL	Lower Explosive Limit	**UKWIR**	UK Water Industry Research
CIRIA	Construction Industry Research and Information Association	**LOD**	Limit of Detection

APPENDIX III
DRAWINGS



	Notes:		*Client:* Kellen Homes	*Job No:* 15-974	*Date:* 24.02.2025
				Drawing No: 002	*Scale:* NTS
			Job Title: Bennett Street, Manchester	*Drawing Title:* Proposed Development Plan	

Phase	Issue	Date	Drawn	Checked
P1	REVC	24.02.2025	TG	MD
P1	REVB	19.04.2023	EB	MD
P1	REVA	21.07.2022	EB	MD

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Key

- Invasive Species Impact Area RE-4
- Historic Ponds RE-9
- Asbestos Impact RE-6
- VOC/SVOC Sources RE-7
- Historic Tanks RE-11 And RE-12
- Impacted Perched Groundwater Areas RE-3

Notes:

Phase	Issue	Date	Drawn	Checked	PM
P1	REVA	11.03.2025	TG	MD	MD

Client: Kellen Homes

Job No: 15-974

Date: 11.03.2025

Drawing No: 043

Scale: NTS

Job Title: Bennett Street, Manchester

Drawing Title: Remediation Plan

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Key

- Invasive Species Impact Area RE-4
- Historic Ponds RE-9
- Asbestos Impact RE-6
- VOC/SVOC Sources RE-7
- Historic Tanks RE-11 And RE-12
- Impacted Perched Groundwater Areas RE-3
- Soil Sample
- Leachate Sample

Notes:

Stockpile Samples Not Shown On Plan.
In-situ Soil And Leachate Samples Only.

Phase	Issue	Date	Drawn	Checked	PM
P1	REVA	11.03.2025	TG	MD	MD

Client: Kellen Homes

Job No: 15-974

Date: 12.03.2025

Drawing No: 044

Scale: NTS

Job Title: Bennett Street, Manchester

Drawing Title: In-situ Sampling Plan

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Location Symbols

Approximate CBR Test Location

Notes:

Phase	Issue	Date	Drawn	Checked	PM
P1	REVA	21.01.2025	TG	MD	MD

Client: Kellen Homes Limited

Job No: 15-974

Date: 21.01.2025

Drawing No: 031

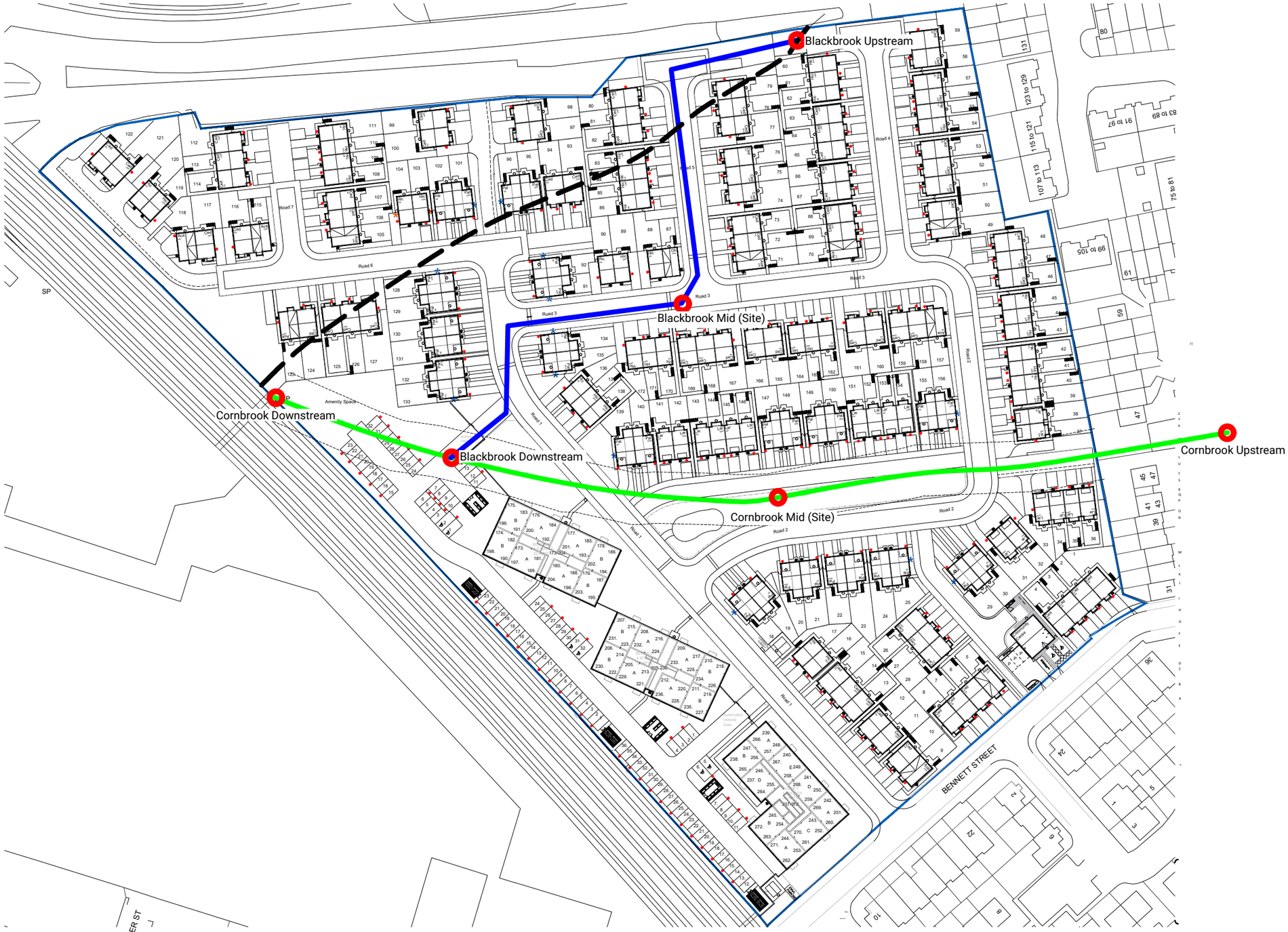
Scale: NTS

Job Title: Bennett Street

Drawing Title: CBR Test Location Plan

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Key

- Water Sampling Location
- Blackbrook Culvert Diversion Route
- Cornbrook Culvert
- Historic Blackbrook Culvert Route

Notes:

Phase	Issue	Date	Drawn	Checked
P1	REVB	24.02.2025	TG	MD
P1	REVA	10.05.2023	OW	JB

Client: Kellen Homes

Job No: 15-974

Date: 24.02.2025

Drawing No: 027

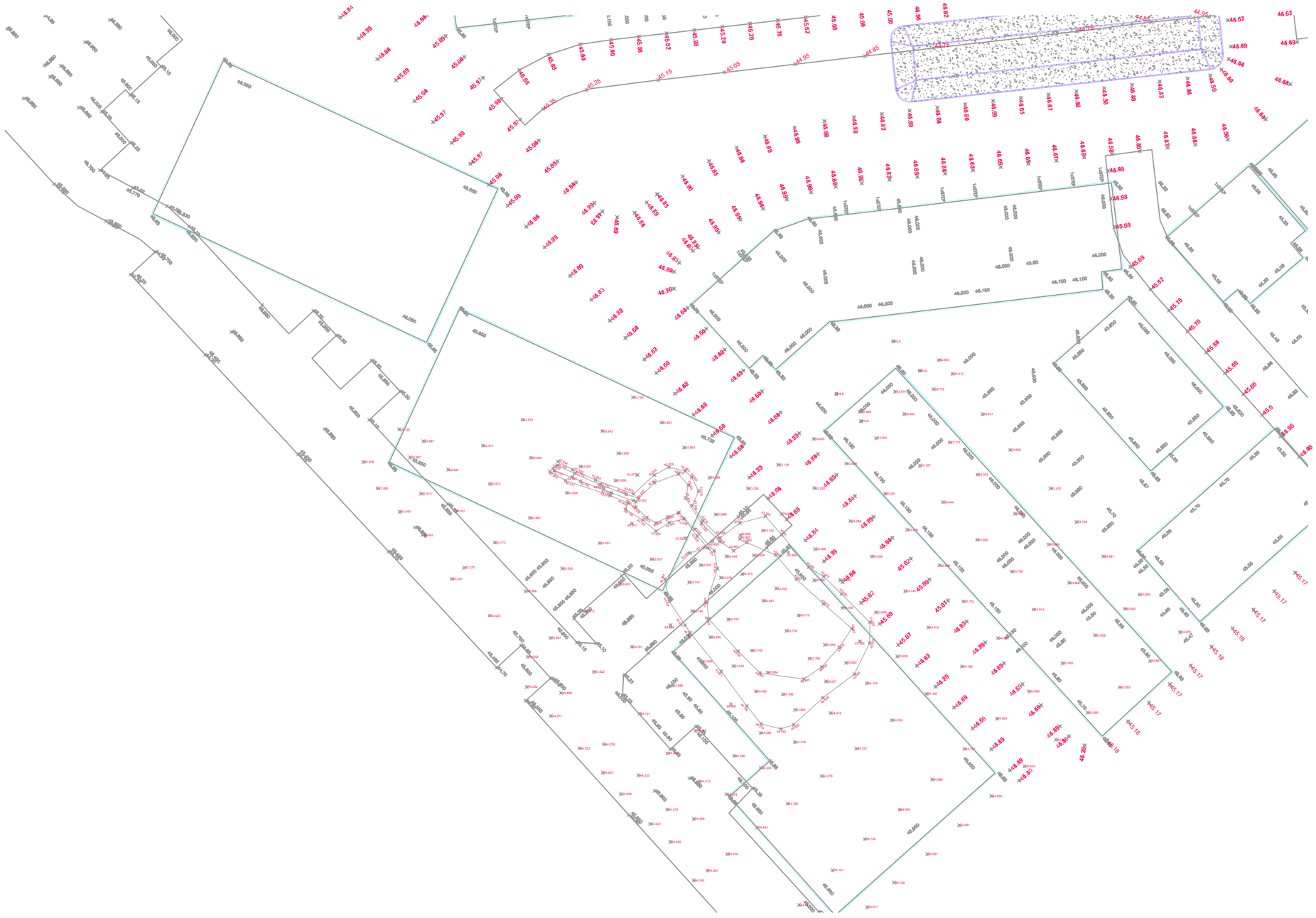
Scale: NTS

Job Title: Bennett Street, Manchester

Drawing Title: Water Sampling Location Plan

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P1	REVA	11.03.2024	CB	MD	MD	
Phase	Issue	Date	Drawn	Checked	PM	

Notes:

Client:
Kellen Homes

Job No:
15-974

Date:
11.03.2024

Drawing No:
032

Scale:
NTS @ A3

Job Title:
Bennett Street, Manchester

Drawing Title:
Phase 1 Pond Excavation Plan

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Location Symbols

Approximate CBR Test Location

Notes:

Phase	Issue	Date	Drawn	Checked	PM
P1	REVA	21.01.2025	TG	MD	MD

Client: Kellen Homes Limited

Job No: 15-974

Date: 21.01.2025

Drawing No: 037

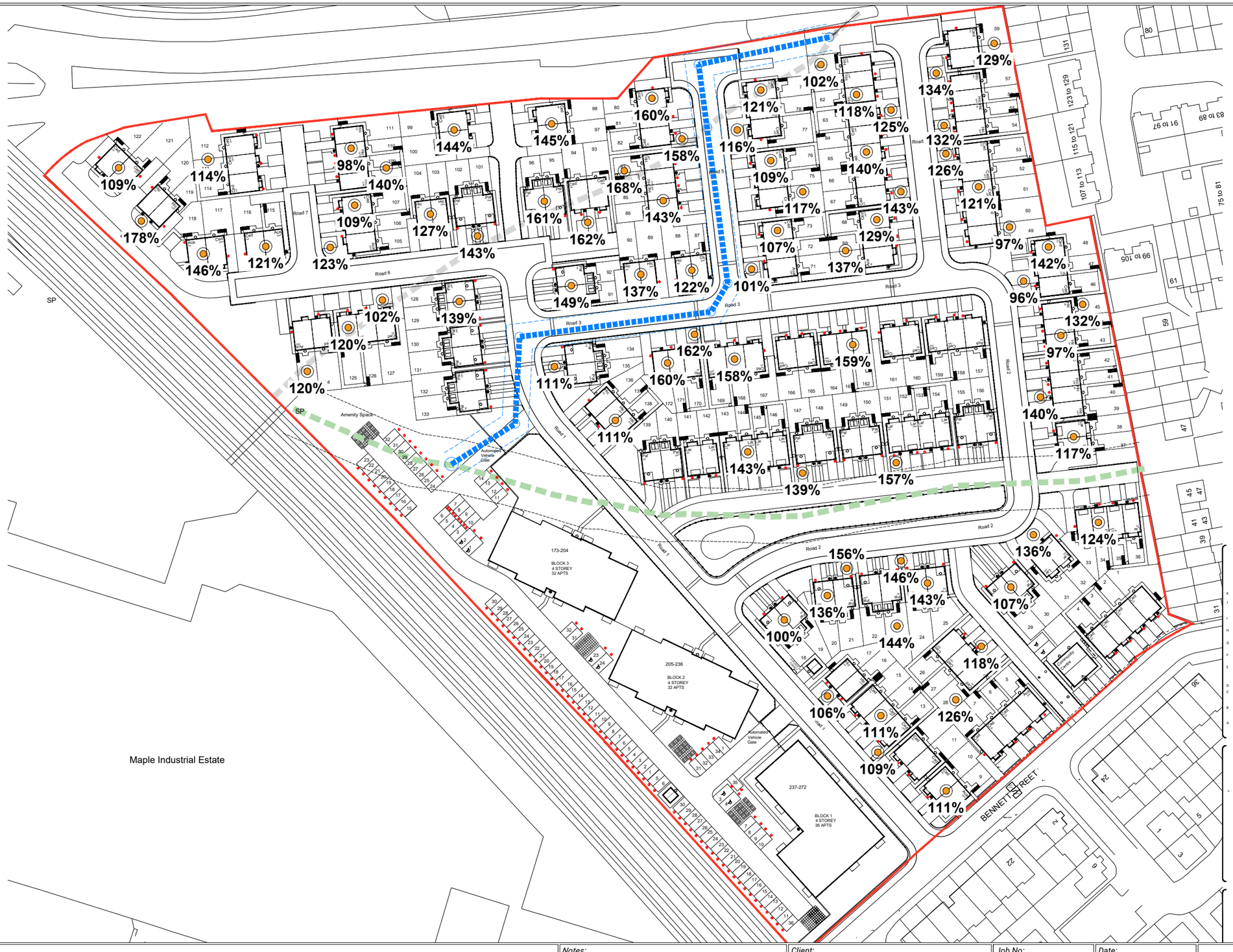
Scale: NTS

Job Title: Bennett Street

Drawing Title: CBR Test Location Plan

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Location Symbols

Approximate NNDG FFL Location

Notes:

P1	REVA	21.01.2025	TG	MD	MD
Phase	Issue	Date	Drawn	Checked	PM

Client: Kellen Homes

Job No: 15-974

Date: 21.01.2025

Drawing No: 038

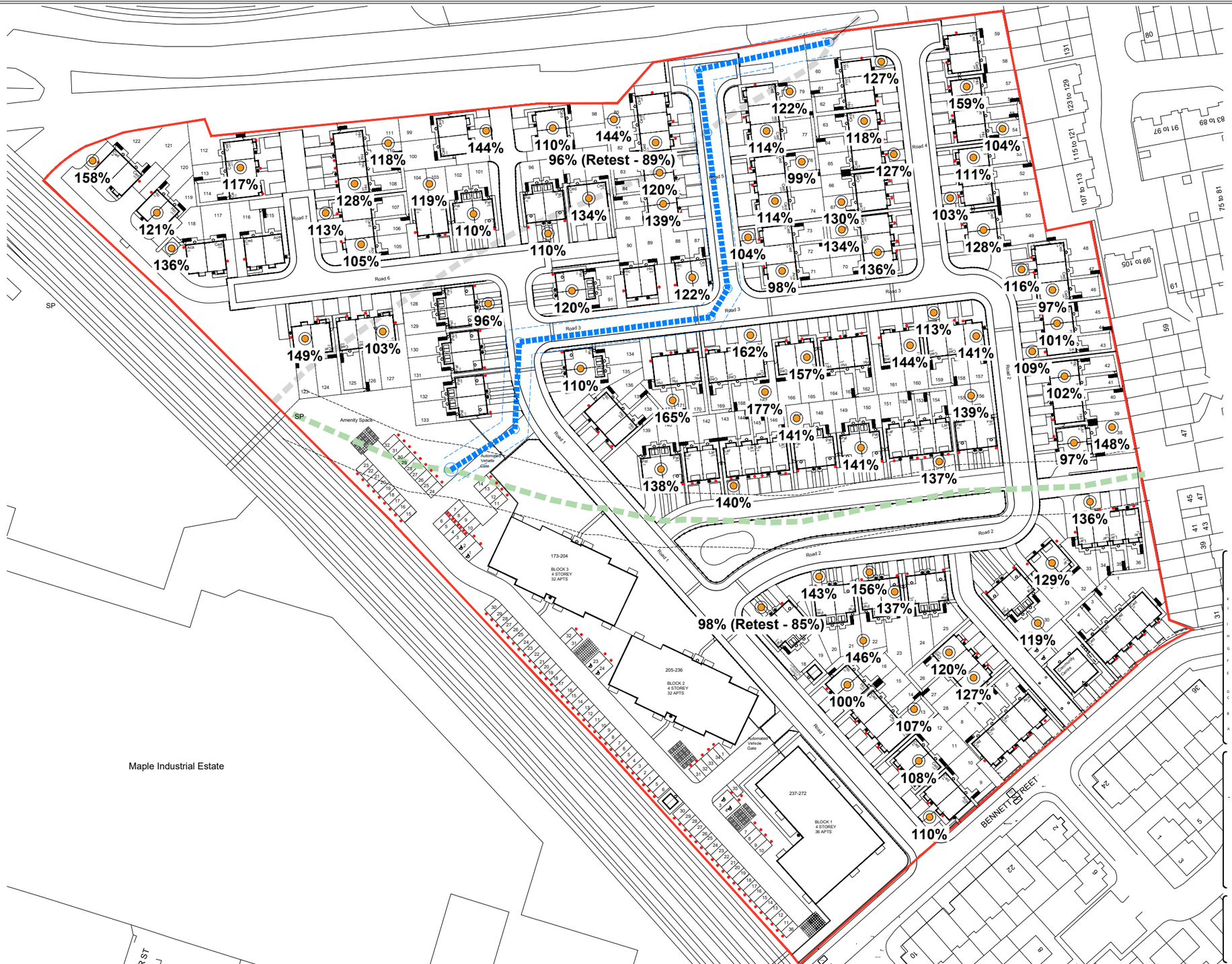
Scale: NTS

Job Title: Bennett Street, Manchester

Drawing Title: NNDG FFL Location Plan

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Location Symbols

Approximate NNDG 0.75m Location

Notes:

P1	REVA	21.01.2025	TG	MD	MD
Phase	Issue	Date	Drawn	Checked	PM

Client: Kellen Homes

Job No: 15-974

Date: 17.01.2025

Drawing No: 039

Scale: NTS

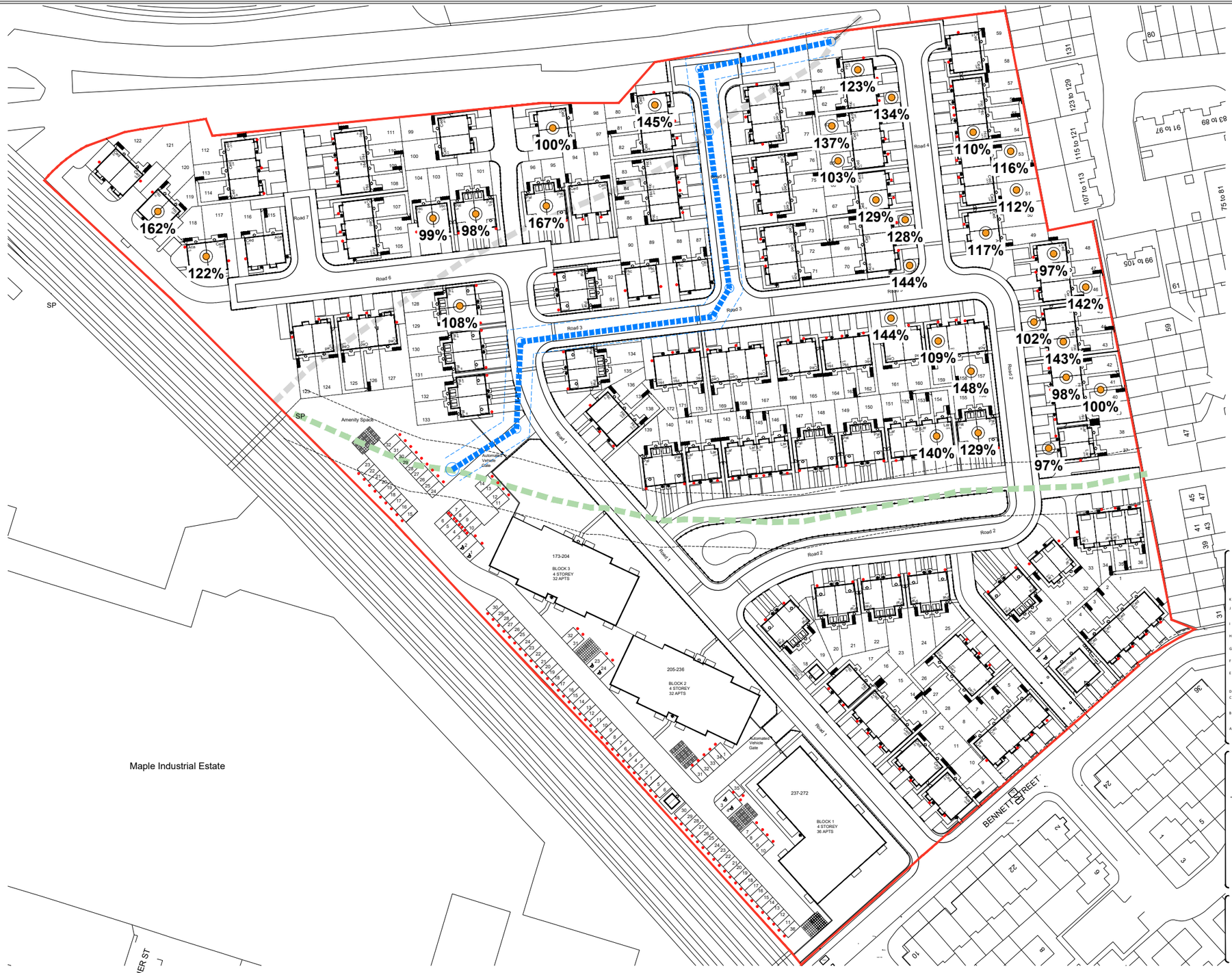
Job Title: Bennett Street, Manchester

Drawing Title: NNDG 0.75m Location Plan

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Location Symbols

Approximate NNDG 1.50m Location

Notes:

P1	REVA	21.01.2025	TG	MD	MD
Phase	Issue	Date	Drawn	Checked	PM

Client: Kellen Homes

Job No: 15-974

Date: 21.01.2025

Drawing No: 040

Scale: NTS

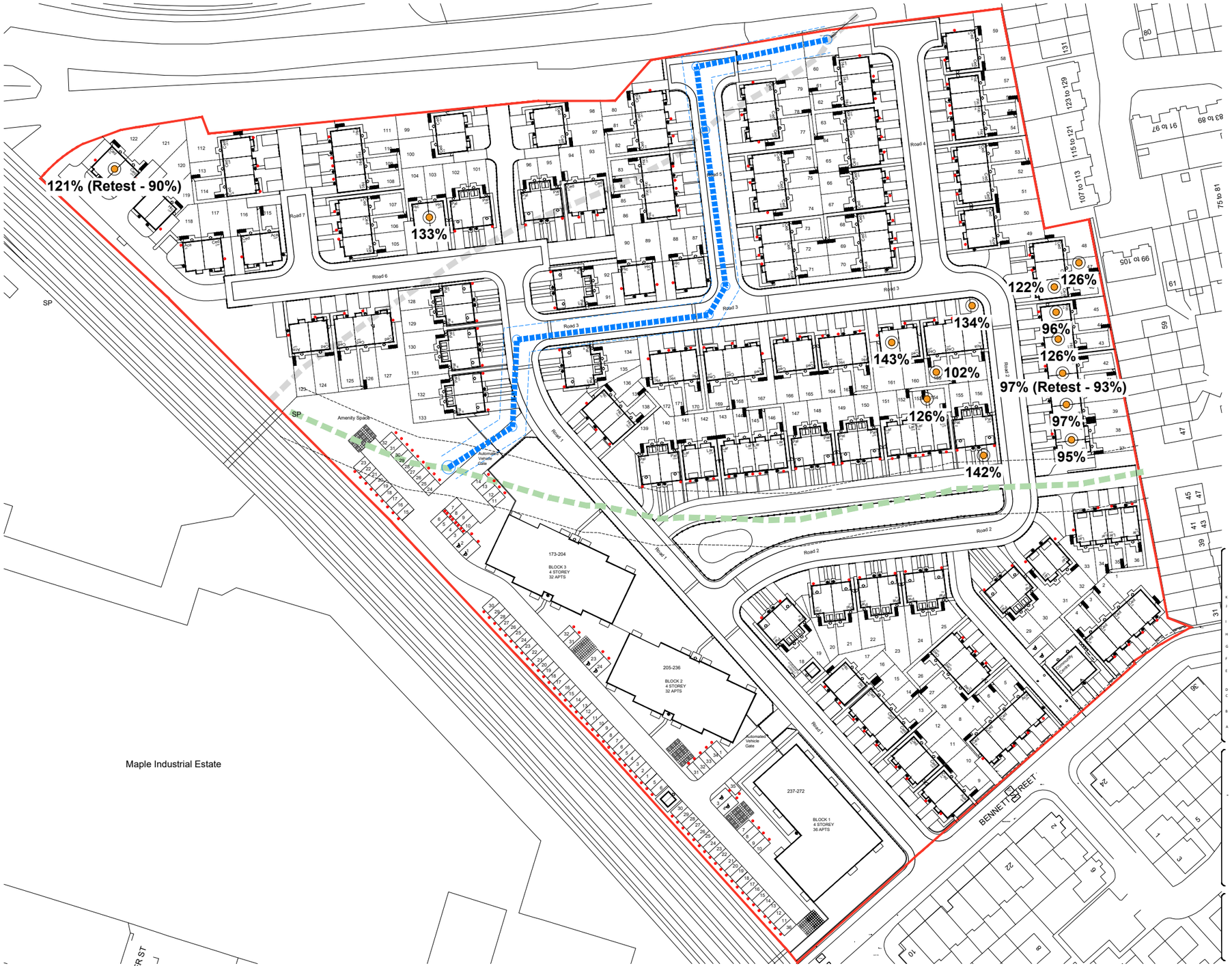
Job Title: Bennett Street, Manchester

Drawing Title: NNDG 1.50m Location Plan

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Location Symbols

Approximate NNDG >2.25m Location

Notes:

Phase	Issue	Date	Drawn	Checked	
P1	REVA	21.01.2025	TG	MD	MD

Client: Kellen Homes

Job No: 15-974

Date: 21.01.2025

Drawing No: 041

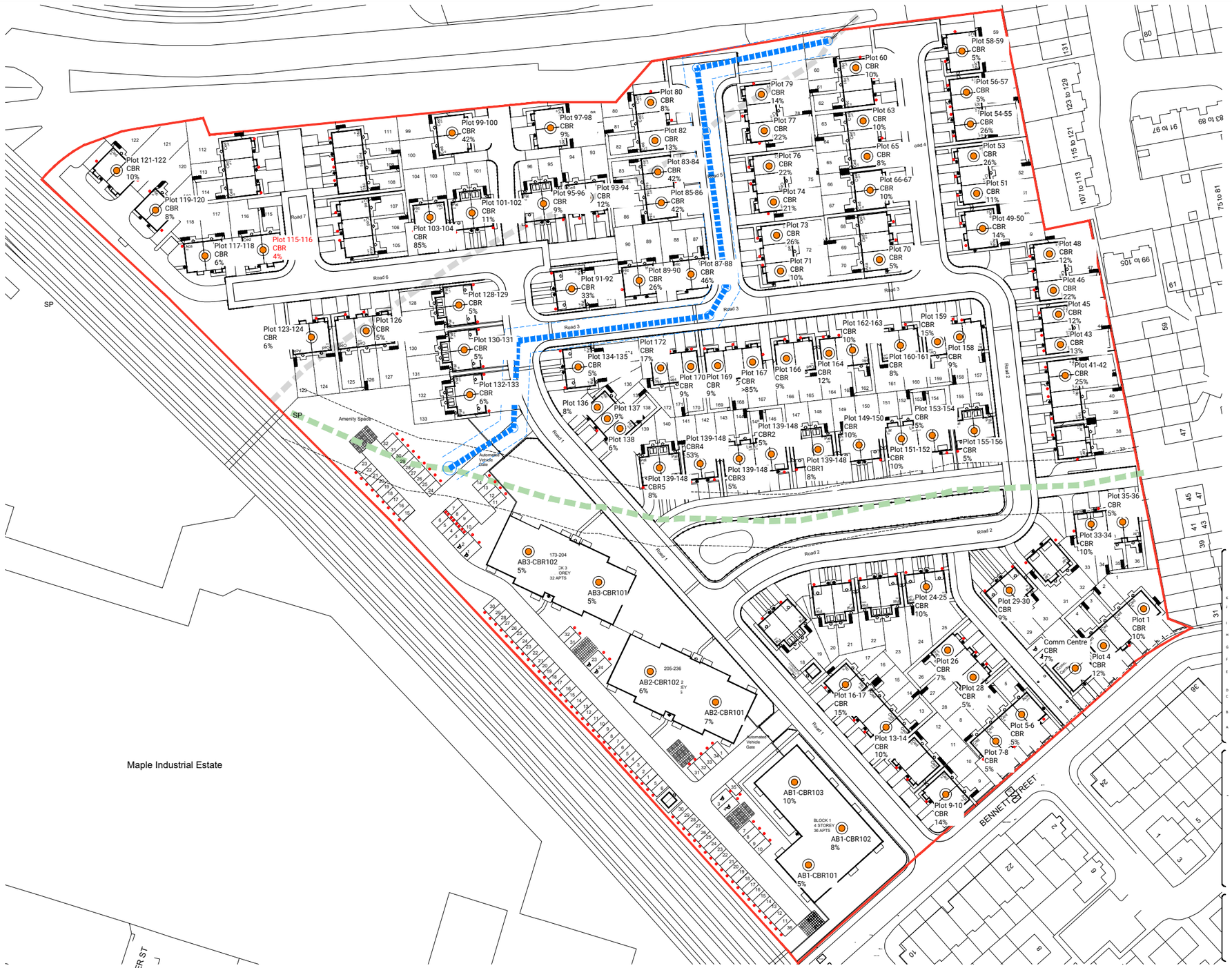
Scale: NTS

Job Title: Bennett Street, Manchester

Drawing Title: NNDG >2.25m Location Plan

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Location Symbols

Approximate CBR Test Location

Notes:

Client: Kellen Homes Limited

Job No: 15-974

Date: 22.01.2025

Drawing No: 042

Scale: NTS

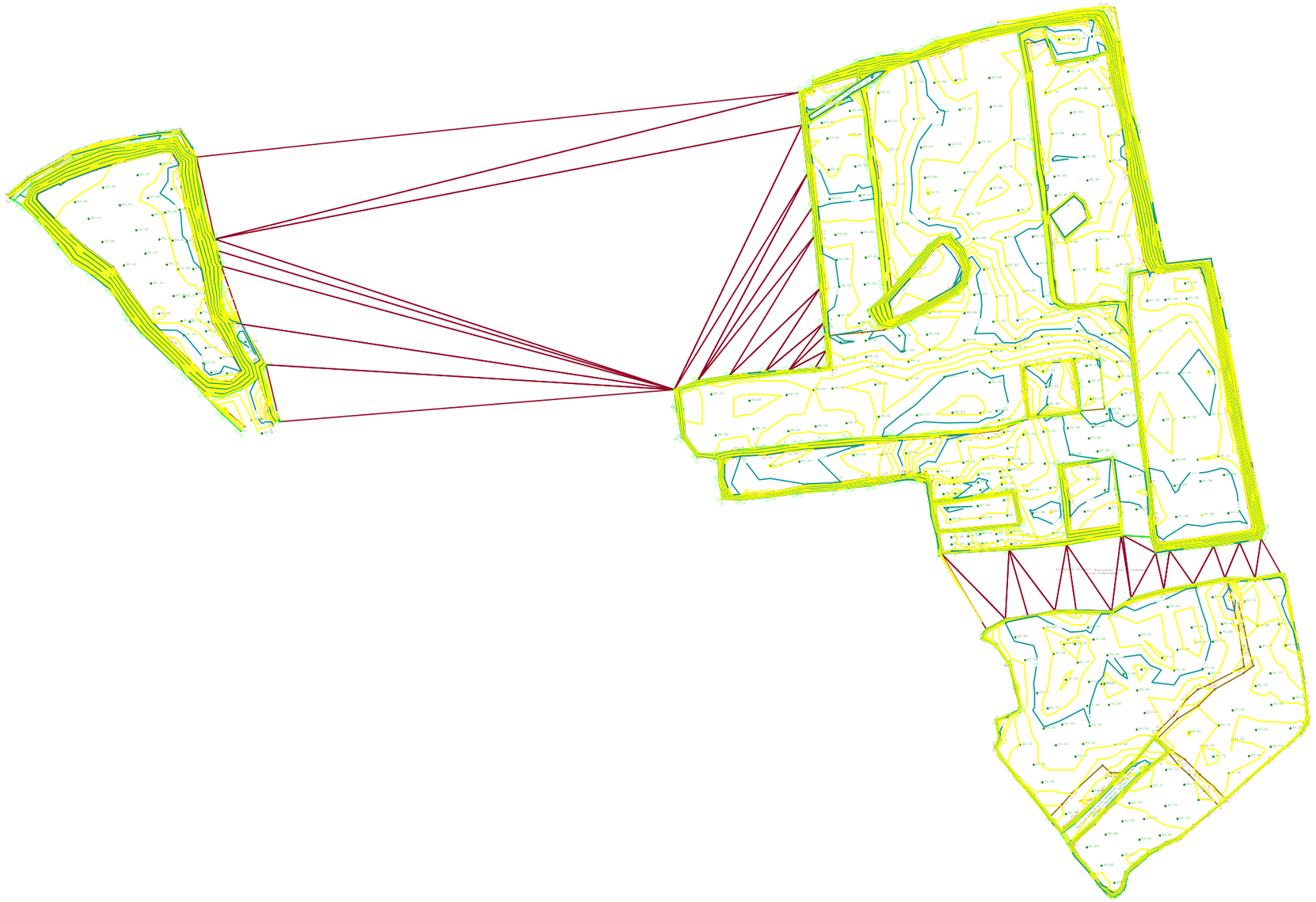
Phase	Issue	Date	Drawn	Checked	PM
P1	REVA	22.01.2025	TG	MD	MD

Job Title: Bennett Street

Drawing Title: CBR Location Plan

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

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N

	Notes:		Client: Kellen Homes	Job No: 15-974	Date: 17.01.2025	e3p Environmental Engineering Partnership Ltd, Taylor Road, Trafford Park, Urmston, Manchester, M41 7JQ, Tel: 0161 707 9612, E-mail: info@e3p.co.uk, Website: www.e3p.co.uk
				Drawing No: 036	Scale: NTS	
	P1 / Phase	REVA / Issue	17.01.2025 / Date	TG / Drawn	MD / Checked	MD / PM
			Job Title: Bennett Street, Manchester	Drawing Title: Urban Regen - Depth of turnover		The client must not amend any drawing, design or other intellectual property produced by E3P Ltd without permission in writing from E3P Ltd in advance of any amendments being made. In the event that such written permission is not obtained in advance of the amendments being made, E3P Ltd shall not be liable for any damage and/or losses occurring as a result of the amended drawing, design or intellectual property.





P1	REVA	17.01.2025	TG	MD	MD	
Phase	Issue	Date	Drawn	Checked	PM	

Notes:

Client: Kellen Homes

Job No: 15-974

Drawing No:

Date: 17.01.2025

Scale: NTS

Job Title: Bennett Street, Manchester

Drawing Title:

Environmental Engineering Partnership Ltd
Taylor Road, Trafford Park
Urmston, Manchester, M41 7JQ
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P1	REVA	17.01.2025	TG	MD	MD	
Phase	Issue	Date	Drawn	Checked	PM	

Notes:

Client: Kellen Homes

Job No: 15-974

Date: 17.01.2025

Drawing No:

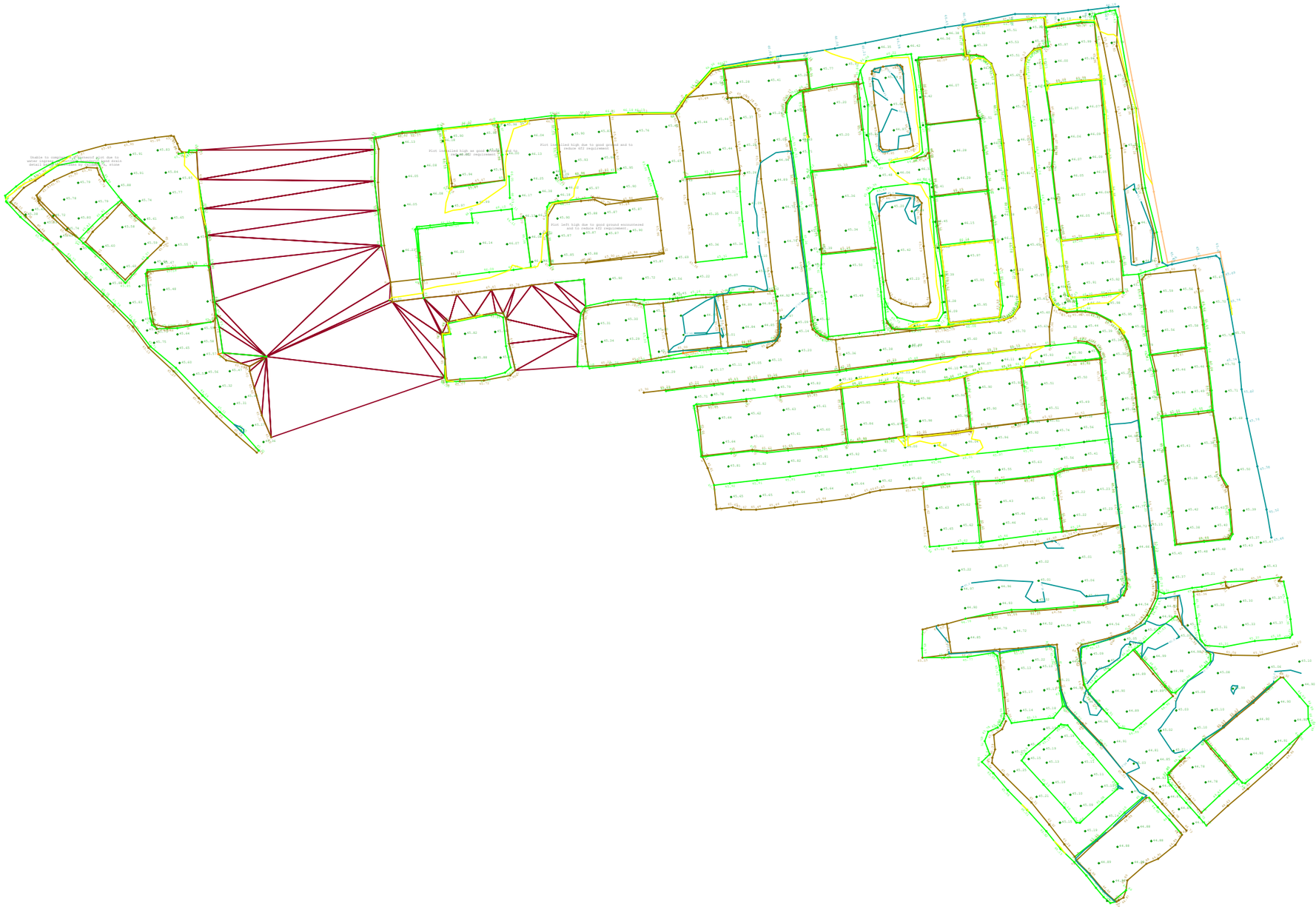
Scale: NTS

Job Title: Bennett Street, Manchester

Drawing Title:

Environmental Engineering Partnership Ltd
Taylor Road, Trafford Park
Urmston, Manchester, M41 7JQ
Tel: 0161 707 9612
E-mail: info@e3p.co.uk
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P1	REVA	17.01.2025	TG	MD	MD	
Phase	Issue	Date	Drawn	Checked	PM	

Notes:

Client: Kellen Homes

Job No: 15-974

Date: 17.01.2025

Drawing No:

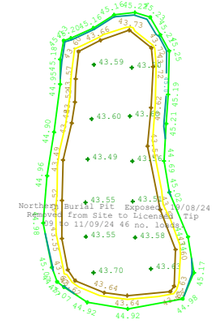
Scale: NTS

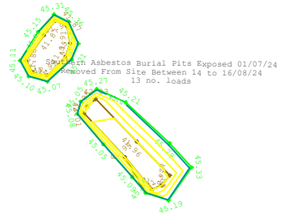
Job Title: Bennett Street, Manchester

Drawing Title:

Environmental Engineering Partnership Ltd
Taylor Road, Trafford Park
Urmston, Manchester, M41 7JQ
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P1	REVA	17.01.2025	TG	MD	MD	
Phase	Issue	Date	Drawn	Checked	PM	

Notes:

Client: Kellen Homes

Job No: 15-974

Date: 17.01.2025

Drawing No:

Scale: NTS

Job Title: Bennett Street, Manchester

Drawing Title:

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Figure A1

Asbestos in Soils Conceptual Site Model - Residential Development

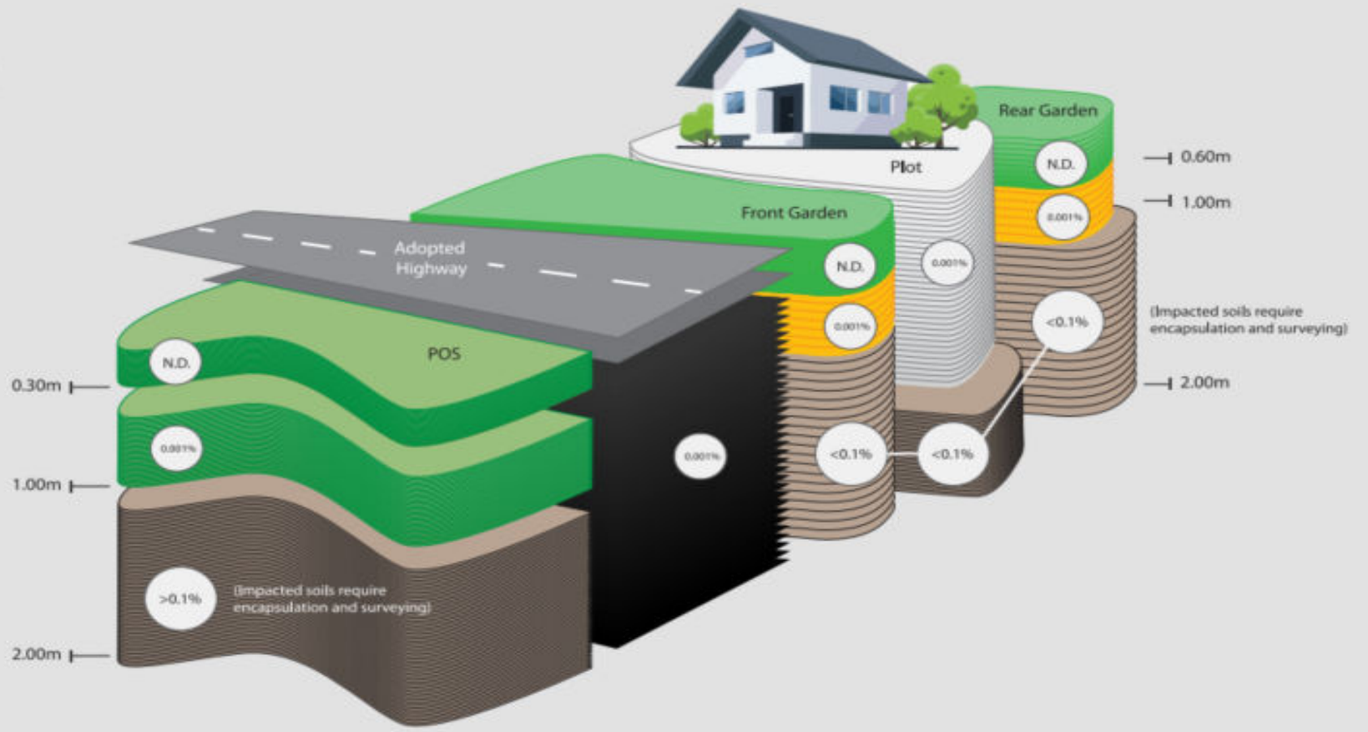
Notes:

N.D. – None Detected

0.001% - Soils may contain ≤0.001% asbestos using composite testing to ensure there is no potential risk to human health. This value is present within areas where there may be short term low level exposure of soils containing trace asbestos fibres by construction workers where an appropriate level of asbestos management is employed (dust suppression).

0.1% - Soils at a depth of >1.00m bgl may contain <0.1% asbestos using composite testing where they will be not likely to be disturbed in the future and will therefore be in an area of low sensitivity. Risk assessment completed in accordance with the Asbestos JIWG risk assessment tools.

Undefined – This will be dependent upon soils encountered during the earthworks, which may be placed at these depths to ensure no potential risk to human health.



Notes:						
P1	REVA	07.01.2025	TG	LC	MD	
Phase	Issue	Date	Drawn	Checked	PM	

Client: Kellen Homes Limited

Job No: 15-974

Date: 07.01.2025

Drawing No: 035

Scale: NTS

Job Title: Bennett Street

Drawing Title: Asbestos Conceptual Site Model

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Taylor Road, Trafford Park
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APPENDIX IV
CHEMICAL TESTING RESULTS

Olivia Jackson
e3p
Taylor Road
Urmston
Manchester
M41 7JQ

e: ojackson@e3p.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 21-30518-2

Replaces Analytical Report Number: 21-30518, issue no. 1
Client sampling date amended.

Project / Site name:	Bennet Street	**Samples received on:**	15/12/2021
Your job number:	15-425	**Samples instructed on/ Analysis started on:**	17/12/2021
Your order number:	000177	**Analysis completed by:**	15/03/2022
Report Issue Number:	2	**Report issued on:**	15/03/2022
Samples Analysed:	1 leachate sample - 12 soil samples		

Signed:

Joanna Wawrzeczko
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-30518
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2124227	2124228	2124229	2124230	2124231
Sample Reference				WS107	WS109	WS109	WS110	WS113
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.00	3.50	1.80	2.50
Date Sampled				13/12/2021	13/12/2021	13/12/2021	13/12/2021	14/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	19	17	30	22
Total mass of sample received	kg	0.001	NONE	1	1	0.5	1	0.5
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Not-detected	-
Asbestos Analyst ID	N/A	N/A	N/A	EC	EC		EC	

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	8.1	-	8.2	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	1000	-	1200	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.2	-	0.13	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	400	-	270	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	202	-	133	-
Sulphide	mg/kg	1	MCERTS	-	65	-	110	-
Total Sulphur	mg/kg	50	MCERTS	-	4700	-	4700	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	2.5	-	2.8	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	4.8	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	5.3	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	4.2	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	1.7	< 0.05	26	0.64
Anthracene	mg/kg	0.05	MCERTS	-	0.54	< 0.05	9.1	0.21
Fluoranthene	mg/kg	0.05	MCERTS	-	2.8	< 0.05	29	0.7
Pyrene	mg/kg	0.05	MCERTS	-	3.1	< 0.05	28	0.72
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	1.6	< 0.05	12	0.4
Chrysene	mg/kg	0.05	MCERTS	-	1.3	< 0.05	8.6	0.3
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	1.3	< 0.05	7.9	0.18
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	0.59	< 0.05	5.6	0.27
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	1.4	< 0.05	9.6	0.29
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	0.51	< 0.05	3.9	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	1.3	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	0.62	< 0.05	4.6	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	15.5	< 0.80	160	3.71

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-30518
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2124227	2124228	2124229	2124230	2124231
Sample Reference				WS107	WS109	WS109	WS110	WS113
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.00	3.50	1.80	2.50
Date Sampled				13/12/2021	13/12/2021	13/12/2021	13/12/2021	14/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	110	48	3	99	16
Barium (aqua regia extractable)	mg/kg	1	MCERTS	550	-	84	-	99
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	6.1	-	0.45	-	1
Boron (water soluble)	mg/kg	0.2	MCERTS	2.8	-	0.5	-	2.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	20	-	29	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	320	140	12	260	44
Lead (aqua regia extractable)	mg/kg	1	MCERTS	590	220	13	320	72
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	3.1	0.8	< 0.3	1.2	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	77	28	11	74	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	88	-	17	-	32
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	340	66	35	230	280
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	3.6	< 2.0	< 2.0	2.9	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	21	< 4.0	< 4.0	16	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	130	12	< 1.0	86	10
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	250	24	28	180	23
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	52	< 10	< 10	54	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	MCERTS	460	36	28	340	33
VOCs								
Chloromethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Chloroethane	µg/kg	1	NONE	< 1.0	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	< 1.0	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	-	-	-	-
Benzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-

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Analytical Report Number: 21-30518
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2124227	2124228	2124229	2124230	2124231
Sample Reference				WS107	WS109	WS109	WS110	WS113
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.00	3.50	1.80	2.50
Date Sampled				13/12/2021	13/12/2021	13/12/2021	13/12/2021	14/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Tetrachloroethene	µg/kg	1	NONE	< 1.0	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Styrene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Tribromomethane	µg/kg	1	NONE	< 1.0	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	< 0.2	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	1.8	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	1.8	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 21-30518
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2124227	2124228	2124229	2124230	2124231
Sample Reference				WS107	WS109	WS109	WS110	WS113
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.00	3.50	1.80	2.50
Date Sampled				13/12/2021	13/12/2021	13/12/2021	13/12/2021	14/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	1.1	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	3.1	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	1.5	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	3.7	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	26	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	5.8	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	1.3	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	30	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	30	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	16	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	14	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	14	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	6.6	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	14	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	6.1	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.7	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	7.5	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 21-30518
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2124232	2124233	2124234	2124235	2124236
Sample Reference				WS114	WS115	WS116	WS117	WS118
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.40	0.25	2.40	1.90
Date Sampled				14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	18	17	20	24
Total mass of sample received	kg	0.001	NONE	1	1	1	0.5	0.5
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EC	DBU	DBU		DBU

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	-	8	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	1.5
Total Sulphate as SO4	mg/kg	50	MCERTS	730	-	900	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.13	-	0.049	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	250	-	99	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	126	-	49.3	-	-
Sulphide	mg/kg	1	MCERTS	180	-	180	-	-
Total Sulphur	mg/kg	50	MCERTS	1900	-	1400	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3	-	3	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	3.2	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-	-	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	-	-	2.9	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	-	-	2.2	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	-	-	10	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	3.6	-
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	8.2	-
Pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	7.2	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	3.5	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	-	3.1	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	2.3	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	-	-	1.9	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	3	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-	-	1.2	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-	-	0.44	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	-	1.3	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	-	-	54.6	-

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Analytical Report Number: 21-30518
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2124232	2124233	2124234	2124235	2124236
Sample Reference				WS114	WS115	WS116	WS117	WS118
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.40	0.25	2.40	1.90
Date Sampled				14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	84	18	10	49
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	880	-	200	85
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	1.7	-	1.3	1.2
Boron (water soluble)	mg/kg	0.2	MCERTS	-	0.6	-	1.3	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	7.7	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	-	24	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	83	330	110	52	150
Lead (aqua regia extractable)	mg/kg	1	MCERTS	380	4300	430	45	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.8	5.1	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	40	28	31	44
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	52	-	32	92
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	5900	250	79	68
Petroleum Hydrocarbons								
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	< 2.0	180	100	4.8	< 2.0
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	< 4.0	550	220	12	8.5
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	< 1.0	1400	470	25	9
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	< 1.0	2300	630	27	4.3
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	530	82	< 10	< 10
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	MCERTS	< 10	4900	1500	68	22
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0
Chloroethane	µg/kg	1	NONE	-	< 1.0	< 1.0	-	< 1.0
Bromomethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0
Vinyl Chloride	µg/kg	1	NONE	-	< 1.0	< 1.0	-	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	-	< 1.0	< 1.0	-	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	-	< 1.0	< 1.0	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	< 1.0	< 1.0	-	< 1.0
Benzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	6.6	< 1.0	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0

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Analytical Report Number: 21-30518
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2124232	2124233	2124234	2124235	2124236
Sample Reference				WS114	WS115	WS116	WS117	WS118
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.40	0.25	2.40	1.90
Date Sampled				14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0	< 1.0	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	9.9	< 1.0	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	16	< 1.0	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	< 1.0	< 1.0	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	13	< 1.0	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	17	< 1.0	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	30	< 1.0	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	-	< 0.1	< 0.1	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	< 0.2	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	< 0.2	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	86	23	-	1.9
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	< 0.1	-	1.2
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	< 0.1	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	54	16	-	1.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1

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Analytical Report Number: 21-30518
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2124232	2124233	2124234	2124235	2124236
Sample Reference				WS114	WS115	WS116	WS117	WS118
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.40	0.25	2.40	1.90
Date Sampled				14/12/2021	14/12/2021	14/12/2021	14/12/2021	14/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	5.5	1.8	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	82	59	-	1
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	51	35	-	0.4
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3	< 0.3	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	70	50	-	0.67
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	360	270	-	3.5
Anthracene	mg/kg	0.05	MCERTS	-	100	74	-	1
Carbazole	mg/kg	0.3	MCERTS	-	24	20	-	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	7.7	7.2	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	390	220	-	3.2
Pyrene	mg/kg	0.05	MCERTS	-	360	200	-	2.8
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	< 0.3	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	190	91	-	1.8
Chrysene	mg/kg	0.05	MCERTS	-	170	77	-	1.3
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	140	64	-	1.1
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	81	37	-	0.67
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	150	67	-	1.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	73	34	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	24	10	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	83	33	-	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 21-30518
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2124237	2124238
Sample Reference				WS119	WS128
Sample Number				None Supplied	None Supplied
Depth (m)				2.50	0.60
Date Sampled				14/12/2021	15/12/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	23
Total mass of sample received	kg	0.001	NONE	0.5	1

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

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	7.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	320	590
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.038	0.029
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	75	58
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	37.6	29
Sulphide	mg/kg	1	MCERTS	30	< 1.0
Total Sulphur	mg/kg	50	MCERTS	1400	640
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.2	3.1

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	0.37	-
Fluorene	mg/kg	0.05	MCERTS	0.22	-
Phenanthrene	mg/kg	0.05	MCERTS	0.89	-
Anthracene	mg/kg	0.05	MCERTS	0.23	-
Fluoranthene	mg/kg	0.05	MCERTS	0.97	-
Pyrene	mg/kg	0.05	MCERTS	0.96	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.51	-
Chrysene	mg/kg	0.05	MCERTS	0.44	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.36	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.3	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.44	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	5.69	-

Analytical Report Number: 21-30518
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2124237	2124238
Sample Reference				WS119	WS128
Sample Number				None Supplied	None Supplied
Depth (m)				2.50	0.60
Date Sampled				14/12/2021	15/12/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	38
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	31	42
Copper (aqua regia extractable)	mg/kg	1	MCERTS	43	110
Lead (aqua regia extractable)	mg/kg	1	MCERTS	27	540
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	34	33
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	67	230
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	MCERTS	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	MCERTS	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	27
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	180
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	7.6	480
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	12	620
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	68
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	MCERTS	19	1400
VOCs					
Chloromethane	µg/kg	1	ISO 17025	-	< 1.0
Chloroethane	µg/kg	1	NONE	-	< 1.0
Bromomethane	µg/kg	1	ISO 17025	-	< 1.0
Vinyl Chloride	µg/kg	1	NONE	-	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	-	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	-	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	< 1.0
Benzene	µg/kg	1	MCERTS	-	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0

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Analytical Report Number: 21-30518
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2124237	2124238
Sample Reference				WS119	WS128
Sample Number				None Supplied	None Supplied
Depth (m)				2.50	0.60
Date Sampled				14/12/2021	15/12/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	< 1.0
Styrene	µg/kg	1	MCERTS	-	< 1.0
Tribromomethane	µg/kg	1	NONE	-	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	34
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	28
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1

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Analytical Report Number: 21-30518
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2124237	2124238
Sample Reference				WS119	WS128
Sample Number				None Supplied	None Supplied
Depth (m)				2.50	0.60
Date Sampled				14/12/2021	15/12/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	0.95
Acenaphthene	mg/kg	0.05	MCERTS	-	56
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	29
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	41
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	240
Anthracene	mg/kg	0.05	MCERTS	-	61
Carbazole	mg/kg	0.3	MCERTS	-	17
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	8.1
Fluoranthene	mg/kg	0.05	MCERTS	-	190
Pyrene	mg/kg	0.05	MCERTS	-	170
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	77
Chrysene	mg/kg	0.05	MCERTS	-	72
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	54
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	30
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	53
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	25
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	7.9
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	27

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 21-30518
Project / Site name: Bennet Street

Your Order No: 000177

Lab Sample Number				2124259
Sample Reference				WS115
Sample Number				None Supplied
Depth (m)				0.40
Date Sampled				14/12/2021
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (automated)	pH Units	N/A	ISO 17025	8.1
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	1.4
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	30
Speciated PAHs				
Naphthalene	µg/l	0.01	ISO 17025	1.2
Acenaphthylene	µg/l	0.01	ISO 17025	2.2
Acenaphthene	µg/l	0.01	ISO 17025	43
Fluorene	µg/l	0.01	ISO 17025	6.3
Phenanthrene	µg/l	0.01	ISO 17025	1.2
Anthracene	µg/l	0.01	ISO 17025	4.7
Fluoranthene	µg/l	0.01	ISO 17025	2.6
Pyrene	µg/l	0.01	ISO 17025	1.8
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.54
Chrysene	µg/l	0.01	ISO 17025	0.49
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	0.37
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	0.17
Benzo(a)pyrene	µg/l	0.01	ISO 17025	0.4
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.2	NONE	65
Heavy Metals / Metalloids				
Arsenic (dissolved)	µg/l	1	ISO 17025	8.7
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	< 0.4
Copper (dissolved)	µg/l	0.7	ISO 17025	13
Lead (dissolved)	µg/l	1	ISO 17025	6.5
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	3.9
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	27
Monoaromatics & Oxygenates				
Benzene	µg/l	1	ISO 17025	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10
Petroleum Hydrocarbons				
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_\#1\_\#2\_MS}$	µg/l	10	NONE	1100
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0

Analytical Report Number: 21-30518
Project / Site name: Bennet Street

Your Order No: 000177

Lab Sample Number				2124259
Sample Reference				WS115
Sample Number				None Supplied
Depth (m)				0.40
Date Sampled				14/12/2021
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	73
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	480
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	450
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	120
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_#1_#2_MS	µg/l	10	NONE	1100

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number : 21-30518
Project / Site name: Bennet Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2124227	WS107	None Supplied	1	Brown sand with gravel and clinker
2124228	WS109	None Supplied	2	Brown clay with gravel.
2124229	WS109	None Supplied	3.5	Grey clay.
2124230	WS110	None Supplied	1.8	Brown gravelly sand.
2124231	WS113	None Supplied	2.5	Brown clay.
2124232	WS114	None Supplied	0.5	Brown clay with gravel.
2124233	WS115	None Supplied	0.4	Brown gravelly sand.
2124234	WS116	None Supplied	0.25	Brown loam and clay with gravel.
2124235	WS117	None Supplied	2.4	Brown clay.
2124236	WS118	None Supplied	1.9	Brown gravelly sand with oil / petroleum.
2124237	WS119	None Supplied	2.5	Brown clay.
2124238	WS128	None Supplied	0.6	Brown clay with gravel.

Analytical Report Number : 21-30518
Project / Site name: Bennet Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025

Analytical Report Number : 21-30518
Project / Site name: Bennet Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

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

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Analytical Report Number : 21-30518
Project / Site name: Bennet Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Analytical Report Number : 21-30518
Project / Site name: Bennet Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS107	None Supplied	S	2124227	c	Total cyanide in soil	L080-PL	c
WS109	None Supplied	S	2124228	c	Sulphide in soil	L010-PL	c
WS109	None Supplied	S	2124228	c	Total cyanide in soil	L080-PL	c
WS109	None Supplied	S	2124229	c	Total cyanide in soil	L080-PL	c
WS110	None Supplied	S	2124230	c	Sulphide in soil	L010-PL	c
WS110	None Supplied	S	2124230	c	Total cyanide in soil	L080-PL	c
WS113	None Supplied	S	2124231	c	Total cyanide in soil	L080-PL	c
WS114	None Supplied	S	2124232	c	Sulphide in soil	L010-PL	c
WS114	None Supplied	S	2124232	c	Total cyanide in soil	L080-PL	c
WS115	None Supplied	S	2124233	c	Total cyanide in soil	L080-PL	c
WS116	None Supplied	S	2124234	c	Sulphide in soil	L010-PL	c
WS116	None Supplied	S	2124234	c	Total cyanide in soil	L080-PL	c
WS117	None Supplied	S	2124235	c	Total cyanide in soil	L080-PL	c
WS118	None Supplied	S	2124236	c	Total cyanide in soil	L080-PL	c
WS119	None Supplied	S	2124237	c	Sulphide in soil	L010-PL	c
WS119	None Supplied	S	2124237	c	Total cyanide in soil	L080-PL	c

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Analytical Report Number : 22-31069-2

Replaces Analytical Report Number: 22-31069, issue no. 1
Client references/information amended.

Project / Site name:	Bennet Street	**Samples received on:**	17/12/2021
Your job number:	15-425	**Samples instructed on/ Analysis started on:**	04/01/2022
Your order number:	000177	**Analysis completed by:**	15/03/2022
Report Issue Number:	2	**Report issued on:**	15/03/2022
Samples Analysed:	2 leachate samples - 15 soil samples		

Signed:

Joanna Wawrzeczko
Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 22-31069
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2127817	2127818	2127819	2127820	2127821
Sample Reference				WS101	WS104	WS105	WS121	WS122
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.50	1.80	0.70	1.70
Date Sampled				16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	10	22	14	19
Total mass of sample received	kg	0.001	NONE	1.2	0.60	0.50	1.2	0.50
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Not-detected	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO		MLO	
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	11.6	7.5	6.8	-
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	1.9	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	2600	500	5800	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.085	0.12	3.3	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	170	230	6600	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	84.5	115	3300	-
Sulphide	mg/kg	1	MCERTS	-	150	77	630	-
Total Sulphur	mg/kg	50	MCERTS	-	1100	960	7700	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	1.3	1.2	-	-
Total Organic Carbon (TOC) – Manual	%	0.1	MCERTS	-	-	-	14	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	5.1	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	1.3
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	0.96
Acenaphthene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	2.4
Fluorene	mg/kg	0.05	MCERTS	-	-	0.35	-	1.9
Phenanthrene	mg/kg	0.05	MCERTS	-	-	1.3	-	12
Anthracene	mg/kg	0.05	MCERTS	-	-	0.36	-	3.8
Fluoranthene	mg/kg	0.05	MCERTS	-	-	1.3	-	16
Pyrene	mg/kg	0.05	MCERTS	-	-	1.2	-	15
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	0.78	-	8.6
Chrysene	mg/kg	0.05	MCERTS	-	-	0.48	-	7.4
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	0.68	-	8.4
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	0.25	-	2.6
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	0.55	-	6.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	0.28	-	3.6
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	< 0.05	-	1.2
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	0.28	-	4.2
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	7.85	-	95.7
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	57	8.9	6.2	91	66
Barium (aqua regia extractable)	mg/kg	1	MCERTS	180	-	-	-	370
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	2.1	-	-	-	2.1
Boron (water soluble)	mg/kg	0.2	MCERTS	2.0	-	-	-	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.4	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	11	26	7.1	-

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Analytical Report Number: 22-31069
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2127817	2127818	2127819	2127820	2127821
Sample Reference				WS101	WS104	WS105	WS121	WS122
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.50	1.80	0.70	1.70
Date Sampled				16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Copper (aqua regia extractable)	mg/kg	1	MCERTS	100	42	14	51	280
Lead (aqua regia extractable)	mg/kg	1	MCERTS	140	36	25	160	720
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.4	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	62	12	16	20	57
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	160	-	-	-	87
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	70	46	54	130	80
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	27	< 2.0	2400	2.9
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	9.4	65	< 4.0	5200	59
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	37	180	7.0	9400	100
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	79	290	32	8900	220
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	32	67	21	1300	63
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	MCERTS	160	630	60	27000	450
VOCs								
Chloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Lab Sample Number				2127817	2127818	2127819	2127820	2127821
Sample Reference				WS101	WS104	WS105	WS121	WS122
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.50	1.80	0.70	1.70
Date Sampled				16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
o-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	-	< 0.1	-
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	-	73	-
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	-
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	< 0.05	-
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	-
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	-	100	-
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	-
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	49	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	-
Naphthalene	mg/kg	0.05	MCERTS	0.48	23	-	1400	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	-
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	-	< 0.1	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	-	< 0.1	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	-
2-Methylnaphthalene	mg/kg	0.1	NONE	0.5	14	-	610	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	1600	-
Acenaphthene	mg/kg	0.05	MCERTS	0.99	15	-	170	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	-
Dibenzofuran	mg/kg	0.2	MCERTS	0.4	7.3	-	870	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	-	< 0.3	-
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	-

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Lab Sample Number				2127817	2127818	2127819	2127820	2127821
Sample Reference				WS101	WS104	WS105	WS121	WS122
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60	0.50	1.80	0.70	1.70
Date Sampled				16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	-
Fluorene	mg/kg	0.05	MCERTS	0.87	13	-	2200	-
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	< 0.3	-
Phenanthrene	mg/kg	0.05	MCERTS	5.3	67	-	4600	-
Anthracene	mg/kg	0.05	MCERTS	1.5	21	-	1800	-
Carbazole	mg/kg	0.3	MCERTS	0.3	6.2	-	440	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	< 0.2	-
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	3.3	-	120	-
Fluoranthene	mg/kg	0.05	MCERTS	7.6	65	-	3100	-
Pyrene	mg/kg	0.05	MCERTS	9.3	61	-	2500	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	-	< 0.3	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	5.2	35	-	2200	-
Chrysene	mg/kg	0.05	MCERTS	4.0	30	-	1400	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	4.0	30	-	1500	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	1.9	15	-	1200	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.9	28	-	1600	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.9	12	-	770	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.73	3.8	-	260	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.3	14	-	670	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Project / Site name: Bennet Street
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Lab Sample Number				2127822	2127823	2127824	2127825	2127826
Sample Reference				WS123B	WS125	WS131	WS132	WS133
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.80	0.50	0.95	1.50	0.50
Date Sampled				16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	23	2.2	19	14	24
Total mass of sample received	kg	0.001	NONE	0.50	0.50	0.50	0.50	1.2
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	-	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO	MLO		MLO
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.6	8.8	7.8	-	7.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	2600	2700	730	-	1800
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.1	0.57	0.19	-	0.89
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	2200	1100	370	-	1800
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1100	569	187	-	892
Sulphide	mg/kg	1	MCERTS	26	150	26	-	57
Total Sulphur	mg/kg	50	MCERTS	3000	1300	1100	-	2200
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	4.1	2.1	2.1	-	3.5
Total Organic Carbon (TOC) – Manual	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.60	3.3	1.5	< 0.05	-
Acenaphthylene	mg/kg	0.05	MCERTS	0.42	0.29	< 0.05	< 0.05	-
Acenaphthene	mg/kg	0.05	MCERTS	1.7	3.2	1.2	< 0.05	-
Fluorene	mg/kg	0.05	MCERTS	1.4	2.4	1.2	< 0.05	-
Phenanthrene	mg/kg	0.05	MCERTS	8.3	16	8.5	0.30	-
Anthracene	mg/kg	0.05	MCERTS	1.8	3.2	2.0	< 0.05	-
Fluoranthene	mg/kg	0.05	MCERTS	8.4	20	10	0.37	-
Pyrene	mg/kg	0.05	MCERTS	8.4	19	12	0.38	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	4.8	11	6.1	< 0.05	-
Chrysene	mg/kg	0.05	MCERTS	3.9	9.4	6.3	< 0.05	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	4.4	11	6.8	< 0.05	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	1.1	4.6	1.4	< 0.05	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.5	10	5.6	< 0.05	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.7	5.0	2.4	< 0.05	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.68	1.6	0.90	< 0.05	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.1	5.9	3.0	< 0.05	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	53.2	126	68.9	1.05	-
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	110	9.0	21	9.6	32
Barium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	130	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	-	-	-	1.1	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	0.8	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.5	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	14	20	-	160

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 22-31069
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2127822	2127823	2127824	2127825	2127826
Sample Reference				WS123B	WS125	WS131	WS132	WS133
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.80	0.50	0.95	1.50	0.50
Date Sampled				16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Copper (aqua regia extractable)	mg/kg	1	MCERTS	520	48	250	28	160
Lead (aqua regia extractable)	mg/kg	1	MCERTS	600	140	100	19	380
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	6.5	< 0.3	0.7	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	48	15	22	34	53
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	29	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	99	320	59	210
Petroleum Hydrocarbons								
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	< 2.0	2.5	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	12	14	10	< 4.0	12
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	46	56	28	< 1.0	95
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	220	290	64	< 1.0	130
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	140	180	22	< 10	26
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	MCERTS	420	540	120	< 10	270
VOCs								
Chloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 22-31069
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2127822	2127823	2127824	2127825	2127826
Sample Reference				WS123B	WS125	WS131	WS132	WS133
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.80	0.50	0.95	1.50	0.50
Date Sampled				16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
o-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	-	-	-	-	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	3.1
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	2.5
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	0.76
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	2.6
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	8.4
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2

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Analytical Report Number: 22-31069
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2127822	2127823	2127824	2127825	2127826
Sample Reference				WS123B	WS125	WS131	WS132	WS133
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.80	0.50	0.95	1.50	0.50
Date Sampled				16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	10
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	19
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	8.1
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	0.7
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	34
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	27
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	11
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	8.7
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	7.7
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	2.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	5.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	3.0
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	1.2
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	3.8

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-31069
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2127827	2127828	2127829	2127830	2127906
Sample Reference				WS133	WS135	WS136	WS136	WS122
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.30	0.90	0.50	1.20	0.80
Date Sampled				16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	35	22	27	45	12
Total mass of sample received	kg	0.001	NONE	1.2	1.2	0.50	1.2	0.50
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO	MLO	MLO	MLO
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	7.2	7.3	-	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	3.5	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	-	1300	1400	-	220
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.43	0.28	-	0.039
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	860	570	-	78
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	431	283	-	39.2
Sulphide	mg/kg	1	MCERTS	-	79	57	-	7.3
Total Sulphur	mg/kg	50	MCERTS	-	1900	1600	-	160
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	3.1	5.2	-	0.9
Total Organic Carbon (TOC) – Manual	%	0.1	MCERTS	-	-	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Fluorene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	-	-	-	-	0.53
Anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	0.80
Pyrene	mg/kg	0.05	MCERTS	-	-	-	-	0.78
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	0.33
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	0.37
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	0.36
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	-	-	-	-	0.21
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	0.34
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	-	-	3.72
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	19	27	91	24	6.9
Barium (aqua regia extractable)	mg/kg	1	MCERTS	220	-	-	170	-
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	2.2	-	-	0.90	-
Boron (water soluble)	mg/kg	0.2	MCERTS	1.4	-	-	1.7	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	NONE	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	20	23	-	18

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Analytical Report Number: 22-31069
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2127827	2127828	2127829	2127830	2127906
Sample Reference				WS133	WS135	WS136	WS136	WS122
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.30	0.90	0.50	1.20	0.80
Date Sampled				16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Copper (aqua regia extractable)	mg/kg	1	MCERTS	160	130	170	100	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	260	420	450	370	29
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7	2.2	0.8	2.7	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	40	24	50	21	25
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	48	-	-	29	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	160	150	83	100	58
Petroleum Hydrocarbons								
TPH (C5 - C6) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) HS_1D_TOTAL	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) HS_1D_TOTAL	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	12	2.2	< 2.0	25	< 2.0
TPH (C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	66	42	80	320	< 4.0
TPH (C16 - C21) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	200	220	690	1200	5.2
TPH (C21 - C35) EH_CU_1D_TOTAL	mg/kg	1	MCERTS	160	270	430	1400	14
TPH (C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	37	15	66	170	< 10
TPH Total C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	MCERTS	480	540	1300	3100	19
VOCs								
Chloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

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Analytical Report Number: 22-31069
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2127827	2127828	2127829	2127830	2127906
Sample Reference				WS133	WS135	WS136	WS136	WS122
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.30	0.90	0.50	1.20	0.80
Date Sampled				16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
o-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	-
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	-
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	-
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	-
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Naphthalene	mg/kg	0.05	MCERTS	8.7	1.7	1.6	4.5	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
2-Methylnaphthalene	mg/kg	0.1	NONE	6.5	2.3	0.9	4.8	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	2.3	0.90	1.5	-
Acenaphthene	mg/kg	0.05	MCERTS	9.8	5.4	2.0	9.5	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
Dibenzofuran	mg/kg	0.2	MCERTS	22	2.1	0.9	17	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	< 0.3	< 0.3	-
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-

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Analytical Report Number: 22-31069
Project / Site name: Bennet Street
Your Order No: 000177

Lab Sample Number				2127827	2127828	2127829	2127830	2127906
Sample Reference				WS133	WS135	WS136	WS136	WS122
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.30	0.90	0.50	1.20	0.80
Date Sampled				16/12/2021	16/12/2021	16/12/2021	16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
Fluorene	mg/kg	0.05	MCERTS	41	6.0	1.7	39	-
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	-
Phenanthrene	mg/kg	0.05	MCERTS	77	35	16	79	-
Anthracene	mg/kg	0.05	MCERTS	15	8.3	4.5	20	-
Carbazole	mg/kg	0.3	MCERTS	1.8	1.6	1.6	1.7	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	-
Anthraquinone	mg/kg	0.3	MCERTS	4.2	< 0.3	< 0.3	< 0.3	-
Fluoranthene	mg/kg	0.05	MCERTS	74	45	30	87	-
Pyrene	mg/kg	0.05	MCERTS	49	49	34	58	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	< 0.3	< 0.3	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	18	22	23	21	-
Chrysene	mg/kg	0.05	MCERTS	14	21	16	16	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	12	18	25	13	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	3.4	10	11	3.7	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	9.5	19	27	9.8	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.1	7.0	14	3.5	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.2	2.5	4.2	1.4	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.7	8.6	18	3.5	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Analytical Report Number: 22-31069
Project / Site name: Bennet Street
Your Order No: 000177

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2127823	WS125	0.50	153	Bitumen	**Chrysotile**	< 0.001	**< 0.001**

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

Analytical Report Number: 22-31069
Project / Site name: Bennet Street

Your Order No: 000177

Lab Sample Number				2127831	2127832
Sample Reference				WS104	WS133
Sample Number				None Supplied	None Supplied
Depth (m)				0.50	2.30
Date Sampled				16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
General Inorganics					
pH (automated)	pH Units	N/A	ISO 17025	11.9	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	1.8	< 1.0
Total Phenols					
Total Phenols (monohydric)	µg/l	1	ISO 17025	140	< 1.0
Speciated PAHs					
Naphthalene	µg/l	0.01	ISO 17025	220	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	0.41	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	30	< 0.01
Fluorene	µg/l	0.01	ISO 17025	13	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	13	< 0.01
Anthracene	µg/l	0.01	ISO 17025	3.5	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	1.6	< 0.01
Pyrene	µg/l	0.01	ISO 17025	0.91	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01
Total PAH					
Total EPA-16 PAHs	µg/l	0.2	NONE	280	< 0.2
Heavy Metals / Metalloids					
Arsenic (dissolved)	µg/l	1	ISO 17025	9.1	12
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	0.12
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	4.1	2.0
Copper (dissolved)	µg/l	0.7	ISO 17025	56	6.5
Lead (dissolved)	µg/l	1	ISO 17025	2.7	2.4
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	8.4	5.5
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	8.6	16
Monoaromatics & Oxygenates					
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10	< 10
Petroleum Hydrocarbons					
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_\#1\_\#2\_MS}$	µg/l	10	NONE	1600	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0

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Analytical Report Number: 22-31069
Project / Site name: Bennet Street

Your Order No: 000177

Lab Sample Number				2127831	2127832
Sample Reference				WS104	WS133
Sample Number				None Supplied	None Supplied
Depth (m)				0.50	2.30
Date Sampled				16/12/2021	16/12/2021
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	360	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	530	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	570	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	150	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_#1_#2_MS	µg/l	10	NONE	1600	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 22-31069
Project / Site name: Bennet Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2127817	WS101	None Supplied	0.6	Brown clay and loam with gravel and vegetation.
2127818	WS104	None Supplied	0.5	Brown loam and sand with gravel and vegetation.
2127819	WS105	None Supplied	1.8	Brown clay and sand.
2127820	WS121	None Supplied	0.7	Black gravel with tar.
2127821	WS122	None Supplied	1.7	Brown clay and sand with gravel.
2127822	WS123B	None Supplied	0.8	Brown clay and sand with gravel.
2127823	WS125	None Supplied	0.5	Brown clay and sand with gravel.
2127824	WS131	None Supplied	0.95	Brown clay and sand with gravel.
2127825	WS132	None Supplied	1.5	Brown clay and sand.
2127826	WS133	None Supplied	0.5	Brown clay and sand with gravel and vegetation.
2127827	WS133	None Supplied	2.3	Brown clay and sand with gravel.
2127828	WS135	None Supplied	0.9	Brown clay and loam with gravel and vegetation.
2127829	WS136	None Supplied	0.5	Brown clay and sand with gravel and vegetation.
2127830	WS136	None Supplied	1.2	Brown clay and loam with gravel and vegetation.
2127906	WS122	None Supplied	0.8	Brown clay and sand.

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Analytical Report Number : 22-31069
Project / Site name: Bennet Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS

Analytical Report Number : 22-31069
Project / Site name: Bennet Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	MCERTS
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

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

Information in Support of Analytical Results

Analytical Report Number : 22-31069
Project / Site name: Bennet Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Analytical Report Number : 22-31069
Project / Site name: Bennet Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS101	None Supplied	S	2127817	c	TPH in (Soil)	L076-PL	c
WS101	None Supplied	S	2127817	c	Total cyanide in soil	L080-PL	c
WS101	None Supplied	S	2127817	c	Volatile organic compounds in soil	L073B-PL	c
WS104	None Supplied	S	2127818	c	Sulphide in soil	L010-PL	c
WS104	None Supplied	S	2127818	c	TPH in (Soil)	L076-PL	c
WS104	None Supplied	S	2127818	c	Total cyanide in soil	L080-PL	c
WS104	None Supplied	S	2127818	c	Volatile organic compounds in soil	L073B-PL	c
WS105	None Supplied	S	2127819	c	Sulphide in soil	L010-PL	c
WS105	None Supplied	S	2127819	c	TPH in (Soil)	L076-PL	c
WS105	None Supplied	S	2127819	c	Total cyanide in soil	L080-PL	c
WS105	None Supplied	S	2127819	c	Volatile organic compounds in soil	L073B-PL	c
WS121	None Supplied	S	2127820	c	Sulphide in soil	L010-PL	c
WS121	None Supplied	S	2127820	c	TPH in (Soil)	L076-PL	c
WS121	None Supplied	S	2127820	c	Total cyanide in soil	L080-PL	c
WS121	None Supplied	S	2127820	c	Volatile organic compounds in soil	L073B-PL	c
WS122	None Supplied	S	2127821	c	TPH in (Soil)	L076-PL	c
WS122	None Supplied	S	2127821	c	Total cyanide in soil	L080-PL	c
WS122	None Supplied	S	2127821	c	Volatile organic compounds in soil	L073B-PL	c
WS122	None Supplied	S	2127906	c	Sulphide in soil	L010-PL	c
WS122	None Supplied	S	2127906	c	TPH in (Soil)	L076-PL	c
WS122	None Supplied	S	2127906	c	Total cyanide in soil	L080-PL	c
WS122	None Supplied	S	2127906	c	Volatile organic compounds in soil	L073B-PL	c
WS123B	None Supplied	S	2127822	c	Sulphide in soil	L010-PL	c
WS123B	None Supplied	S	2127822	c	TPH in (Soil)	L076-PL	c
WS123B	None Supplied	S	2127822	c	Total cyanide in soil	L080-PL	c
WS123B	None Supplied	S	2127822	c	Volatile organic compounds in soil	L073B-PL	c
WS125	None Supplied	S	2127823	c	Sulphide in soil	L010-PL	c
WS125	None Supplied	S	2127823	c	TPH in (Soil)	L076-PL	c
WS125	None Supplied	S	2127823	c	Total cyanide in soil	L080-PL	c
WS125	None Supplied	S	2127823	c	Volatile organic compounds in soil	L073B-PL	c
WS131	None Supplied	S	2127824	c	Sulphide in soil	L010-PL	c
WS131	None Supplied	S	2127824	c	TPH in (Soil)	L076-PL	c
WS131	None Supplied	S	2127824	c	Total cyanide in soil	L080-PL	c
WS131	None Supplied	S	2127824	c	Volatile organic compounds in soil	L073B-PL	c
WS132	None Supplied	S	2127825	c	TPH in (Soil)	L076-PL	c
WS132	None Supplied	S	2127825	c	Total cyanide in soil	L080-PL	c
WS132	None Supplied	S	2127825	c	Volatile organic compounds in soil	L073B-PL	c
WS133	None Supplied	S	2127826	c	Sulphide in soil	L010-PL	c
WS133	None Supplied	S	2127826	c	TPH in (Soil)	L076-PL	c
WS133	None Supplied	S	2127826	c	Total cyanide in soil	L080-PL	c
WS133	None Supplied	S	2127826	c	Volatile organic compounds in soil	L073B-PL	c
WS133	None Supplied	S	2127827	c	TPH in (Soil)	L076-PL	c
WS133	None Supplied	S	2127827	c	Total cyanide in soil	L080-PL	c
WS133	None Supplied	S	2127827	c	Volatile organic compounds in soil	L073B-PL	c
WS135	None Supplied	S	2127828	c	Sulphide in soil	L010-PL	c
WS135	None Supplied	S	2127828	c	TPH in (Soil)	L076-PL	c
WS135	None Supplied	S	2127828	c	Total cyanide in soil	L080-PL	c
WS135	None Supplied	S	2127828	c	Volatile organic compounds in soil	L073B-PL	c
WS136	None Supplied	S	2127829	c	Sulphide in soil	L010-PL	c
WS136	None Supplied	S	2127829	c	TPH in (Soil)	L076-PL	c
WS136	None Supplied	S	2127829	c	Total cyanide in soil	L080-PL	c
WS136	None Supplied	S	2127829	c	Volatile organic compounds in soil	L073B-PL	c
WS136	None Supplied	S	2127830	c	TPH in (Soil)	L076-PL	c
WS136	None Supplied	S	2127830	c	Total cyanide in soil	L080-PL	c
WS136	None Supplied	S	2127830	c	Volatile organic compounds in soil	L073B-PL	c

UKAS TESTING
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Analytical Report Number : 23-32785

Project / Site name:	Bennett Street	**Samples received on:**	09/05/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	09/05/2023
Your order number:	004774	**Analysis completed by:**	17/05/2023
Report Issue Number:	1	**Report issued on:**	18/05/2023
Samples Analysed:	5 water samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-32785
Project / Site name: Bennett Street

Your Order No: 004774

Lab Sample Number				2673378	2673379	2673380	2673381	2673382
Sample Reference				BB US	RB2023	BB Site	CB US	CB Site
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/05/2023	09/05/2023	09/05/2023	09/05/2023	09/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L005B)	pH Units	N/A	ISO 17025	7.6	7.2	7.7	7.5	7.6
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	3.5	< 1.0	< 1.0	1.2	1
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.94	1	5.1	5.19	5.39
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	11	28	6	76	18
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	1	1.3	1.1	1.5
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	110	120	96	96	94
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.05	2.39	1.89	1.65	1.76
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.11	0.11	< 0.02	< 0.02	0.05
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.2	< 0.2	< 0.2	< 0.2	0.4
Copper (dissolved)	µg/l	0.5	ISO 17025	13	4.2	3.3	2.3	3.6
Lead (dissolved)	µg/l	0.2	ISO 17025	0.8	< 0.2	< 0.2	0.3	0.4
Manganese (dissolved)	µg/l	0.05	ISO 17025	39	440	140	160	140
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.7	6.8	2.6	2.9	2.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	0.7	0.7	0.7
Zinc (dissolved)	µg/l	0.5	ISO 17025	34	26	37	23	42
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	10.4	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	108	98.9	77.7	51.9	38.9
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	1900	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	NONE	470#	340#	270#	130#	82#
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	NONE	63#	51#	40#	23#	15#
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0##	< 1.0##	< 1.0##	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	260	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	1600	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	530	2300	310	150	96

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Analytical Report Number: 23-32785
Project / Site name: Bennett Street

Your Order No: 004774

Lab Sample Number				2673378	2673379	2673380	2673381	2673382
Sample Reference				BB US	RB2023	BB Site	CB US	CB Site
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/05/2023	09/05/2023	09/05/2023	09/05/2023	09/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	8.9	7.6	13	11	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	100	95	77	51	36
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	110	100	90	61	36
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	10.4	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloromethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	108	98.9	77.7	51.9	38.9
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tribromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-32785
Project / Site name: Bennett Street

Your Order No: 004774

Lab Sample Number				2673378	2673379	2673380	2673381	2673382
Sample Reference				BB US	RB2023	BB Site	CB US	CB Site
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/05/2023	09/05/2023	09/05/2023	09/05/2023	09/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-32785
Project / Site name: Bennett Street

Your Order No: 004774

Lab Sample Number				2673378	2673379	2673380	2673381	2673382
Sample Reference				BB US	RB2023	BB Site	CB US	CB Site
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				09/05/2023	09/05/2023	09/05/2023	09/05/2023	09/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	0.55	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	0.59	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

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

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Analytical Report Number : 23-32785
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

Analytical Report Number : 23-32785
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

#Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and therefore may be compromised.
##Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-38003

Project / Site name:	Bennett Street	**Samples received on:**	07/06/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	07/06/2023
Your order number:	005117	**Analysis completed by:**	14/06/2023
Report Issue Number:	1	**Report issued on:**	15/06/2023
Samples Analysed:	4 soil samples		

Signed: JSzwagrak

Joanna Szwagrzak
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-38003
Project / Site name: Bennett Street
Your Order No: 005117

Lab Sample Number				2705611	2705612	2705613	2705614
Sample Reference				SP501- Screened Bund	SP601- Screened Bund	SP801- Screened Bund	SP1201- Screened Bund
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/06/2023	06/06/2023	06/06/2023	06/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	46	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	9.6	4.6	5.7	1.2
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	DSA	DSA	DSA	DSA
General Inorganics							
pH - Automated	pH Units	N/A	MCERTS	8.1	6.3	7.9	8.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	74000	1700	6100	5700
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.7	0.37	1.7	1.7
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	3300	730	3500	3300
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1670	366	1730	1660
Sulphide	mg/kg	1	MCERTS	26	4.4	14	28
Total Sulphur	mg/kg	50	MCERTS	25000	620	2100	2600
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	5.7	0.8	1.9	3.7
Total Phenols							
Total Phenols (monohydric)	mg/kg	1	MCERTS	1.8	1.2	< 1.0	< 1.0
Speciated PAHs							
Naphthalene	mg/kg	0.05	MCERTS	6	< 0.05	0.7	13
Acenaphthylene	mg/kg	0.05	MCERTS	1.8	< 0.05	0.13	2.5
Acenaphthene	mg/kg	0.05	MCERTS	19	0.08	1.8	41
Fluorene	mg/kg	0.05	MCERTS	15	< 0.05	1.4	32
Phenanthrene	mg/kg	0.05	MCERTS	110	0.48	11	220
Anthracene	mg/kg	0.05	MCERTS	37	0.1	2.9	67
Fluoranthene	mg/kg	0.05	MCERTS	140	0.63	16	290
Pyrene	mg/kg	0.05	MCERTS	130	0.58	15	260
Benzo(a)anthracene	mg/kg	0.05	MCERTS	75	0.31	7.2	120
Chrysene	mg/kg	0.05	MCERTS	71	0.37	6.7	120
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	90	0.34	8.5	150
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	23	0.09	3	38
Benzo(a)pyrene	mg/kg	0.05	MCERTS	66	0.2	6.6	110
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	35	0.17	3.3	55
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	11	< 0.05	0.95	17
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	41	0.2	3.8	64
Total PAH							
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	878	3.55	88.4	1590

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Analytical Report Number: 23-38003
Project / Site name: Bennett Street
Your Order No: 005117

Lab Sample Number				2705611	2705612	2705613	2705614
Sample Reference				SP501- Screened Bund	SP601- Screened Bund	SP801- Screened Bund	SP1201- Screened Bund
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/06/2023	06/06/2023	06/06/2023	06/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	23	6.9	9.6	27
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.5	< 0.2	0.6	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	30	19	20	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	230	28	92	210
Lead (aqua regia extractable)	mg/kg	1	MCERTS	520	31	140	350
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.9	< 0.3	< 0.3	1.1
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	30	20	21	29
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	1100	83	210	290
Petroleum Hydrocarbons							
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	5.3
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	55	< 4.0	29	110
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	380	< 1.0	230	730
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	1000	14	600	1300
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	180	< 10	85	190
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	1600	22	950	2400

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

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-38003
Project / Site name: Bennett Street
Your Order No: 005117

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2705613	SP801-Screened Bund		181	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-38003
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2705611	01- Screened B	None Supplied	None Supplied	Brown loam with vegetation and metal.
2705612	01- Screened B	None Supplied	None Supplied	Brown loam with gravel and stones.
2705613	01- Screened B	None Supplied	None Supplied	Brown clay and sand with gravel and plastic.
2705614	201- Screened B	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.

Analytical Report Number : 23-38003
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-38003
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-38011

Project / Site name:	Bennett Street	**Samples received on:**	07/06/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	07/06/2023
Your order number:	005115	**Analysis completed by:**	16/06/2023
Report Issue Number:	1	**Report issued on:**	16/06/2023
Samples Analysed:	10 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-38011
Project / Site name: Bennett Street
Your Order No: 005115

Lab Sample Number				2705620	2705621	2705622	2705623	2705624
Sample Reference				SP101 - SWMG	SP201 - SWMG	SP202 - SWMG	SP301 - CLAY	SP401 - CLAY
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/06/2023	06/06/2023	06/06/2023	06/06/2023	06/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	45	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.9	7.3	5.8	9	8.2
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-	Chrysotile	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.013	-	< 0.001	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	0.013	-	< 0.001	-	-
Asbestos Analyst ID	N/A	N/A	N/A	WEM	WEM	WEM	WEM	WEM
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	9.3	9.4	8.9	10.3	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	37000	1500	1600	16000	1800
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	7.1	0.2	0.27	2	0.51
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	14000	410	540	4000	1000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	7090	205	272	2010	510
Sulphide	mg/kg	1	MCERTS	20	12	19	30	4.5
Total Sulphur	mg/kg	50	MCERTS	13000	900	1000	8900	870
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.9	4.7	5.8	2	1.3
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	30	19	170	27	1.4
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	2.8	< 0.05	< 0.05	0.38
Acenaphthene	mg/kg	0.05	MCERTS	57	90	230	38	3
Fluorene	mg/kg	0.05	MCERTS	42	63	170	31	2.6
Phenanthrene	mg/kg	0.05	MCERTS	270	430	880	180	17
Anthracene	mg/kg	0.05	MCERTS	88	140	280	51	4.8
Fluoranthene	mg/kg	0.05	MCERTS	320	710	850	200	22
Pyrene	mg/kg	0.05	MCERTS	280	610	730	170	20
Benzo(a)anthracene	mg/kg	0.05	MCERTS	140	320	350	94	10
Chrysene	mg/kg	0.05	MCERTS	140	300	340	71	8.3
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	140	340	360	90	11
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	58	140	120	31	3.4
Benzo(a)pyrene	mg/kg	0.05	MCERTS	120	280	290	73	8.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	54	120	140	35	4.7
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	9.5	22	41	9.2	1.2
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	66	150	160	38	5.3
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1820	3740	5100	1130	125

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-38011
Project / Site name: Bennett Street
Your Order No: 005115

Lab Sample Number				2705620	2705621	2705622	2705623	2705624
Sample Reference				SP101 - SWMG	SP201 - SWMG	SP202 - SWMG	SP301 - CLAY	SP401 - CLAY
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/06/2023	06/06/2023	06/06/2023	06/06/2023	06/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	21	24	19	14
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	17	21	23	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	82	110	120	79	57
Lead (aqua regia extractable)	mg/kg	1	MCERTS	240	330	320	190	68
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	1	1.3	1.2	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	27	30	24	32
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	260	170	150	230	97
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	16	220	380	8.2	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	150	930	1800	73	12
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	540	3500	5100	300	45
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	760	6200	6700	550	86
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	76	790	710	84	22
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	1500	12000	15000	1000	170

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

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Analytical Report Number: 23-38011
Project / Site name: Bennett Street
Your Order No: 005115

Lab Sample Number				2705625	2705626	2705627	2705628	2705629
Sample Reference				SP701 - CLAY	ST901 - SWMG	ST1001 - SWMG	ST1101 - SWMG	ST1301 - SWMG
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/06/2023	06/06/2023	06/06/2023	06/06/2023	06/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	5	7.7	3.4	12	6.1
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001	< 0.001	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	WEM	WEM	WEM	WEM	WEM
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.8	7.9	7.8	8.1	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	1.2	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	3800	3600	1600	62000	770
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.91	0.9	0.16	2	0.13
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1800	1800	310	4000	260
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	915	905	156	1980	128
Sulphide	mg/kg	1	MCERTS	11	15	9.3	26	3.4
Total Sulphur	mg/kg	50	MCERTS	2000	2200	1300	25000	590
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.4	6.1	5.4	4.7	1.2
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	33	60	7.9	5.3	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	1	3.8	2.1	0.8	0.19
Acenaphthene	mg/kg	0.05	MCERTS	26	94	25	7.9	1.1
Fluorene	mg/kg	0.05	MCERTS	20	70	16	6.2	0.83
Phenanthrene	mg/kg	0.05	MCERTS	130	440	150	51	6.3
Anthracene	mg/kg	0.05	MCERTS	36	120	41	16	1.8
Fluoranthene	mg/kg	0.05	MCERTS	120	510	260	88	8.5
Pyrene	mg/kg	0.05	MCERTS	100	450	250	81	8.1
Benzo(a)anthracene	mg/kg	0.05	MCERTS	49	210	110	50	3.5
Chrysene	mg/kg	0.05	MCERTS	44	200	120	38	3.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	53	240	150	57	3.8
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	13	65	39	18	2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	39	180	110	45	3.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	19	90	59	23	1.7
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	5	25	18	6.1	0.48
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	21	110	71	25	2
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	709	2880	1420	520	47.4

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Analytical Report Number: 23-38011
Project / Site name: Bennett Street
Your Order No: 005115

Lab Sample Number				2705625	2705626	2705627	2705628	2705629
Sample Reference				SP701 - CLAY	ST901 - SWMG	ST1001 - SWMG	ST1101 - SWMG	ST1301 - SWMG
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/06/2023	06/06/2023	06/06/2023	06/06/2023	06/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	30	40	40	15	21
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.3	< 0.2	< 0.2	0.8	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	22	23	22	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	170	220	200	93	51
Lead (aqua regia extractable)	mg/kg	1	MCERTS	180	450	370	310	110
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.4	3.4	3.9	0.4	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	38	54	55	25	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	240	360	230	570	83
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	25	240	20	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	96	1200	250	50	4.7
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	230	4100	1100	370	16
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	290	6100	2200	1200	23
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	21	710	330	270	14
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	660	12000	3900	1900	58

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-38011
Project / Site name: Bennett Street
Your Order No: 005115

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2705620	SP101 - SWMG		130	Loose Fibrous Debris	**Chrysotile**	0.013	**0.013**
2705622	SP202 - SWMG		184	Loose Fibrous Debris	**Chrysotile**	< 0.001	**< 0.001**
2705625	SP701 - CLAY		183	Loose Fibrous Debris	**Chrysotile**	< 0.001	**< 0.001**
2705626	ST901 - SWMG		176	Loose Fibrous Debris	**Chrysotile**	< 0.001	**< 0.001**

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-38011
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2705620	SP101 - SWMG	None Supplied	None Supplied	Brown sand with gravel and tar.
2705621	SP201 - SWMG	None Supplied	None Supplied	Brown sand with gravel and stones.
2705622	SP202 - SWMG	None Supplied	None Supplied	Brown sand with gravel.
2705623	SP301 - CLAY	None Supplied	None Supplied	Brown loam and sand with gravel.
2705624	SP401 - CLAY	None Supplied	None Supplied	Brown clay and sand with gravel.
2705625	SP701 - CLAY	None Supplied	None Supplied	Brown clay and sand with gravel.
2705626	ST901 - SWMG	None Supplied	None Supplied	Brown loam and sand with gravel.
2705627	ST1001 - SWMG	None Supplied	None Supplied	Brown loam and sand with gravel.
2705628	ST1101 - SWMG	None Supplied	None Supplied	Brown loam and sand with gravel and plastic.
2705629	ST1301 - SWMG	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-38011
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-38011
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-41067

Project / Site name:	Bennett Street	**Samples received on:**	23/06/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	23/06/2023
Your order number:	005285	**Analysis completed by:**	28/06/2023
Report Issue Number:	1	**Report issued on:**	28/06/2023
Samples Analysed:	5 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-41067
Project / Site name: Bennett Street
Your Order No: 005285

Lab Sample Number				2724641	2724642	2724643	2724644	2724645
Sample Reference				Bund 1	Bund 2	Bund 3	Bund 4	Bund 5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/06/2023	21/06/2023	21/06/2023	21/06/2023	21/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	16	16	15	13
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	0.011	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	0.011	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SCA	SCA	WEM	LFT	WEM

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	8.6	8	8	7.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	33000	51000	48000	10000	5800
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.8	1.8	1.7	1.7	1.7
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	3600	3600	3400	3500	3400
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1810	1790	1700	1750	1690
Sulphide	mg/kg	1	MCERTS	14	18	15	4.2	13
Total Sulphur	mg/kg	50	MCERTS	11000	18000	16000	3600	2600
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.7	2.8	3.1	2.5	6.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.15	0.2	0.8	0.52	9.8
Acenaphthylene	mg/kg	0.05	MCERTS	0.25	0.34	0.84	0.18	2.2
Acenaphthene	mg/kg	0.05	MCERTS	0.48	2	3.7	1.7	37
Fluorene	mg/kg	0.05	MCERTS	0.51	2.4	3.9	1.3	26
Phenanthrene	mg/kg	0.05	MCERTS	4.6	24	25	9	190
Anthracene	mg/kg	0.05	MCERTS	1.7	6.3	7.8	2.6	66
Fluoranthene	mg/kg	0.05	MCERTS	11	34	35	14	320
Pyrene	mg/kg	0.05	MCERTS	10	28	31	13	280
Benzo(a)anthracene	mg/kg	0.05	MCERTS	5.7	15	18	6	130
Chrysene	mg/kg	0.05	MCERTS	5.3	12	15	6.1	130
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	6.8	14	20	7.1	140
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.8	7	5.8	2.8	50
Benzo(a)pyrene	mg/kg	0.05	MCERTS	6.4	12	15	5.9	130
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.7	6.1	7.4	3	66
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.68	1.2	1.8	0.66	16
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.9	7.3	8.8	3.8	72

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	63.6	173	199	77.6	1670

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Analytical Report Number: 23-41067
Project / Site name: Bennett Street
Your Order No: 005285

Lab Sample Number				2724641	2724642	2724643	2724644	2724645
Sample Reference				Bund 1	Bund 2	Bund 3	Bund 4	Bund 5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/06/2023	21/06/2023	21/06/2023	21/06/2023	21/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	13	13	13	20
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.9	0.9	0.6	0.8	0.8
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	30	26	21	37	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	320	80	88	120	120
Lead (aqua regia extractable)	mg/kg	1	MCERTS	330	170	360	360	410
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.3	< 0.3	< 0.3	1.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	28	22	19	25	28
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	570	610	490	450	220
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	120
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	7.6	16	13	850
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	28	84	100	64	3200
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	190	470	350	230	5300
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	55	160	95	63	700
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	270	720	570	370	10000

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

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-41067
Project / Site name: Bennett Street
Your Order No: 005285

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2724642	Bund 2		191	Loose Fibrous Debris & Asbestos Cement	**Chrysotile**	0.011	**0.011**

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-41067
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2724641	Bund 1	None Supplied	None Supplied	Brown sand with gravel and vegetation.
2724642	Bund 2	None Supplied	None Supplied	Brown sand with gravel and vegetation.
2724643	Bund 3	None Supplied	None Supplied	Brown sand with gravel and vegetation.
2724644	Bund 4	None Supplied	None Supplied	Brown clay and sand with gravel.
2724645	Bund 5	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-41067
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-41067
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-41464

Project / Site name:	Bennett Street	**Samples received on:**	26/06/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	26/06/2023
Your order number:		**Analysis completed by:**	30/06/2023
Report Issue Number:	1	**Report issued on:**	30/06/2023
Samples Analysed:	2 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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Analytical Report Number: 23-41464
Project / Site name: Bennett Street

Lab Sample Number				2727040	2727041
Sample Reference				SW-MG-101	SW-MG-102
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				23/06/2023	23/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.2	7.2
Total mass of sample received	kg	0.001	NONE	0.3	0.3

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

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.4	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	830	3000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.058	0.94
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	120	1900
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	58	939
Sulphide	mg/kg	1	MCERTS	< 1.0	32
Total Sulphur	mg/kg	50	MCERTS	530	2200
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.4	2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.26	0.71
Acenaphthylene	mg/kg	0.05	MCERTS	0.17	0.34
Acenaphthene	mg/kg	0.05	MCERTS	1.1	2.2
Fluorene	mg/kg	0.05	MCERTS	0.9	2
Phenanthrene	mg/kg	0.05	MCERTS	9.1	13
Anthracene	mg/kg	0.05	MCERTS	2.2	3.5
Fluoranthene	mg/kg	0.05	MCERTS	12	17
Pyrene	mg/kg	0.05	MCERTS	12	18
Benzo(a)anthracene	mg/kg	0.05	MCERTS	5	8.2
Chrysene	mg/kg	0.05	MCERTS	5.3	7.3
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	5.4	7.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.1	3.5
Benzo(a)pyrene	mg/kg	0.05	MCERTS	4.7	6.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.1	3.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.41	0.72
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.6	3.8

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	65.2	96.9

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Analytical Report Number: 23-41464
Project / Site name: Bennett Street

Lab Sample Number				2727040	2727041
Sample Reference				SW-MG-101	SW-MG-102
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				23/06/2023	23/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	26
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	1.3
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	43	87
Lead (aqua regia extractable)	mg/kg	1	MCERTS	160	210
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	28	28
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	170
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	29	31
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	54	82
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	11
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	94	130

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

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Analytical Report Number : 23-41464
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2727040	SW-MG-101	None Supplied	None Supplied	Brown clay and sand with gravel.
2727041	SW-MG-102	None Supplied	None Supplied	Brown loam and clay with gravel.

Analytical Report Number : 23-41464
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-41464
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-41682

Project / Site name:	Bennett Street	**Samples received on:**	27/06/2023
Your job number:	15 974	**Samples instructed on/ Analysis started on:**	27/06/2023
Your order number:		**Analysis completed by:**	03/07/2023
Report Issue Number:	1	**Report issued on:**	03/07/2023
Samples Analysed:	6 soil samples		

Signed:

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-41682
Project / Site name: Bennett Street

Lab Sample Number				2728431	2728432	2728433	2728434	2728435
Sample Reference				Tank-B1	Tank-B2	Tank-N	Tank-S	Tank-E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				27/06/2023	27/06/2023	27/06/2023	27/06/2023	27/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	68	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	11	7.1	11	15
Total mass of sample received	kg	0.001	NONE	0.8	0.8	0.5	0.8	0.8
Asbestos in Soil	Type	N/A	ISO 17025	-	-	Not-detected	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	LFT	N/A	LFT

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.9	10.1	11.9	8.7	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	530	590	3300	440	380
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.12	0.13	0.2	0.12	0.1
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	250	270	400	240	200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	123	133	198	121	101
Sulphide	mg/kg	1	MCERTS	< 1.0	< 1.0	12	< 1.0	17
Total Sulphur	mg/kg	50	MCERTS	300	320	1400	200	1100
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.8	0.7	1	0.9	1.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.8	6.6	13	8.1	8.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	22	17	25	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	26	19	39	24	31
Lead (aqua regia extractable)	mg/kg	1	MCERTS	84	15	110	13	21
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	29	25	18	31	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	64	50	110	55	50

Petroleum Hydrocarbons

TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	< 4.0	5.9	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	6.5	< 1.0	38	< 1.0	12
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	37	< 1.0	120	< 1.0	24
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	< 10	14	< 10	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	49	< 10	180	< 10	38

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Analytical Report Number: 23-41682
Project / Site name: Bennett Street

Lab Sample Number				2728431	2728432	2728433	2728434	2728435
Sample Reference				Tank-B1	Tank-B2	Tank-N	Tank-S	Tank-E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				27/06/2023	27/06/2023	27/06/2023	27/06/2023	27/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
VOCs								
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-41682
Project / Site name: Bennett Street

Lab Sample Number				2728431	2728432	2728433	2728434	2728435
Sample Reference				Tank-B1	Tank-B2	Tank-N	Tank-S	Tank-E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				27/06/2023	27/06/2023	27/06/2023	27/06/2023	27/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
SVOCs								
Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.09	< 0.05	0.33	< 0.05	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.1	< 0.1	0.3	< 0.1	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.34	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.15	0.06	0.84	< 0.05	0.48
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.4	< 0.2	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.14	0.05	0.79	< 0.05	0.36
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	0.89	0.43	7.8	0.14	0.89
Anthracene	mg/kg	0.05	MCERTS	0.25	0.11	2	< 0.05	0.43
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	1	0.54	12	0.15	3.9
Pyrene	mg/kg	0.05	MCERTS	1.1	0.58	12	0.17	4.3
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.47	0.25	5.5	0.07	1.6
Chrysene	mg/kg	0.05	MCERTS	0.47	0.25	5.2	0.08	1.7

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Analytical Report Number: 23-41682
Project / Site name: Bennett Street

Lab Sample Number				2728431	2728432	2728433	2728434	2728435
Sample Reference				Tank-B1	Tank-B2	Tank-N	Tank-S	Tank-E
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				27/06/2023	27/06/2023	27/06/2023	27/06/2023	27/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.42	0.21	4.7	< 0.05	1.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.23	0.11	2.8	< 0.05	0.56
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.38	0.17	4.7	0.05	1.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.16	0.05	2.2	< 0.05	0.52
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.37	< 0.05	0.09
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.25	0.11	2.7	< 0.05	0.73

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

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Analytical Report Number: 23-41682
Project / Site name: Bennett Street

Lab Sample Number				2728436
Sample Reference				Tank-W
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				27/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	12
Total mass of sample received	kg	0.001	NONE	0.8

Asbestos in Soil	Type	N/A	ISO 17025	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	480
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.11
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	220
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	109
Sulphide	mg/kg	1	MCERTS	< 1.0
Total Sulphur	mg/kg	50	MCERTS	210
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	27
Lead (aqua regia extractable)	mg/kg	1	MCERTS	14
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	32
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	57

Petroleum Hydrocarbons

TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	< 1.0
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	< 1.0
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	< 10

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Analytical Report Number: 23-41682
Project / Site name: Bennett Street

Lab Sample Number				2728436
Sample Reference				Tank-W
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				27/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
VOCs				
Chloromethane	µg/kg	5	ISO 17025	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0
Tetrachloromethane	µg/kg	5	NONE	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0

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Analytical Report Number: 23-41682
Project / Site name: Bennett Street

Lab Sample Number				2728436
Sample Reference				Tank-W
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				27/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0
SVOCs				
Aniline	mg/kg	0.1	NONE	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2
Fluorene	mg/kg	0.05	MCERTS	< 0.05
Azobenzene	mg/kg	0.3	NONE	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	0.22
Anthracene	mg/kg	0.05	MCERTS	0.06
Carbazole	mg/kg	0.3	MCERTS	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	0.25
Pyrene	mg/kg	0.05	MCERTS	0.27
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.11
Chrysene	mg/kg	0.05	MCERTS	0.12

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Analytical Report Number: 23-41682
Project / Site name: Bennett Street

Lab Sample Number				2728436
Sample Reference				Tank-W
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				27/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.12
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.09
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05

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

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Analytical Report Number : 23-41682
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2728431	Tank-B1	None Supplied	None Supplied	Brown clay and sand with gravel.
2728432	Tank-B2	None Supplied	None Supplied	Brown clay and sand with gravel.
2728433	Tank-N	None Supplied	None Supplied	Brown clay and sand with gravel and stones.
2728434	Tank-S	None Supplied	None Supplied	Brown clay and sand.
2728435	Tank-E	None Supplied	None Supplied	Brown clay and sand with gravel.
2728436	Tank-W	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-41682
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-41682
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

UKAS TESTING
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Analytical Report Number : 23-43859

Project / Site name:	Bennett Street	**Samples received on:**	07/07/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	07/07/2023
Your order number:	005447	**Analysis completed by:**	13/07/2023
Report Issue Number:	1	**Report issued on:**	13/07/2023
Samples Analysed:	5 leachate samples		

Signed:

Elżbieta Suchy
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-43859
Project / Site name: Bennett Street

Your Order No: 005447

Lab Sample Number				2740936	2740937	2740938	2740939	2740940
Sample Reference				Tank-B(L)	Tank-N(L)	Tank-S(L)	Tank-E(L)	Tank-W(L)
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/07/2023	06/07/2023	06/07/2023	06/07/2023	06/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (automated)	pH Units	N/A	ISO 17025	7.9	8.1	8	8.1	8.2
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	1	1.3	1.4	1.2	1.3
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	0.73	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	0.25	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH								
Total EPA-16 PAHs	µg/l	0.2	NONE	1	< 0.2	< 0.2	< 0.2	< 0.2
Heavy Metals / Metalloids								
Arsenic (dissolved)	µg/l	1	ISO 17025	< 1.0	< 1.0	2.2	< 1.0	4.1
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	< 0.4	< 0.4	< 0.4	1.2	3.3
Copper (dissolved)	µg/l	0.7	ISO 17025	8.6	7.7	5.5	8.2	14
Lead (dissolved)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	0.8	1.7	1.6	1.1	1.4
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	11	6.7	9.7	8.1	11
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene#	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-43859
Project / Site name: Bennett Street

Your Order No: 005447

Lab Sample Number				2740936	2740937	2740938	2740939	2740940
Sample Reference				Tank-B(L)	Tank-N(L)	Tank-S(L)	Tank-E(L)	Tank-W(L)
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				06/07/2023	06/07/2023	06/07/2023	06/07/2023	06/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aliphatic >C5 - C6## $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8## $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10## $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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

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Analytical Report Number : 23-43859
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted

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Analytical Report Number : 23-43859
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

4041

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Analytical Report Number : 23-44732

Project / Site name:	Bennett Street	**Samples received on:**	12/07/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	13/07/2023
Your order number:	005506	**Analysis completed by:**	19/07/2023
Report Issue Number:	1	**Report issued on:**	19/07/2023
Samples Analysed:	2 leachate samples		

Signed:

Karolina Marek
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-44732
Project / Site name: Bennett Street

Your Order No: 005506

Lab Sample Number				2746764	2746765
Sample Reference				SW-MG-001	SW-MG-002
Sample Number				Area B	Area B
Depth (m)				None Supplied	None Supplied
Date Sampled				11/07/2023	11/07/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
General Inorganics					
pH (automated)	pH Units	N/A	ISO 17025	7.7	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0
Total Phenols					
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.2	< 1.0
Speciated PAHs					
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01
Total PAH					
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2	< 0.2
Heavy Metals / Metalloids					
Arsenic (dissolved)	µg/l	1	ISO 17025	10	2.5
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	< 0.4	< 0.4
Copper (dissolved)	µg/l	0.7	ISO 17025	13	11
Lead (dissolved)	µg/l	1	ISO 17025	1.3	3.7
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	2.1	< 0.3
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	17	15
Monoaromatics & Oxygenates					
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10	< 10

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Analytical Report Number: 23-44732
Project / Site name: Bennett Street

Your Order No: 005506

Lab Sample Number				2746764	2746765
Sample Reference				SW-MG-001	SW-MG-002
Sample Number				Area B	Area B
Depth (m)				None Supplied	None Supplied
Date Sampled				11/07/2023	11/07/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10

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

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number : 23-44732
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025

4041

Analytical Report Number : 23-44732
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-44843

Project / Site name:	Bennett Street	**Samples received on:**	13/07/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	13/07/2023
Your order number:	005497	**Analysis completed by:**	20/07/2023
Report Issue Number:	1	**Report issued on:**	20/07/2023
Samples Analysed:	3 soil samples		

Signed:

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

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

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

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

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

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

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-44843
Project / Site name: Bennett Street
Your Order No: 005497

Lab Sample Number				2747362	2747363	2747364
Sample Reference				SW-CRUSH-001	SW-CRUSH-002	SW-CRUSH-003
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				13/07/2023	13/07/2023	13/07/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	33	25	31
Moisture Content	%	0.01	NONE	6.2	6.9	6.2
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-
Asbestos Analyst ID	N/A	N/A	N/A	MWI	MWI	MWI
General Inorganics						
pH - Automated	pH Units	N/A	MCERTS	11.7	11.8	11.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	5400	5500	3200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.54	0.25	0.31
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1100	490	610
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	535	247	306
Sulphide	mg/kg	1	MCERTS	13	13	10
Total Sulphur	mg/kg	50	MCERTS	2300	2500	1800
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.8	2.1	2.9
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	20	11	20
Acenaphthylene	mg/kg	0.05	MCERTS	0.79	0.83	0.9
Acenaphthene	mg/kg	0.05	MCERTS	26	27	31
Fluorene	mg/kg	0.05	MCERTS	20	21	24
Phenanthrene	mg/kg	0.05	MCERTS	190	390	320
Anthracene	mg/kg	0.05	MCERTS	38	42	44
Fluoranthene	mg/kg	0.05	MCERTS	200	350	330
Pyrene	mg/kg	0.05	MCERTS	180	310	300
Benzo(a)anthracene	mg/kg	0.05	MCERTS	80	140	140
Chrysene	mg/kg	0.05	MCERTS	76	140	130
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	70	120	130
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	31	60	46
Benzo(a)pyrene	mg/kg	0.05	MCERTS	65	120	110
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	23	27	34
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	6	7.4	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	27	31	37
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1040	1800	1700

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Analytical Report Number: 23-44843
Project / Site name: Bennett Street
Your Order No: 005497

Lab Sample Number				2747362	2747363	2747364
Sample Reference				SW-CRUSH-001	SW-CRUSH-002	SW-CRUSH-003
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				13/07/2023	13/07/2023	13/07/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	14	16
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.8	0.6	1.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	19	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	71	74	120
Lead (aqua regia extractable)	mg/kg	1	MCERTS	410	570	350
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1	2	1.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	22	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	140	160	220
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	11	9.2	13
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	68	100	110
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	250	480	480
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	510	880	860
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	86	110	110
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	930	1600	1600

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

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-44843
Project / Site name: Bennett Street
Your Order No: 005497

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2747363	SW-CRUSH-002		168	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-44843
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2747362	SW-CRUSH-001	None Supplied	None Supplied	Brown loam and sand with gravel and brick.
2747363	SW-CRUSH-002	None Supplied	None Supplied	Brown loam and sand with gravel and brick.
2747364	SW-CRUSH-003	None Supplied	None Supplied	Brown loam and sand with gravel and brick.

Analytical Report Number : 23-44843
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-44843
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-47263

Project / Site name:	Bennett Street	**Samples received on:**	25/07/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	27/07/2023
Your order number:	005612	**Analysis completed by:**	02/08/2023
Report Issue Number:	1	**Report issued on:**	02/08/2023
Samples Analysed:	3 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-47263
Project / Site name: Bennett Street
Your Order No: 005612

Lab Sample Number				2761233	2761234	2761235
Sample Reference				SW-CRUSH-004	SW-CRUSH-005	SW-CRUSH-006
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				24/07/2023	24/07/2023	24/07/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	14	17
Moisture Content	%	0.01	NONE	2.9	5.6	6.7
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	IZJ	IZJ	IZJ
General Inorganics						
pH - Automated	pH Units	N/A	MCERTS	12.2	11.9	10.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	5600	5500	2900
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.012	0.042	0.41
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	23	84	820
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	11.5	41.8	410
Sulphide	mg/kg	1	MCERTS	43	24	15
Total Sulphur	mg/kg	50	MCERTS	2300	2000	1300
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.5	1.3	1.8
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	0.31	3.2	7.6
Acenaphthylene	mg/kg	0.05	MCERTS	0.06	0.5	0.86
Acenaphthene	mg/kg	0.05	MCERTS	1.1	9.7	15
Fluorene	mg/kg	0.05	MCERTS	0.83	7.5	12
Phenanthrene	mg/kg	0.05	MCERTS	6.8	53	76
Anthracene	mg/kg	0.05	MCERTS	1.9	15	22
Fluoranthene	mg/kg	0.05	MCERTS	9.4	62	100
Pyrene	mg/kg	0.05	MCERTS	8.6	57	92
Benzo(a)anthracene	mg/kg	0.05	MCERTS	4.2	31	39
Chrysene	mg/kg	0.05	MCERTS	3.8	27	36
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	3.9	31	42
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2	11	13
Benzo(a)pyrene	mg/kg	0.05	MCERTS	3.6	28	35
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	1.7	12	17
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.31	2.6	3.8
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.9	14	18
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	50.2	363	530

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-47263
Project / Site name: Bennett Street
Your Order No: 005612

Lab Sample Number				2761233	2761234	2761235
Sample Reference				SW-CRUSH-004	SW-CRUSH-005	SW-CRUSH-006
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				24/07/2023	24/07/2023	24/07/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.5	11	10
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	0.5	0.5
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	18	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	27	65	62
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	170	150
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.5	1.8
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	17	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	67	180	110
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	12	26	26
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	85	160	160
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	220	270	230
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	40	28	31
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	360	490	440

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

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Analytical Report Number : 23-47263
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2761233	SW-CRUSH-004	None Supplied	None Supplied	Grey rubble.^^
2761234	SW-CRUSH-005	None Supplied	None Supplied	Brown gravel with vegetation and stones.^^
2761235	SW-CRUSH-006	None Supplied	None Supplied	Brown sand with gravel and stones.

Analytical Report Number : 23-47263
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-47263
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

^^unaccredited sample matrix

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Analytical Report Number : 23-47897

Project / Site name:	Bennett Street	**Samples received on:**	28/07/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	28/07/2023
Your order number:	005632	**Analysis completed by:**	04/08/2023
Report Issue Number:	1	**Report issued on:**	04/08/2023
Samples Analysed:	6 water samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-47897
Project / Site name: Bennett Street

Your Order No: 005632

Lab Sample Number				2764765	2764766	2764767	2764768	2764769
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/07/2023	28/07/2023	28/07/2023	28/07/2023	28/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L099)	pH Units	N/A	ISO 17025	7.9	8.1	7.8	8	8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	4.1	4.1	3.5	2.8	3.7
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	8.29	38.9	30.9	0.86	0.8
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	3	6	470	28	19
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	1.4	1.7
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	160	150	150	130	140
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.36	1.42	2.05	3.14	3.07
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.04	0.04	< 0.02	0.09	0.06
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	0.3	< 0.2	< 0.2	0.5
Copper (dissolved)	µg/l	0.5	ISO 17025	10	9	5.6	3.3	7
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	0.3	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	67	63	310	2.4	5.7
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	3	2	3.1	4.7	4.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	1.2	1	0.9	1.2	1.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	15	21	9.1	61	34
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	3700	< 10	53
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	13	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	50	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	220	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	2300	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	2500	< 10	< 10

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Analytical Report Number: 23-47897
Project / Site name: Bennett Street

Your Order No: 005632

Lab Sample Number				2764765	2764766	2764767	2764768	2764769
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/07/2023	28/07/2023	28/07/2023	28/07/2023	28/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	110	< 10	15
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	420	< 10	18
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	620	< 10	20
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	1100	< 10	53
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-47897
Project / Site name: Bennett Street

Your Order No: 005632

Lab Sample Number				2764765	2764766	2764767	2764768	2764769
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/07/2023	28/07/2023	28/07/2023	28/07/2023	28/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	0.91	1.1	1.1
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	0.88	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	1.6	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	0.63	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	0.2	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	1.3	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	1.8	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	0.99	< 0.01	< 0.01

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Analytical Report Number: 23-47897
Project / Site name: Bennett Street

Your Order No: 005632

Lab Sample Number				2764765	2764766	2764767	2764768	2764769
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				28/07/2023	28/07/2023	28/07/2023	28/07/2023	28/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	5.6	< 0.01	0.46
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	1.9	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	1.9	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	8.9	< 0.01	0.89
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	8.5	< 0.01	0.89
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	4.3	< 0.01	0.42
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	4.4	< 0.01	0.41
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	4.9	< 0.01	0.46
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	1.7	< 0.01	0.17
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	4.3	< 0.01	0.35
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	1.9	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	0.68	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	2.5	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	0.91	1.1	1.1

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

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Analytical Report Number: 23-47897
Project / Site name: Bennett Street

Your Order No: 005632

Lab Sample Number	2764770
Sample Reference	CB DS
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	28/07/2023
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (L099)	pH Units	N/A	ISO 17025	8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	3.2
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	6.23
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	120
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.4
Heavy Metals / Metalloids				
Calcium (dissolved)	mg/l	0.012	ISO 17025	130
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.63
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.04
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	7.5
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3
Manganese (dissolved)	µg/l	0.05	ISO 17025	7.8
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	5.3
Selenium (dissolved)	µg/l	0.6	ISO 17025	1.7
Zinc (dissolved)	µg/l	0.5	ISO 17025	23
Monoaromatics & Oxygenates				
Benzene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
Petroleum Hydrocarbons				
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	290
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C8 - C10## HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10

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Analytical Report Number: 23-47897
Project / Site name: Bennett Street

Your Order No: 005632

Lab Sample Number	2764770
Sample Reference	CB DS
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	28/07/2023
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	21
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	34
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	110
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	120
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	290
VOCs				
Chloromethane	µg/l	3	ISO 17025	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane##	µg/l	3	ISO 17025	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0
Carbontetrachloride##	µg/l	3	ISO 17025	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0

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Analytical Report Number: 23-47897
Project / Site name: Bennett Street

Your Order No: 005632

Lab Sample Number	2764770
Sample Reference	CB DS
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	28/07/2023
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status	
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	0.66
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05
Fluorene	µg/l	0.01	ISO 17025	0.44

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Analytical Report Number: 23-47897
Project / Site name: Bennett Street

Your Order No: 005632

Lab Sample Number				2764770
Sample Reference				CB DS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				28/07/2023
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Azobenzene	µg/l	0.05	NONE	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	3.7
Anthracene	µg/l	0.01	ISO 17025	0.94
Carbazole	µg/l	0.05	NONE	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	6.7
Pyrene	µg/l	0.01	ISO 17025	6
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	3
Chrysene	µg/l	0.01	ISO 17025	3
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	3.2
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	1.6
Benzo(a)pyrene	µg/l	0.01	ISO 17025	3
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	1.4
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	0.44
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	1.7
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10

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

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Analytical Report Number : 23-47897
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

4041

Analytical Report Number : 23-47897
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-49287

Project / Site name:	Bennett Street	**Samples received on:**	04/08/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	04/08/2023
Your order number:	005695	**Analysis completed by:**	10/08/2023
Report Issue Number:	1	**Report issued on:**	11/08/2023
Samples Analysed:	5 leachate samples		

Signed:

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-49287
Project / Site name: Bennett Street

Your Order No: 005695

Lab Sample Number				2772037	2772038	2772039	2772040	2772041
Sample Reference				SW-MG-103	SW-MG-104	SW-MG-105	SW-MG-106	SW-MG-107
Sample Number				Area B	Area B	Area B	Area B	Area B
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/08/2023	03/08/2023	03/08/2023	04/08/2023	04/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (automated)	pH Units	N/A	ISO 17025	8	8	7.3	8.1	8.3
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.5	1.6	1.5	1.3	1.3
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total PAH								
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Heavy Metals / Metalloids								
Arsenic (dissolved)	µg/l	1	ISO 17025	< 1.0	< 1.0	1.4	< 1.0	1.7
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	0.6	1.3	1.3	1.5	1.7
Copper (dissolved)	µg/l	0.7	ISO 17025	7.8	13	16	8.1	15
Lead (dissolved)	µg/l	1	ISO 17025	< 1.0	2.5	< 1.0	< 1.0	7.2
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	2.1	1.3	3.2	1.7	1.9
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	14	18	25	12	17
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-49287
Project / Site name: Bennett Street

Your Order No: 005695

Lab Sample Number				2772037	2772038	2772039	2772040	2772041
Sample Reference				SW-MG-103	SW-MG-104	SW-MG-105	SW-MG-106	SW-MG-107
Sample Number				Area B	Area B	Area B	Area B	Area B
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				03/08/2023	03/08/2023	03/08/2023	04/08/2023	04/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 ## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 ## HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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

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Analytical Report Number : 23-49287
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025

4041

Analytical Report Number : 23-49287
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-50842

Project / Site name:	Bennett Street	**Samples received on:**	14/08/2023
Your job number:	15 974	**Samples instructed on/ Analysis started on:**	14/08/2023
Your order number:	005783	**Analysis completed by:**	18/08/2023
Report Issue Number:	1	**Report issued on:**	18/08/2023
Samples Analysed:	5 water samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-50842
Project / Site name: Bennett Street

Your Order No: 005783

Lab Sample Number				2780640	2780641	2780642	2780643	2780644
Sample Reference				BB US	BB MS	BB DS	CB MS	CB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L099)	pH Units	N/A	ISO 17025	8.1	8	8.1	7.9	8.2
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	3.1	2.1	2	2.8	2
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.17	3.77	6.07	6.02	5.49
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	58	17	17	11	31
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	1.5	1.1	< 1.0
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	190	190	170	160	180
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.97	0.82	2.76	3.22	2.17
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.08	0.08	0.03	0.03	0.06
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	0.3	0.4	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	7	7.9	2.4	2.1	4.3
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	68	170	6.7	3.8	7.5
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.5	2.1	3.5	3.7	4.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.6	< 0.6	1	0.9	0.8
Zinc (dissolved)	µg/l	0.5	ISO 17025	24	13	31	36	29
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8## $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10## $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-50842
Project / Site name: Bennett Street

Your Order No: 005783

Lab Sample Number				2780640	2780641	2780642	2780643	2780644
Sample Reference				BB US	BB MS	BB DS	CB MS	CB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride##	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-50842
Project / Site name: Bennett Street

Your Order No: 005783

Lab Sample Number				2780640	2780641	2780642	2780643	2780644
Sample Reference				BB US	BB MS	BB DS	CB MS	CB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	0.37	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 23-50842
Project / Site name: Bennett Street

Your Order No: 005783

Lab Sample Number				2780640	2780641	2780642	2780643	2780644
Sample Reference				BB US	BB MS	BB DS	CB MS	CB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2023	11/08/2023	11/08/2023	11/08/2023	11/08/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	0.21	< 0.01	0.29	0.23	< 0.01
Anthracene	µg/l	0.01	ISO 17025	0.07	< 0.01	0.12	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	0.41	< 0.01	0.46	0.45	0.39
Pyrene	µg/l	0.01	ISO 17025	0.41	< 0.01	0.48	0.52	0.39
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.18	< 0.01	0.21	0.34	< 0.01
Chrysene	µg/l	0.01	ISO 17025	0.21	< 0.01	0.19	0.32	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	0.23	< 0.01	0.24	0.37	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	0.09	< 0.01	0.08	0.19	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	0.2	< 0.01	0.19	0.28	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

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

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Analytical Report Number : 23-50842
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-50842
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-50842
Project / Site name: Bennett Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BB DS	None Supplied	W	2780642	c	pH at 20oC in water (automated)	L099-PL	c
BB MS	None Supplied	W	2780641	c	pH at 20oC in water (automated)	L099-PL	c
BB US	None Supplied	W	2780640	c	pH at 20oC in water (automated)	L099-PL	c
CB DS	None Supplied	W	2780644	c	pH at 20oC in water (automated)	L099-PL	c
CB MS	None Supplied	W	2780643	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-51589

Project / Site name:	Bennett Street	**Samples received on:**	17/08/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	17/08/2023
Your order number:	005848	**Analysis completed by:**	24/08/2023
Report Issue Number:	1	**Report issued on:**	24/08/2023
Samples Analysed:	2 leachate samples		

Izabela Wójcik

Signed:

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

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-51589
Project / Site name: Bennett Street

Your Order No: 005848

Lab Sample Number				2784411	2784412
Sample Reference				SW-Crush-001	SW-Crush-002
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				16/08/2023	16/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
General Inorganics					
pH (automated)	pH Units	N/A	ISO 17025	9.2	8.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0
Total Phenols					
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.2	1.2
Speciated PAHs					
Naphthalene	µg/l	0.01	ISO 17025	0.4	0.52
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	1.3	0.98
Fluorene	µg/l	0.01	ISO 17025	0.32	0.3
Phenanthrene	µg/l	0.01	ISO 17025	0.2	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	0.29	0.28
Pyrene	µg/l	0.01	ISO 17025	0.69	0.52
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01
Total PAH					
Total EPA-16 PAHs	µg/l	0.2	NONE	3.2	2.6
Heavy Metals / Metalloids					
Arsenic (dissolved)	µg/l	1	ISO 17025	4.3	3.7
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	11	9.2
Chromium (dissolved)	µg/l	0.4	ISO 17025	23	17
Copper (dissolved)	µg/l	0.7	ISO 17025	23	21
Lead (dissolved)	µg/l	1	ISO 17025	2.5	6.1
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	2	1.7
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	4.5
Zinc (dissolved)	µg/l	0.4	ISO 17025	7.2	10
Monoaromatics & Oxygenates					
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10	< 10
Petroleum Hydrocarbons					
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	95	80

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4041

Analytical Report Number: 23-51589
Project / Site name: Bennett Street

Your Order No: 005848

Lab Sample Number				2784411	2784412
Sample Reference				SW-Crush-001	SW-Crush-002
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				16/08/2023	16/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic ## >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	52	25
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	43	55
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	95	80

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

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Analytical Report Number : 23-51589
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted

4041

Analytical Report Number : 23-51589
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-52624

Project / Site name:	Bennett Street	**Samples received on:**	21/08/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	23/08/2023
Your order number:	005912	**Analysis completed by:**	30/08/2023
Report Issue Number:	1	**Report issued on:**	30/08/2023
Samples Analysed:	2 soil samples		

Izabela Wójcik

Signed:

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-52624
Project / Site name: Bennett Street
Your Order No: 005912

Lab Sample Number				2789987	2789988
Sample Reference				KW-001	KW-002
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/08/2023	18/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	15
Total mass of sample received	kg	0.001	NONE	1.7	0.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.005	-
Asbestos Quantification Total	%	0.001	ISO 17025	0.005	-
Asbestos Analyst ID	N/A	N/A	N/A	DSA	DSA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	8200	12000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.8	1.6
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	3500	3300
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1760	1650
Sulphide	mg/kg	1	MCERTS	13	16
Total Sulphur	mg/kg	50	MCERTS	3900	6100
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.6	2.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.35	0.67
Acenaphthylene	mg/kg	0.05	MCERTS	0.15	0.33
Acenaphthene	mg/kg	0.05	MCERTS	0.87	2.5
Fluorene	mg/kg	0.05	MCERTS	0.65	1.9
Phenanthrene	mg/kg	0.05	MCERTS	6.5	17
Anthracene	mg/kg	0.05	MCERTS	6.7	4.7
Fluoranthene	mg/kg	0.05	MCERTS	12	26
Pyrene	mg/kg	0.05	MCERTS	11	24
Benzo(a)anthracene	mg/kg	0.05	MCERTS	5.4	12
Chrysene	mg/kg	0.05	MCERTS	5.3	12
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	6.8	13
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.6	6.8
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.4	12
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.8	5.8
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.88	1.7
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.5	7.2

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	70.5	147

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Analytical Report Number: 23-52624
Project / Site name: Bennett Street
Your Order No: 005912

Lab Sample Number				2789987	2789988
Sample Reference				KW-001	KW-002
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				18/08/2023	18/08/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	15
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.7	0.8
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	36	30
Copper (aqua regia extractable)	mg/kg	1	MCERTS	170	110
Lead (aqua regia extractable)	mg/kg	1	MCERTS	620	330
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	31	25
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	770	470
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	8.6	20
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	61	170
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	230	550
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	88	150
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	380	890

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-52624
Project / Site name: Bennett Street
Your Order No: 005912

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2789987	KW-001		161	Sheeting/Board Debris	**Chrysotile**	0.005	**0.005**

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-52624
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2789987	KW-001	None Supplied	None Supplied	Brown sand with gravel.
2789988	KW-002	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.

Analytical Report Number : 23-52624
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-52624
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-52626

Project / Site name:	Bennett Street	**Samples received on:**	21/08/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	23/08/2023
Your order number:	005912	**Analysis completed by:**	30/08/2023
Report Issue Number:	1	**Report issued on:**	30/08/2023
Samples Analysed:	1 wac multi sample		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

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Waste Acceptance Criteria Analytical Results

Report No:	**23-52626**						
					Client:	**E3P**	
Location	**Bennett Street**						
Lab Reference (Sample Number)	2789991				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	18/08/2023				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	KW-001						
Depth (m)							
Solid Waste Analysis							
TOC (%)**	2.5				3%	5%	6%
Loss on Ignition (%) **	6.6				--	--	10%
BTEX (µg/kg)**	< 10				6000	--	--
Sum of PCBs (mg/kg)**	< 0.30				1	--	--
Mineral Oil (mg/kg) $_{EH\_1D\_CU\_AL}$ #	110				500	--	--
Total PAH (WAC-17) (mg/kg)	70.5				100	--	--
pH (units)**	7.2				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	1.9				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 3 preparation utilising end over end leaching procedure)	2:1 mg/l	8:1 mg/l		Cumulative 10:1 mg/kg	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.010	< 0.010		< 0.050	0.5	2	25
Barium *	0.071	0.065		0.66	20	100	300
Cadmium *	< 0.0005	< 0.0005		< 0.0020	0.04	1	5
Chromium *	0.0048	0.0020		0.023	0.5	10	70
Copper *	0.035	0.024		0.25	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	0.016	0.0059		0.073	0.5	10	30
Nickel *	0.0064	0.0024		0.030	0.4	10	40
Lead *	< 0.0050	< 0.0050		< 0.020	0.5	10	50
Antimony *	0.13	0.064		0.73	0.06	0.7	5
Selenium *	< 0.010	< 0.010		< 0.040	0.1	0.5	7
Zinc *	0.16	0.0702		0.82	4	50	200
Chloride *	7.2	< 4.0		17	800	15000	25000
Fluoride*	0.69	0.49		5.2	10	150	500
Sulphate *	1600	660		7800	1000	20000	50000
TDS*	1300	620		7200	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.13	< 0.13		< 0.50	1	-	-
DOC	14	8.4		91	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.7						
Dry Matter (%)	83						
Moisture (%)	17						
Stage 1							
Volume Eluate L2 (litres)	0.32						
Filtered Eluate VE1 (litres)	0.23						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

*= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepencies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as

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amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-52626
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2789991	KW-001	None Supplied	None Supplied	Brown sand with gravel.

Analytical Report Number : 23-52626
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Preparation WAC leachate		In-house method	L043-PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270.	L064-PL	D	MCERTS
Chloride in WAC leachate (BS EN 12457-3 Prep)	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride in WAC leachate (BS EN 12457-3 Prep)	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L033-PL	W	ISO 17025
Phenol Index in WAC leachate (BS EN 12457-3 Prep)	Determination of monohydric phenols in leachate by continuous flow analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Sulphate in WAC leachate (BS EN 12457-3 Prep)	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025
TDS in WAC leachate (BS EN 12457-3 Prep)	Determination of total dissolved solids in leachate by electrometric measurement.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L031-PL	W	ISO 17025
DOC in WAC leachate (BS EN 12457-3 Prep)	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L037-PL	W	NONE
PCB's by GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
BTEX (Sum of BTEX compounds) in soil	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil in Soil C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
pH in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS

Analytical Report Number : 23-52626
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	MCERTS
Metals in WAC leachate (BS EN 12457-3 Prep)	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 23-53713

Replaces Analytical Report Number: 23-53713, issue no. 1
Client references/information amended.
Sample ID change on 2795874 as per clients request

Project / Site name:	Bennett Street	**Samples received on:**	29/08/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	30/08/2023
Your order number:	5960	**Analysis completed by:**	05/09/2023
Report Issue Number:	2	**Report issued on:**	01/03/2024
Samples Analysed:	1 soil sample		

Signed:

Joanna Szwagrzak
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-53713
Project / Site name: Bennett Street
Your Order No: 5960

Lab Sample Number				2795874
Sample Reference				CB-001Well-001
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				25/08/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	40
Total mass of sample received	kg	0.001	NONE	0.7

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.003
Asbestos Quantification Total	%	0.001	ISO 17025	0.003
Asbestos Analyst ID	N/A	N/A	N/A	WEM

General Inorganics

pH - Automated	pH Units	N/A	NONE	7.9
Total Cyanide	mg/kg	1	NONE	< 1.0
Total Sulphate as SO4	mg/kg	50	NONE	1100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	NONE	0.053
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	NONE	110
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	NONE	53.1
Sulphide	mg/kg	1	NONE	74
Total Sulphur	mg/kg	50	NONE	4100
Organic Matter	%	0.1	NONE	15
Total Organic Carbon (TOC) – Manual	%	0.1	NONE	8.4

Total Phenols

Total Phenols (monohydric)	mg/kg	1	NONE	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	77
Acenaphthylene	mg/kg	0.05	NONE	3.8
Acenaphthene	mg/kg	0.05	NONE	150
Fluorene	mg/kg	0.05	NONE	130
Phenanthrene	mg/kg	0.05	NONE	490
Anthracene	mg/kg	0.05	NONE	180
Fluoranthene	mg/kg	0.05	NONE	670
Pyrene	mg/kg	0.05	NONE	570
Benzo(a)anthracene	mg/kg	0.05	NONE	310
Chrysene	mg/kg	0.05	NONE	340
Benzo(b)fluoranthene	mg/kg	0.05	NONE	300
Benzo(k)fluoranthene	mg/kg	0.05	NONE	170
Benzo(a)pyrene	mg/kg	0.05	NONE	290
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	130
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	37
Benzo(ghi)perylene	mg/kg	0.05	NONE	160

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	3990

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number: 23-53713
Project / Site name: Bennett Street
Your Order No: 5960

Lab Sample Number				2795874
Sample Reference				CB-001Well-001
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				25/08/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	NONE	56
Cadmium (aqua regia extractable)	mg/kg	0.2	NONE	3.8
Chromium (hexavalent)	mg/kg	1.8	NONE	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	NONE	24
Copper (aqua regia extractable)	mg/kg	1	NONE	480
Lead (aqua regia extractable)	mg/kg	1	NONE	1300
Mercury (aqua regia extractable)	mg/kg	0.3	NONE	8.5
Nickel (aqua regia extractable)	mg/kg	1	NONE	32
Selenium (aqua regia extractable)	mg/kg	1	NONE	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	NONE	1800
Petroleum Hydrocarbons				
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	12
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	260
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	1200
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	1900
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	270
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	3600

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-53713
Project / Site name: Bennett Street
Your Order No: 5960

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2795874	CB-001		118	Loose Fibrous Debris	**Chrysotile**	0.003	**0.003**

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

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The results included within the report are representative of the samples submitted for analysis.

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Analytical Report Number : 23-53713
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2795874	CB-001Well-001	None Supplied	None Supplied	Brown silt with gravel.**

Analytical Report Number : 23-53713
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	NONE
Organic matter in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	NONE
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and NONE requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	NONE
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025

4041

Analytical Report Number : 23-53713
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	NONE
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

**Unaccredited sample matrix.

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Analytical Report Number : 23-54584

Project / Site name:	Bennett Street	**Samples received on:**	01/09/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	05/09/2023
Your order number:	006024	**Analysis completed by:**	08/09/2023
Report Issue Number:	1	**Report issued on:**	08/09/2023
Samples Analysed:	3 soil samples		

Signed:

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

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

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

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

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

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-54584
Project / Site name: Bennett Street
Your Order No: 006024

Lab Sample Number				2800579	2800580	2800581
Sample Reference				Bund 6	Bund 7	Bund 8
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				01/09/2023	01/09/2023	01/09/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	23	23	20
Total mass of sample received	kg	0.001	NONE	0.3	0.2	0.2
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	0.172	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	0.172	-
Asbestos Analyst ID	N/A	N/A	N/A	WEM	WEM	WEM
General Inorganics						
pH - Automated	pH Units	N/A	MCERTS	7.8	7.9	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	35000	36000	55000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.9	1.8	1.9
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	3900	3600	3800
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1940	1820	1890
Sulphide	mg/kg	1	MCERTS	15	16	24
Total Sulphur	mg/kg	50	MCERTS	20000	17000	25000
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	4.1	3.6	4.6
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	0.19	0.25	0.15
Acenaphthylene	mg/kg	0.05	MCERTS	0.13	0.13	0.13
Acenaphthene	mg/kg	0.05	MCERTS	0.79	0.81	0.43
Fluorene	mg/kg	0.05	MCERTS	0.72	0.67	0.33
Phenanthrene	mg/kg	0.05	MCERTS	6.8	8.7	3.2
Anthracene	mg/kg	0.05	MCERTS	1.8	2.4	0.95
Fluoranthene	mg/kg	0.05	MCERTS	12	14	7.6
Pyrene	mg/kg	0.05	MCERTS	11	12	7.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	5.5	6.9	4.7
Chrysene	mg/kg	0.05	MCERTS	4.9	6.3	4.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	7.5	7.2	5.8
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.3	3.3	2.6
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.8	7.1	5.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.2	3.4	2.9
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.77	0.56	0.49
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.4	3.7	3
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	66.3	77.1	49.6

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Analytical Report Number: 23-54584
Project / Site name: Bennett Street
Your Order No: 006024

Lab Sample Number				2800579	2800580	2800581
Sample Reference				Bund 6	Bund 7	Bund 8
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				01/09/2023	01/09/2023	01/09/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	12	14
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.2	0.8	0.9
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32	26	29
Copper (aqua regia extractable)	mg/kg	1	MCERTS	390	270	300
Lead (aqua regia extractable)	mg/kg	1	MCERTS	300	250	290
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	0.5	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27	22	25
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	600	600	540
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	5.7	13	8.4
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	56	73	42
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	390	380	300
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	140	140	120
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	590	610	470

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-54584
Project / Site name: Bennett Street
Your Order No: 006024

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2800580	Bund 7		141	Loose Fibrous Debris & Asbestos Cement	**Chrysotile**	0.172	**0.172**

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-54584
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2800579	Bund 6	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2800580	Bund 7	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2800581	Bund 8	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.

Analytical Report Number : 23-54584
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-54584
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-59931

Project / Site name:	Bennett Street	**Samples received on:**	02/10/2023
Your job number:	15 974	**Samples instructed on/ Analysis started on:**	02/10/2023
Your order number:	006345	**Analysis completed by:**	06/10/2023
Report Issue Number:	1	**Report issued on:**	06/10/2023
Samples Analysed:	2 leachate samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-59931
Project / Site name: Bennett Street

Your Order No: 006345

Lab Sample Number				2831623	2831624
Sample Reference				SW-MG-008	SW-MG-009
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				29/09/2023	29/09/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
General Inorganics					
pH (automated)	pH Units	N/A	ISO 17025	7.7	7.8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	3	2
Total Phenols					
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.3	1.2
Speciated PAHs					
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01
Total PAH					
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2	< 0.2
Heavy Metals / Metalloids					
Arsenic (dissolved)	µg/l	1	ISO 17025	< 1.0	4.2
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	< 0.4	0.8
Copper (dissolved)	µg/l	0.7	ISO 17025	9.9	8.8
Lead (dissolved)	µg/l	1	ISO 17025	< 1.0	< 1.0
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	2.3	1.7
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	16	14
Monoaromatics & Oxygenates					
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10	< 10
Petroleum Hydrocarbons					
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	< 10	< 10

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4041

Analytical Report Number: 23-59931
Project / Site name: Bennett Street

Your Order No: 006345

Lab Sample Number				2831623	2831624
Sample Reference				SW-MG-008	SW-MG-009
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				29/09/2023	29/09/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10

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

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Analytical Report Number : 23-59931
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025

4041

Analytical Report Number : 23-59931
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-59942

Project / Site name:	Bennett Street	**Samples received on:**	02/10/2023
Your job number:	15 974	**Samples instructed on/ Analysis started on:**	02/10/2023
Your order number:	006344	**Analysis completed by:**	06/10/2023
Report Issue Number:	1	**Report issued on:**	06/10/2023
Samples Analysed:	5 water samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-59942
Project / Site name: Bennett Street

Your Order No: 006344

Lab Sample Number				2831694	2831695	2831696	2831697	2831698
Sample Reference				BB US	BB MS	BB DS	CB MS	CB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				26/09/2023	26/09/2023	26/09/2023	26/09/2023	26/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L099)	pH Units	N/A	ISO 17025	7.7	8	7.9	7.8	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.01	3.89	4.07	6.98	6.22
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	10	21	8	7	11
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	1.2	1.3
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	170	180	170	140	150
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	1	0.96	1.15	3.32	3.39
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	0.7	0.4	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	7.1	7.1	8.6	8.1	5
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	76	43	9.2	4.4	1.7
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.9	1.7	2.5	3.3	3.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	< 0.6	1.4	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	11	12	4.9	20	22
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-59942
Project / Site name: Bennett Street

Your Order No: 006344

Lab Sample Number				2831694	2831695	2831696	2831697	2831698
Sample Reference				BB US	BB MS	BB DS	CB MS	CB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				26/09/2023	26/09/2023	26/09/2023	26/09/2023	26/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-59942
Project / Site name: Bennett Street

Your Order No: 006344

Lab Sample Number				2831694	2831695	2831696	2831697	2831698
Sample Reference				BB US	BB MS	BB DS	CB MS	CB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				26/09/2023	26/09/2023	26/09/2023	26/09/2023	26/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-59942
Project / Site name: Bennett Street

Your Order No: 006344

Lab Sample Number				2831694	2831695	2831696	2831697	2831698
Sample Reference				BB US	BB MS	BB DS	CB MS	CB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				26/09/2023	26/09/2023	26/09/2023	26/09/2023	26/09/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

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

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Analytical Report Number : 23-59942
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-59942
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report

Analytical Report Number : 23-59942
Project / Site name: Bennett Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BB DS	None Supplied	W	2831696	c	Settleable Solids in water	L004-PL	c
BB DS	None Supplied	W	2831696	c	Suspended solids in water	L004-PL	c
BB DS	None Supplied	W	2831696	c	pH at 20oC in water (automated)	L099-PL	c
BB MS	None Supplied	W	2831695	c	Settleable Solids in water	L004-PL	c
BB MS	None Supplied	W	2831695	c	Suspended solids in water	L004-PL	c
BB MS	None Supplied	W	2831695	c	pH at 20oC in water (automated)	L099-PL	c
BB US	None Supplied	W	2831694	c	Settleable Solids in water	L004-PL	c
BB US	None Supplied	W	2831694	c	Suspended solids in water	L004-PL	c
BB US	None Supplied	W	2831694	c	pH at 20oC in water (automated)	L099-PL	c
CB DS	None Supplied	W	2831698	c	Settleable Solids in water	L004-PL	c
CB DS	None Supplied	W	2831698	c	Suspended solids in water	L004-PL	c
CB DS	None Supplied	W	2831698	c	pH at 20oC in water (automated)	L099-PL	c
CB MS	None Supplied	W	2831697	c	Settleable Solids in water	L004-PL	c
CB MS	None Supplied	W	2831697	c	Suspended solids in water	L004-PL	c
CB MS	None Supplied	W	2831697	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-61056

Project / Site name:	Bennett Street	**Samples received on:**	06/10/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	06/10/2023
Your order number:	006394	**Analysis completed by:**	12/10/2023
Report Issue Number:	1	**Report issued on:**	12/10/2023
Samples Analysed:	3 soil samples		

Signed:

Joanna Szwagrzak
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-61056
Project / Site name: Bennett Street
Your Order No: 006394

Lab Sample Number				2837293	2837294	2837295
Sample Reference				Bund 009	Bund 010	Bund 011
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				04/10/2023	04/10/2023	04/10/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	23	20	20
Total mass of sample received	kg	0.001	NONE	0.4	0.3	0.3
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Amosite
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	0.001
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO	MLO
General Inorganics						
pH - Automated	pH Units	N/A	MCERTS	7.9	9.2	8.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	45000	40000	42000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	2	2	1.8
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	4000	3900	3600
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	2020	1960	1790
Sulphide	mg/kg	1	MCERTS	15	31	2.6
Total Sulphur	mg/kg	50	MCERTS	20000	12000	20000
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	4.1	3.1	2.7
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	0.22	0.16	0.17
Acenaphthylene	mg/kg	0.05	MCERTS	0.11	0.08	0.09
Acenaphthene	mg/kg	0.05	MCERTS	1.2	0.6	0.46
Fluorene	mg/kg	0.05	MCERTS	1.1	0.47	0.34
Phenanthrene	mg/kg	0.05	MCERTS	9.5	4.3	3.5
Anthracene	mg/kg	0.05	MCERTS	2.5	1.1	1.1
Fluoranthene	mg/kg	0.05	MCERTS	13	7	6.5
Pyrene	mg/kg	0.05	MCERTS	12	6.5	6.2
Benzo(a)anthracene	mg/kg	0.05	MCERTS	5.9	3.3	3.3
Chrysene	mg/kg	0.05	MCERTS	5.9	3.4	3.4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	7.6	4.6	4.7
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.4	1.3	1.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	6.2	3.6	3.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.2	1.9	2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.64	0.31	0.41
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.2	2	2.1
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	74.4	40.6	39.2

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Analytical Report Number: 23-61056
Project / Site name: Bennett Street
Your Order No: 006394

Lab Sample Number				2837293	2837294	2837295
Sample Reference				Bund 009	Bund 010	Bund 011
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				04/10/2023	04/10/2023	04/10/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	11	14
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.1	0.8	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	35	30	29
Copper (aqua regia extractable)	mg/kg	1	MCERTS	310	160	160
Lead (aqua regia extractable)	mg/kg	1	MCERTS	280	230	210
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	0.4	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	20	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	660	480	430
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	9.9	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	44	52	< 10
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	350	350	< 10
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	130	140	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	530	550	< 10

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-61056
Project / Site name: Bennett Street
Your Order No: 006394

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2837295	Bund 011		169	Loose Fibrous Debris	**Amosite**	0.001	**0.001**

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-61056
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2837293	Bund 009	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2837294	Bund 010	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.
2837295	Bund 011	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation.

Analytical Report Number : 23-61056
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-61056
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-66926

Project / Site name:	Bennett Street	**Samples received on:**	02/11/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	06/11/2023
Your order number:	6630	**Analysis completed by:**	10/11/2023
Report Issue Number:	1	**Report issued on:**	10/11/2023
Samples Analysed:	6 water samples		

Signed:

Joanna Szwagrzak
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-66926
Project / Site name: Bennett Street

Your Order No: 6630

Lab Sample Number				2868376	2868377	2868378	2868379	2868380
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/10/2023	30/10/2023	30/10/2023	30/10/2023	30/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L099)	pH Units	N/A	ISO 17025	7.9	8	7.9	7.9	7.8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	2.8	3	2.9	2.3	2.5
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	6.87	3.28	4.66	5.78	6.23
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	8	8	14	22	6
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	140	130	140	110	110
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.3	1.36	1.35	2.27	2.22
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.02	0.03	0.03	< 0.02	0.03
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.4	0.4	0.3	0.4	0.4
Copper (dissolved)	µg/l	0.5	ISO 17025	7.6	8.9	8.9	3	3.5
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	0.3	0.3	0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	11	12	30	20	10
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.7	1.6	1.6	3.1	2.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.8	0.6	< 0.6	0.6	0.8
Zinc (dissolved)	µg/l	0.5	ISO 17025	13	15	14	63	40
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-66926
Project / Site name: Bennett Street

Your Order No: 6630

Lab Sample Number				2868376	2868377	2868378	2868379	2868380
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/10/2023	30/10/2023	30/10/2023	30/10/2023	30/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-66926
Project / Site name: Bennett Street

Your Order No: 6630

Lab Sample Number				2868376	2868377	2868378	2868379	2868380
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/10/2023	30/10/2023	30/10/2023	30/10/2023	30/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 23-66926
Project / Site name: Bennett Street

Your Order No: 6630

Lab Sample Number				2868376	2868377	2868378	2868379	2868380
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				30/10/2023	30/10/2023	30/10/2023	30/10/2023	30/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

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

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-66926
Project / Site name: Bennett Street

Your Order No: 6630

Lab Sample Number	2868381
Sample Reference	CB DS
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	30/10/2023
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (L099)	pH Units	N/A	ISO 17025	7.8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	2.5
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	5.96
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	14
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0
Heavy Metals / Metalloids				
Calcium (dissolved)	mg/l	0.012	ISO 17025	100
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.24
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.05
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	3.8
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3
Manganese (dissolved)	µg/l	0.05	ISO 17025	23
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	3.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	59
Monoaromatics & Oxygenates				
Benzene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
Petroleum Hydrocarbons				
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	NONE	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10

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Analytical Report Number: 23-66926
Project / Site name: Bennett Street

Your Order No: 6630

Lab Sample Number	2868381
Sample Reference	CB DS
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	30/10/2023
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
VOCs				
Chloromethane	µg/l	3	ISO 17025	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0

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Analytical Report Number: 23-66926
Project / Site name: Bennett Street

Your Order No: 6630

Lab Sample Number				2868381
Sample Reference				CB DS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				30/10/2023
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01

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Analytical Report Number: 23-66926
Project / Site name: Bennett Street

Your Order No: 6630

Lab Sample Number				2868381
Sample Reference				CB DS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				30/10/2023
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Azobenzene	µg/l	0.05	NONE	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10

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

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Analytical Report Number : 23-66926
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-66926
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report

Analytical Report Number : 23-66926
Project / Site name: Bennett Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BB DS	None Supplied	W	2868378	c	BTEX and MTBE in water (Monoaromatics)	L073B-PL	c
BB DS	None Supplied	W	2868378	c	Hexavalent chromium in water	L080-PL	c
BB DS	None Supplied	W	2868378	c	Low level total cyanide in water	L080-PL	c
BB DS	None Supplied	W	2868378	c	Metals in water by ICP-MS (dissolved)	L012-PL	c
BB DS	None Supplied	W	2868378	c	Metals in water by ICP-OES (dissolved)	L039-PL	c
BB DS	None Supplied	W	2868378	c	Settleable Solids in water	L004-PL	c
BB DS	None Supplied	W	2868378	c	Suspended solids in water	L004-PL	c
BB DS	None Supplied	W	2868378	c	Volatile organic compounds in water	L073B-PL	c
BB DS	None Supplied	W	2868378	c	pH at 20oC in water (automated)	L099-PL	c
BB MS	None Supplied	W	2868377	c	BTEX and MTBE in water (Monoaromatics)	L073B-PL	c
BB MS	None Supplied	W	2868377	c	Hexavalent chromium in water	L080-PL	c
BB MS	None Supplied	W	2868377	c	Low level total cyanide in water	L080-PL	c
BB MS	None Supplied	W	2868377	c	Metals in water by ICP-MS (dissolved)	L012-PL	c
BB MS	None Supplied	W	2868377	c	Metals in water by ICP-OES (dissolved)	L039-PL	c
BB MS	None Supplied	W	2868377	c	Settleable Solids in water	L004-PL	c
BB MS	None Supplied	W	2868377	c	Suspended solids in water	L004-PL	c
BB MS	None Supplied	W	2868377	c	Volatile organic compounds in water	L073B-PL	c
BB MS	None Supplied	W	2868377	c	pH at 20oC in water (automated)	L099-PL	c
BB US	None Supplied	W	2868376	c	BTEX and MTBE in water (Monoaromatics)	L073B-PL	c
BB US	None Supplied	W	2868376	c	Hexavalent chromium in water	L080-PL	c
BB US	None Supplied	W	2868376	c	Low level total cyanide in water	L080-PL	c
BB US	None Supplied	W	2868376	c	Metals in water by ICP-MS (dissolved)	L012-PL	c
BB US	None Supplied	W	2868376	c	Metals in water by ICP-OES (dissolved)	L039-PL	c
BB US	None Supplied	W	2868376	c	Settleable Solids in water	L004-PL	c
BB US	None Supplied	W	2868376	c	Suspended solids in water	L004-PL	c
BB US	None Supplied	W	2868376	c	Volatile organic compounds in water	L073B-PL	c
BB US	None Supplied	W	2868376	c	pH at 20oC in water (automated)	L099-PL	c
CB DS	None Supplied	W	2868381	c	BTEX and MTBE in water (Monoaromatics)	L073B-PL	c
CB DS	None Supplied	W	2868381	c	Hexavalent chromium in water	L080-PL	c
CB DS	None Supplied	W	2868381	c	Low level total cyanide in water	L080-PL	c
CB DS	None Supplied	W	2868381	c	Metals in water by ICP-MS (dissolved)	L012-PL	c
CB DS	None Supplied	W	2868381	c	Metals in water by ICP-OES (dissolved)	L039-PL	c
CB DS	None Supplied	W	2868381	c	Settleable Solids in water	L004-PL	c
CB DS	None Supplied	W	2868381	c	Suspended solids in water	L004-PL	c
CB DS	None Supplied	W	2868381	c	Volatile organic compounds in water	L073B-PL	c
CB DS	None Supplied	W	2868381	c	pH at 20oC in water (automated)	L099-PL	c
CB MS	None Supplied	W	2868380	c	BTEX and MTBE in water (Monoaromatics)	L073B-PL	c
CB MS	None Supplied	W	2868380	c	Hexavalent chromium in water	L080-PL	c
CB MS	None Supplied	W	2868380	c	Low level total cyanide in water	L080-PL	c
CB MS	None Supplied	W	2868380	c	Metals in water by ICP-MS (dissolved)	L012-PL	c
CB MS	None Supplied	W	2868380	c	Metals in water by ICP-OES (dissolved)	L039-PL	c
CB MS	None Supplied	W	2868380	c	Settleable Solids in water	L004-PL	c
CB MS	None Supplied	W	2868380	c	Suspended solids in water	L004-PL	c
CB MS	None Supplied	W	2868380	c	Volatile organic compounds in water	L073B-PL	c
CB MS	None Supplied	W	2868380	c	pH at 20oC in water (automated)	L099-PL	c
CB US	None Supplied	W	2868379	c	BTEX and MTBE in water (Monoaromatics)	L073B-PL	c
CB US	None Supplied	W	2868379	c	Hexavalent chromium in water	L080-PL	c
CB US	None Supplied	W	2868379	c	Low level total cyanide in water	L080-PL	c
CB US	None Supplied	W	2868379	c	Metals in water by ICP-MS (dissolved)	L012-PL	c
CB US	None Supplied	W	2868379	c	Metals in water by ICP-OES (dissolved)	L039-PL	c
CB US	None Supplied	W	2868379	c	Settleable Solids in water	L004-PL	c
CB US	None Supplied	W	2868379	c	Suspended solids in water	L004-PL	c
CB US	None Supplied	W	2868379	c	Volatile organic compounds in water	L073B-PL	c
CB US	None Supplied	W	2868379	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-69190

Project / Site name:	Bennett Street	**Samples received on:**	14/11/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	16/11/2023
Your order number:	06766	**Analysis completed by:**	22/11/2023
Report Issue Number:	1	**Report issued on:**	22/11/2023
Samples Analysed:	1 soil sample		

Signed:

Joanna Wawrzeczko
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-69190
Project / Site name: Bennett Street
Your Order No: 06766

Lab Sample Number				2880441
Sample Reference				CT001
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				14/11/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	17
Total mass of sample received	kg	0.001	NONE	0.7

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

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1600
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.12
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	240
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	120
Sulphide	mg/kg	1	MCERTS	17
Total Sulphur	mg/kg	50	MCERTS	2100
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	4.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	45
Acenaphthylene	mg/kg	0.05	MCERTS	4.6
Acenaphthene	mg/kg	0.05	MCERTS	95
Fluorene	mg/kg	0.05	MCERTS	73
Phenanthrene	mg/kg	0.05	MCERTS	460
Anthracene	mg/kg	0.05	MCERTS	120
Fluoranthene	mg/kg	0.05	MCERTS	520
Pyrene	mg/kg	0.05	MCERTS	480
Benzo(a)anthracene	mg/kg	0.05	MCERTS	210
Chrysene	mg/kg	0.05	MCERTS	210
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	230
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	95
Benzo(a)pyrene	mg/kg	0.05	MCERTS	220
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	110
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	31
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	120

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3010

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Analytical Report Number: 23-69190
Project / Site name: Bennett Street
Your Order No: 06766

Lab Sample Number				2880441
Sample Reference				CT001
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				14/11/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	39
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	2.3
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	470
Lead (aqua regia extractable)	mg/kg	1	MCERTS	3800
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	6.9
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	46
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	810
Petroleum Hydrocarbons				
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	17
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	180
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	870
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	1400
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	190
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	2600

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

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Analytical Report Number : 23-69190
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2880441	CT001	None Supplied	None Supplied	Brown sand with gravel.

Analytical Report Number : 23-69190
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-69190
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-69196

Project / Site name:	Bennett Street	**Samples received on:**	14/11/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	16/11/2023
Your order number:	06766	**Analysis completed by:**	21/11/2023
Report Issue Number:	1	**Report issued on:**	21/11/2023
Samples Analysed:	1 wac multi sample		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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Waste Acceptance Criteria Analytical Results

Report No:	**23-69196**						
					Client:	**E3P**	
Location	**Bennett Street**						
Lab Reference (Sample Number)	2880456				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	14/11/2023				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	CT001						
Depth (m)							
Solid Waste Analysis							
TOC (%)**	3.1				3%	5%	6%
Loss on Ignition (%) **	12				--	--	10%
BTEX (µg/kg)**	< 10				6000	--	--
Sum of PCBs (mg/kg)**	< 0.30				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	390				500	--	--
Total PAH (WAC-17) (mg/kg)	3040				100	--	--
pH (units)**	7.7				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	1.8				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 3 preparation utilising end over end leaching procedure)	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l	mg/l		mg/kg			
Arsenic *	< 0.010	< 0.010		0.052	0.5	2	25
Barium *	0.073	0.17		1.5	20	100	300
Cadmium *	< 0.0005	< 0.0005		< 0.0020	0.04	1	5
Chromium *	< 0.0010	0.0025		0.022	0.5	10	70
Copper *	0.016	0.053		0.49	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	0.032	0.016		0.18	0.5	10	30
Nickel *	0.0025	0.0033		0.032	0.4	10	40
Lead *	< 0.0050	0.0085		0.077	0.5	10	50
Antimony *	0.035	0.027		0.28	0.06	0.7	5
Selenium *	< 0.010	< 0.010		< 0.040	0.1	0.5	7
Zinc *	0.039	0.0294		0.30	4	50	200
Chloride *	5.3	< 4.0		< 15	800	15000	25000
Fluoride*	0.83	0.55		5.8	10	150	500
Sulphate *	170	37		510	1000	20000	50000
TDS*	290	130		1500	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.13	< 0.13		< 0.50	1	-	-
DOC	13	13		130	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.60						
Dry Matter (%)	83						
Moisture (%)	17						
Stage 1							
Volume Eluate L2 (litres)	0.32						
Filtered Eluate VE1 (litres)	0.20						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

*= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-69196
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2880456	CT001	None Supplied	None Supplied	Brown sand with gravel.

Analytical Report Number : 23-69196
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Preparation WAC leachate		In-house method	L043-PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270.	L064-PL	D	MCERTS
Chloride in WAC leachate (BS EN 12457-3 Prep)	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride in WAC leachate (BS EN 12457-3 Prep)	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L033-PL	W	ISO 17025
Phenol Index in WAC leachate (BS EN 12457-3 Prep)	Determination of monohydric phenols in leachate by continuous flow analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Sulphate in WAC leachate (BS EN 12457-3 Prep)	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025
TDS in WAC leachate (BS EN 12457-3 Prep)	Determination of total dissolved solids in leachate by electrometric measurement.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L031-PL	W	ISO 17025
DOC in WAC leachate (BS EN 12457-3 Prep)	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L037-PL	W	NONE
PCB's by GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
BTEX (Sum of BTEX compounds) in soil	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil in Soil C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
pH in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS

Analytical Report Number : 23-69196
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	MCERTS
Metals in WAC leachate (BS EN 12457-3 Prep)	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 23-70619

Project / Site name:	Bennett Street	**Samples received on:**	22/11/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	22/11/2023
Your order number:	006808	**Analysis completed by:**	28/11/2023
Report Issue Number:	1	**Report issued on:**	28/11/2023
Samples Analysed:	1 leachate sample		

Signed:

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
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Analytical i2 Environmental Science

Analytical Report Number: 23-70619
Project / Site name: Bennett Street

Your Order No: 006808

Lab Sample Number	2887823
Sample Reference	SW-MG-010
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	21/11/2023
Time Taken	None Supplied

Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (automated)	pH Units	N/A	ISO 17025	12.5
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	5
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	21
Speciated PAHs				
Naphthalene	µg/l	0.01	NONE	17
Acenaphthylene	µg/l	0.01	NONE	0.14
Acenaphthene	µg/l	0.01	NONE	4.1
Fluorene	µg/l	0.01	NONE	1.6
Phenanthrene	µg/l	0.01	NONE	2.3
Anthracene	µg/l	0.01	NONE	0.56
Fluoranthene	µg/l	0.01	NONE	0.4
Pyrene	µg/l	0.01	NONE	0.26
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.2	NONE	26
Heavy Metals / Metalloids				
Arsenic (dissolved)	µg/l	1	ISO 17025	7.2
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	11
Copper (dissolved)	µg/l	0.7	ISO 17025	260
Lead (dissolved)	µg/l	1	ISO 17025	4.7
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	9.7
Selenium (dissolved)	µg/l	4	ISO 17025	15
Zinc (dissolved)	µg/l	0.4	ISO 17025	8.7
Monoaromatics & Oxygenates				
Benzene	µg/l	3	NONE	< 3.0
Toluene	µg/l	3	NONE	< 3.0
Ethylbenzene	µg/l	3	NONE	< 3.0
p & m-xylene	µg/l	3	NONE	< 3.0
o-xylene	µg/l	3	NONE	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10

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Analytical Report Number: 23-70619
Project / Site name: Bennett Street

Your Order No: 006808

Lab Sample Number				2887823
Sample Reference				SW-MG-010
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				21/11/2023
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Petroleum Hydrocarbons				
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	200
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	NONE	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	NONE	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	NONE	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	NONE	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	NONE	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	NONE	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	30
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	55
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	80
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	35
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	200

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

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Analytical Report Number : 23-70619
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	NONE
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	NONE
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted

4041

Analytical Report Number : 23-70619
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
#2	EH_2D_Total but with fatty acids mathematically subtracted				
_	Operator - understore to separate acronyms (exception for +)				
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total				

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Analytical Report Number : 23-72754

Project / Site name:	Bennett Street	**Samples received on:**	01/12/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	01/12/2023
Your order number:	6814	**Analysis completed by:**	09/12/2023
Report Issue Number:	1	**Report issued on:**	11/12/2023
Samples Analysed:	6 water samples		

Signed:

Dominika Liana
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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Analytical Report Number: 23-72754
Project / Site name: Bennett Street

Your Order No: 6814

Lab Sample Number				2898759	2898760	2898761	2898762	2898763
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L099)	pH Units	N/A	ISO 17025	8.1	7.9	8	7.9	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	2.6	2.7	2.7	2.2	1.9
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.17	3.06	3.25	5.4	5.94
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	27	26	36	46	7
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0	< 1.0	1.2	< 1.0	< 1.0
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	150	170	160	130	150
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.53	1.59	1.48	2.38	2.54
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	0.1	0.03
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.6	< 0.2	0.2	0.9	0.9
Copper (dissolved)	µg/l	0.5	ISO 17025	4.9	5.7	4.7	9.1	4.5
Lead (dissolved)	µg/l	0.2	ISO 17025	0.2	0.2	0.2	1.1	0.9
Manganese (dissolved)	µg/l	0.05	ISO 17025	1.8	5.3	3.3	13	32
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.6	1.6	1.7	5	4.8
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	0.7	0.9	1.1	1.1
Zinc (dissolved)	µg/l	0.5	ISO 17025	23	8.3	7.3	73	56

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Analytical Report Number: 23-72754
Project / Site name: Bennett Street

Your Order No: 6814

Lab Sample Number				2898759	2898760	2898761	2898762	2898763
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-72754
Project / Site name: Bennett Street

Your Order No: 6814

Lab Sample Number				2898759	2898760	2898761	2898762	2898763
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-72754
Project / Site name: Bennett Street

Your Order No: 6814

Lab Sample Number				2898759	2898760	2898761	2898762	2898763
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

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Analytical Report Number: 23-72754
Project / Site name: Bennett Street

Your Order No: 6814

Lab Sample Number				2898759	2898760	2898761	2898762	2898763
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

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

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Analytical Report Number: 23-72754
Project / Site name: Bennett Street

Your Order No: 6814

Lab Sample Number				2898764
Sample Reference				CB DS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				29/11/2023
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (L099)	pH Units	N/A	ISO 17025	7.8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	1.9
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	5.72
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	27
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.2
Heavy Metals / Metalloids				
Calcium (dissolved)	mg/l	0.012	ISO 17025	120
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.59
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.6
Copper (dissolved)	µg/l	0.5	ISO 17025	4.8
Lead (dissolved)	µg/l	0.2	ISO 17025	0.7
Manganese (dissolved)	µg/l	0.05	ISO 17025	32
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	4.7
Selenium (dissolved)	µg/l	0.6	ISO 17025	1.2
Zinc (dissolved)	µg/l	0.5	ISO 17025	50

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Analytical Report Number: 23-72754
Project / Site name: Bennett Street

Your Order No: 6814

Lab Sample Number	2898764
Sample Reference	CB DS
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	29/11/2023
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Monoaromatics & Oxygenates				
Benzene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
Petroleum Hydrocarbons				
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10

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Analytical Report Number: 23-72754
Project / Site name: Bennett Street

Your Order No: 6814

Lab Sample Number	2898764
Sample Reference	CB DS
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	29/11/2023
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status	
VOCs				
Chloromethane	µg/l	3	ISO 17025	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0

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Analytical Report Number: 23-72754
Project / Site name: Bennett Street

Your Order No: 6814

Lab Sample Number				2898764
Sample Reference				CB DS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				29/11/2023
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-72754
Project / Site name: Bennett Street

Your Order No: 6814

Lab Sample Number				2898764
Sample Reference				CB DS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				29/11/2023
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10

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

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Analytical Report Number : 23-72754
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

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Analytical Report Number : 23-72754
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report

Analytical Report Number : 23-72754
Project / Site name: Bennett Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
BB DS	None Supplied	W	2898761	c	Settleable Solids in water	L004-PL	c
BB DS	None Supplied	W	2898761	c	Suspended solids in water	L004-PL	c
BB DS	None Supplied	W	2898761	c	pH at 20oC in water (automated)	L099-PL	c
BB MS	None Supplied	W	2898760	c	Settleable Solids in water	L004-PL	c
BB MS	None Supplied	W	2898760	c	Suspended solids in water	L004-PL	c
BB MS	None Supplied	W	2898760	c	pH at 20oC in water (automated)	L099-PL	c
BB US	None Supplied	W	2898759	c	Settleable Solids in water	L004-PL	c
BB US	None Supplied	W	2898759	c	Suspended solids in water	L004-PL	c
BB US	None Supplied	W	2898759	c	pH at 20oC in water (automated)	L099-PL	c
CB DS	None Supplied	W	2898764	c	Settleable Solids in water	L004-PL	c
CB DS	None Supplied	W	2898764	c	Suspended solids in water	L004-PL	c
CB DS	None Supplied	W	2898764	c	pH at 20oC in water (automated)	L099-PL	c
CB MS	None Supplied	W	2898763	c	Settleable Solids in water	L004-PL	c
CB MS	None Supplied	W	2898763	c	Suspended solids in water	L004-PL	c
CB MS	None Supplied	W	2898763	c	pH at 20oC in water (automated)	L099-PL	c
CB US	None Supplied	W	2898762	c	Settleable Solids in water	L004-PL	c
CB US	None Supplied	W	2898762	c	Suspended solids in water	L004-PL	c
CB US	None Supplied	W	2898762	c	pH at 20oC in water (automated)	L099-PL	c

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Analytical Report Number : 23-74553

Project / Site name:	Bennett Street	**Samples received on:**	12/12/2023
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	12/12/2023
Your order number:	006981	**Analysis completed by:**	18/12/2023
Report Issue Number:	1	**Report issued on:**	18/12/2023
Samples Analysed:	1 soil sample		

Signed:

Dominika Liana
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-74553
Project / Site name: Bennett Street
Your Order No: 006981

Lab Sample Number				2909105
Sample Reference				ASB-001
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				12/12/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	30
Moisture Content	%	0.01	NONE	19
Total mass of sample received	kg	0.001	NONE	1.5

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.036
Asbestos Quantification Total	%	0.001	ISO 17025	0.036
Asbestos Analyst ID	N/A	N/A	N/A	MJN

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	9900
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	2.1
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	4200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	2110
Sulphide	mg/kg	1	MCERTS	12
Total Sulphur	mg/kg	50	MCERTS	3800
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.5

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	8.5
Acenaphthylene	mg/kg	0.05	MCERTS	0.65
Acenaphthene	mg/kg	0.05	MCERTS	26
Fluorene	mg/kg	0.05	MCERTS	18
Phenanthrene	mg/kg	0.05	MCERTS	33
Anthracene	mg/kg	0.05	MCERTS	34
Fluoranthene	mg/kg	0.05	MCERTS	100
Pyrene	mg/kg	0.05	MCERTS	99
Benzo(a)anthracene	mg/kg	0.05	MCERTS	65
Chrysene	mg/kg	0.05	MCERTS	62
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	78
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	23
Benzo(a)pyrene	mg/kg	0.05	MCERTS	62
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	35
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	38

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	693

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Analytical Report Number: 23-74553
Project / Site name: Bennett Street
Your Order No: 006981

Lab Sample Number				2909105
Sample Reference				ASB-001
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				12/12/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	120
Lead (aqua regia extractable)	mg/kg	1	MCERTS	240
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	330
Petroleum Hydrocarbons				
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	11
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	98
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	440
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	900
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	170
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	1600

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

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Analytical Report Number: 23-74553
Project / Site name: Bennett Street
Your Order No: 006981

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2909105	ASB-001		144	Loose Fibrous Debris	**Chrysotile**	0.036	**0.036**

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-74553
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2909105	ASB-001	None Supplied	None Supplied	Brown loam and clay with vegetation and stones.

Analytical Report Number : 23-74553
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-74553
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-76129

Project / Site name:	Bennett Street	**Samples received on:**	20/12/2023
Your job number:	15 974	**Samples instructed on/ Analysis started on:**	20/12/2023
Your order number:	007058	**Analysis completed by:**	02/01/2024
Report Issue Number:	1	**Report issued on:**	04/01/2024
Samples Analysed:	6 water samples		

Izabela Wójcik

Signed:

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

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

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

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

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

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

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

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Analytical Report Number: 23-76129
Project / Site name: Bennett Street

Your Order No: 007058

Lab Sample Number				2917959	2917960	2917961	2917962	2917963
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L099)	pH Units	N/A	ISO 17025	7.6	7.5	7.6	7.8	7.8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	2.6	3	2.5	1.5	1.3
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	4.14	9.8	4.09	9.46	5.18
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	180	48	12	50	46
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.7	1.2	1.9	2	1.6
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	130	130	130	100	94
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.84	0.83	0.87	2.02	2.09
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.02	0.04	0.05	0.03	0.04
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	0.3	0.4	0.9	0.9
Copper (dissolved)	µg/l	0.5	ISO 17025	5.3	6	5	2.8	2.9
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	0.3	0.3	0.5	0.5
Manganese (dissolved)	µg/l	0.05	ISO 17025	2.2	21	8	12	7.9
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.2	2.1	1.9	3	3.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7	0.8	0.7	0.9	1
Zinc (dissolved)	µg/l	0.5	ISO 17025	29	50	56	45	63
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons								
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	50
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

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Project / Site name: Bennett Street

Your Order No: 007058

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Date Sampled				19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	15
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	15
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10	50
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Lab Sample Number				2917959	2917960	2917961	2917962	2917963
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	0.24
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	0.13
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	0.51	0.52	0.55	0.12	0.48
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	0.25
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	0.25	0.22	0.25	0.08	0.37

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Date Sampled				19/12/2023	19/12/2023	19/12/2023	19/12/2023	19/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	0.41	0.19	0.69	0.38	2.1
Anthracene	µg/l	0.01	ISO 17025	0.17	0.09	0.22	0.14	0.69
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	0.18
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	0.12
Fluoranthene	µg/l	0.01	ISO 17025	0.85	0.45	1.3	0.77	3.7
Pyrene	µg/l	0.01	ISO 17025	0.85	0.49	1.2	0.79	3.4
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.26	< 0.01	0.45	0.29	1.5
Chrysene	µg/l	0.01	ISO 17025	0.28	< 0.01	0.47	0.3	1.7
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	0.29	< 0.01	0.46	0.3	1.6
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	0.09	< 0.01	0.17	0.12	0.71
Benzo(a)pyrene	µg/l	0.01	ISO 17025	0.25	< 0.01	0.39	0.27	1.5
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	0.12	< 0.01	0.19	0.13	0.71
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	0.2
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	0.14	< 0.01	0.23	0.15	0.8
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

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

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Analytical Report Number: 23-76129
Project / Site name: Bennett Street

Your Order No: 007058

Lab Sample Number	2917964
Sample Reference	CB DS
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	19/12/2023
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (L099)	pH Units	N/A	ISO 17025	7.8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	1.3
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	9.55
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	31
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.4
Heavy Metals / Metalloids				
Calcium (dissolved)	mg/l	0.012	ISO 17025	100
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.99
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.7
Copper (dissolved)	µg/l	0.5	ISO 17025	3
Lead (dissolved)	µg/l	0.2	ISO 17025	0.4
Manganese (dissolved)	µg/l	0.05	ISO 17025	8.9
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	1
Zinc (dissolved)	µg/l	0.5	ISO 17025	47
Monoaromatics & Oxygenates				
Benzene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
Petroleum Hydrocarbons				
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	40
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10

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Analytical Report Number: 23-76129
Project / Site name: Bennett Street

Your Order No: 007058

Lab Sample Number	2917964
Sample Reference	CB DS
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	19/12/2023
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status	
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	40
VOCs				
Chloromethane	µg/l	3	ISO 17025	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0

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Analytical Report Number: 23-76129
Project / Site name: Bennett Street

Your Order No: 007058

Lab Sample Number				2917964
Sample Reference				CB DS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				19/12/2023
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	0.18
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	0.1
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	0.29
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05
Dibenzofuran	µg/l	0.05	NONE	0.16
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05
Fluorene	µg/l	0.01	ISO 17025	0.23

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Analytical Report Number: 23-76129
Project / Site name: Bennett Street

Your Order No: 007058

Lab Sample Number				2917964
Sample Reference				CB DS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				19/12/2023
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Azobenzene	µg/l	0.05	NONE	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	1.4
Anthracene	µg/l	0.01	ISO 17025	0.39
Carbazole	µg/l	0.05	NONE	0.1
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	2.1
Pyrene	µg/l	0.01	ISO 17025	1.9
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.82
Chrysene	µg/l	0.01	ISO 17025	0.85
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	0.86
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	0.37
Benzo(a)pyrene	µg/l	0.01	ISO 17025	0.79
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	0.38
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	0.12
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	0.45
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10

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

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Analytical Report Number : 23-76129
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

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Analytical Report Number : 23-76129
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 24-005764

Project / Site name:	Bennet Street	**Samples received on:**	27/02/2024
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	27/02/2024
Your order number:	007517	**Analysis completed by:**	04/03/2024
Report Issue Number:	1	**Report issued on:**	05/03/2024
Samples Analysed:	2 soil samples - 3 leachate samples		

Signed:

Dominika Liana
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 24-005764
Project / Site name: Bennet Street
Your Order No: 007517

Lab Sample Number				129457	129458
Sample Reference				SP16-A	SP16-B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				26/02/2024	26/02/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	23	17
Total mass of sample received	kg	0.1	NONE	0.2	0.3
Asbestos					
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	WEM	WEM
General Inorganics					
pH (L099)	pH Units	N/A	MCERTS	8.8	7.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	11000	3800
Water Soluble SO4 1hr extraction	mg/kg	2.5	MCERTS	4100	3600
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	2060	1810
Sulphide	mg/kg	1	MCERTS	110	8.2
Total Sulphur	mg/kg	50	MCERTS	11000	1800
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3	0.9
Total Phenols					
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
Speciated PAHs					
Naphthalene	mg/kg	0.05	MCERTS	12	0.74
Acenaphthylene	mg/kg	0.05	MCERTS	0.73	0.17
Acenaphthene	mg/kg	0.05	MCERTS	19	1
Fluorene	mg/kg	0.05	MCERTS	16	1
Phenanthrene	mg/kg	0.05	MCERTS	92	7.1
Anthracene	mg/kg	0.05	MCERTS	26	2.3
Fluoranthene	mg/kg	0.05	MCERTS	100	11
Pyrene	mg/kg	0.05	MCERTS	93	11
Benzo(a)anthracene	mg/kg	0.05	MCERTS	43	5.3
Chrysene	mg/kg	0.05	MCERTS	48	5.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	48	6.4
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	23	2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	45	5.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	20	2.6
Dibenzo(a,h)anthracene	mg/kg	0.05	MCERTS	5.7	0.7
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	25	3.1
Total PAH					
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	619	64.8

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-005764
Project / Site name: Bennet Street
Your Order No: 007517

Lab Sample Number				129457	129458
Sample Reference				SP16-A	SP16-B
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				26/02/2024	26/02/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	38	20
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	40	35
Copper (aqua regia extractable)	mg/kg	1	MCERTS	240	110
Lead (aqua regia extractable)	mg/kg	1	MCERTS	1100	180
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.3	0.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	29	31
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	530	140
Petroleum Hydrocarbons					
TPH (>C5 - C10) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0
TPH (>C5 - C6) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (>C6 - C8) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0
TPH (>C8 - C10) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0
TPH (>C10 - C12) EH_CU_1D_TOTAL_#1_#2	mg/kg	2	MCERTS	7.5	< 2.0
TPH (>C12 - C16) EH_CU_1D_TOTAL_#1_#2	mg/kg	4	MCERTS	62	9.7
TPH (>C16 - C21) EH_CU_1D_TOTAL_#1_#2	mg/kg	10	MCERTS	240	31
TPH (>C21 - C35) EH_CU_1D_TOTAL_#1_#2	mg/kg	10	MCERTS	560	84
TPH (>C35 - C40) EH_CU_1D_TOTAL_#1_#2	mg/kg	10	MCERTS	93	22
TPH Total >C5 - C40 EH_CU+HS_1D_TOTAL_#1_#2	mg/kg	10	NONE	960	150
TPH (C10 - C40) EH_CU_1D_TOTAL_#1_#2	mg/kg	10	MCERTS	960	150

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-005764
Project / Site name: Bennet Street

Your Order No: 007517

Lab Sample Number				129454	129455	129456
Sample Reference				SP16-LA	SP16-LB	SP16-LC
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				26/02/2024	26/02/2024	26/02/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
General Inorganics						
pH (automated)	pH Units	N/A	ISO 17025	7.5	9	7.6
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	< 1.0	9.8	< 1.0
Total Phenols						
Total Phenols (monohydric) low level	µg/l	1	NONE	2.6	12	1.7
Speciated PAHs						
Naphthalene	µg/l	0.01	ISO 17025	0.56	7.9	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	0.17	0.3	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	6	16	< 0.01
Fluorene	µg/l	0.01	ISO 17025	1.5	6.7	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	0.76	8.7	< 0.01
Anthracene	µg/l	0.01	ISO 17025	0.79	2	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	1.2	1.5	< 0.01
Pyrene	µg/l	0.01	ISO 17025	0.82	0.98	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Dibenzo(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01
Total PAH						
Total EPA-16 PAHs	µg/l	0.16	NONE	11.8	44	< 0.16

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Analytical Report Number: 24-005764
Project / Site name: Bennet Street

Your Order No: 007517

Lab Sample Number				129454	129455	129456
Sample Reference				SP16-LA	SP16-LB	SP16-LC
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				26/02/2024	26/02/2024	26/02/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (dissolved)	µg/l	1	ISO 17025	2.3	6.5	2.1
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	< 0.4	1.1	0.8
Copper (dissolved)	µg/l	0.7	ISO 17025	11	20	16
Lead (dissolved)	µg/l	1	ISO 17025	< 1.0	3	3.8
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	3.2	4.3	16
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	21	9.7	720
Petroleum Hydrocarbons						
TPH - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH - Aliphatic >C10 - C12 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aliphatic >C12 - C16 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aliphatic >C16 - C21 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aliphatic >C21 - C35 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aliphatic >C5 - C35 HS+EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10	< 10
TPH - Aromatic >EC5 - EC7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH - Aromatic >EC7 - EC8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH - Aromatic >EC8 - EC10 EH_1D_AR_#1_#2_MS	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0
TPH - Aromatic >EC10 - EC12 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	< 10	10	< 10
TPH - Aromatic >EC12 - EC16 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	65	130	< 10
TPH - Aromatic >EC16 - EC21 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	50	80	< 10
TPH - Aromatic >EC21 - EC35 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	15	20	< 10
TPH (C10 - C40) EH_1D_TOTAL_#1_#2_MS	µg/l	10	NONE	130	240	< 10
VOCs						
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	NONE	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0

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

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Analytical Report Number : 24-005764
Project / Site name: Bennet Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
129457	SP16-A	None Supplied	None Supplied	Brown loam and clay with gravel and vegetation
129458	SP16-B	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation

Analytical Report Number : 24-005764
Project / Site name: Bennet Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038B	D	MCERTS
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-MS/GC-MS HS in leachate	Determination of total petroleum hydrocarbons in leachate by GC-MS/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L070B/L088	W	ISO 17025
Total petroleum hydrocarbons by GC-MS/GC-MS HS in leachate	Determination of total petroleum hydrocarbons in leachate by GC-MS/GC-MS HS	In-house method	L070B/L088	W	NONE
BTEX and/or Volatile organic compounds in leachate	Determination of volatile organic compounds in leachate by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	ISO 17025
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080	W	ISO 17025

Analytical Report Number : 24-005764
Project / Site name: Bennet Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080	W	MCERTS
Monohydric phenols (low level) in leachate	Determination of phenols in leachate by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS
Total cyanide (low level) in leachate	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS
pH at 20°C in leachate (automated)	Determination of pH in leachate by electrometric measurement	In-house method	L099	W	ISO 17025
Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in leachate	SVOCs and PAHs in leachate	In-house method	L102B		ISO 17025
Organic 2:1 Leachate		In-house method	L020B	W	NONE

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 24-006553

Project / Site name:	Bennett Street	**Samples received on:**	29/02/2024
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	04/03/2024
Your order number:	7516	**Analysis completed by:**	08/03/2024
Report Issue Number:	1	**Report issued on:**	10/03/2024
Samples Analysed:	2 water samples		

Izabela Wójcik

Signed:

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

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

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

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

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

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

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The results included within the report are representative of the samples submitted for analysis.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 24-006553
Project / Site name: Bennett Street

Your Order No: 7516

Lab Sample Number				133273	133274
Sample Reference				CB US	CB MID
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				28/02/2024	28/02/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
General Inorganics					
pH (L099)	pH Units	N/A	ISO 17025	7.9	7.8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	7.01	6.64
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	280	250
Total Phenols					
Total Phenols (Monohydric) Low Level 1ug/l	µg/l	1	NONE	< 1.0	< 1.0
Speciated PAHs					
Naphthalene	µg/l	0.01	ISO 17025	0.76	2.3
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	2.4	2.4
Fluorene	µg/l	0.01	ISO 17025	1.4	1.3
Phenanthrene	µg/l	0.01	ISO 17025	2.1	3.2
Anthracene	µg/l	0.01	ISO 17025	0.92	1
Fluoranthene	µg/l	0.01	ISO 17025	1.7	2.6
Pyrene	µg/l	0.01	ISO 17025	1.4	2.2
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.28	0.73
Chrysene	µg/l	0.01	ISO 17025	0.3	0.86
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	0.25	0.79
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	0.07	0.31
Benzo(a)pyrene	µg/l	0.01	ISO 17025	0.18	0.72
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	0.31
Dibenzo(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	0.09
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	0.39
Heavy Metals / Metalloids					
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.66	3.79
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.09	0.08
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.7	0.5
Copper (dissolved)	µg/l	0.5	ISO 17025	8	6.6
Lead (dissolved)	µg/l	0.2	ISO 17025	1.4	1.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	23	37
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	4.3	4.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	1.5	1.3
Zinc (dissolved)	µg/l	0.5	ISO 17025	63	44
Calcium (dissolved)	mg/l	0.012	ISO 17025	170	160
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0
Petroleum Hydrocarbons					
TPH - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >C10 - C12 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >C12 - C16 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >C16 - C21 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >C21 - C35 EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >C5 - C35 HS+EH_1D_AL_#1_#2_MS	µg/l	10	NONE	< 10	< 10

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Analytical Report Number: 24-006553
Project / Site name: Bennett Street

Your Order No: 7516

Lab Sample Number				133273	133274
Sample Reference				CB US	CB MID
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				28/02/2024	28/02/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
TPH - Aromatic >EC5 - EC7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC7 - EC8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC8 - EC10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC10 - EC12 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	34	41
TPH - Aromatic >EC12 - EC16 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	95	51
TPH - Aromatic >EC16 - EC21 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	120	52
TPH - Aromatic >EC21 - EC35 EH_1D_AR_#1_#2_MS	µg/l	10	NONE	80	66
TPH - Aromatic >EC5 - EC35 HS+EH_1D_AR_#1_#2_MS	µg/l	10	NONE	330	210
TPH (C10 - C40) EH_1D_TOTAL_#1_#2_MS	µg/l	10	NONE	330	210
VOCs					
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0##	< 3.0##
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0

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Analytical Report Number: 24-006553
Project / Site name: Bennett Street

Your Order No: 7516

Lab Sample Number				133273	133274
Sample Reference				CB US	CB MID
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				28/02/2024	28/02/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	0.61	1
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	1.4	1.2
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05

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Analytical Report Number: 24-006553
Project / Site name: Bennett Street

Your Order No: 7516

Lab Sample Number				133273	133274
Sample Reference				CB US	CB MID
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				28/02/2024	28/02/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05
Carbazole	µg/l	0.05	NONE	0.75	0.81
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05
3+4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10

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

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Analytical Report Number : 24-006553
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Suspended Solids in water	Determined gravimetrically with GFC filtration papers	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved organic carbon in water by TOC/DOC NDIR Analyser	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Total petroleum hydrocarbons with carbon banding by GC-MS in water	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L070B	W	NONE
Total petroleum hydrocarbons by GC-MS in water	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS	In-house method	L070B	W	NONE
BTEX and/or Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW	L080	W	ISO 17025
Monohydric phenols (low level) in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	NONE
Total cyanide (low level) in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	NONE
Total petroleum hydrocarbons by GC-MS HS in water	Determination of total petroleum hydrocarbons in water by GC-MS HS	In-house method	L088	W	ISO 17025
pH at 20°C in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In-house method	L099	W	ISO 17025
Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAH) in leachate by extraction in dichloromethane followed by GC-MS	In-house method based on USEPA 8270	L102B	W	ISO 17025

Analytical Report Number : 24-006553
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Phenols in water by GC-MS	Determination of phenols in water by GC-MS	In-house method	L102B	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices: SW, GW, PW, PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised

Sample Deviation Report

Analytical Report Number : 24-006553
Project / Site name: Bennett Street

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
CB MID	N/A	W	133274	c	Suspended Solids in water	L004B	c
CB MID	N/A	W	133274	c	pH at 20°C in water (automated)	L099	c
CB US	N/A	W	133273	c	Suspended Solids in water	L004B	c
CB US	N/A	W	133273	c	pH at 20°C in water (automated)	L099	c

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Analytical Report Number : 24-008736

Project / Site name:	Bennett Street	**Samples received on:**	13/03/2024
Your job number:	15 974	**Samples instructed on/ Analysis started on:**	13/03/2024
Your order number:	007685	**Analysis completed by:**	20/03/2024
Report Issue Number:	1	**Report issued on:**	20/03/2024
Samples Analysed:	4 soil samples		

Signed:

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

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

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

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

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

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 24-008736
Project / Site name: Bennett Street
Your Order No: 007685

Lab Sample Number				143999	144000	144001	144002
Sample Reference				IMP-SS001	IMP-SS002	IMP-SS003	IMP-SS004
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/03/2024	12/03/2024	12/03/2024	12/03/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	10	10	11	9.7
Total mass of sample received	kg	0.1	NONE	0.4	0.4	0.4	0.4
Asbestos							
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSA	DSA	DSA	WEM
General Inorganics							
pH (L099)	pH Units	N/A	MCERTS	8.1	7.4	8.2	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO_4	mg/kg	50	MCERTS	200	290	250	160
Water Soluble SO_4 1hr extraction	mg/kg	2.5	MCERTS	56	130	130	110
Water Soluble SO_4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	27.8	67.2	62.7	53.1
Sulphide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphur	mg/kg	50	MCERTS	82	160	100	60
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.4	0.5	0.3	0.3
Total Phenols							
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs							
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.25	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.16	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.05	0.15	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.42	0.99	0.24	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.1	0.26	0.06	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.66	0.84	0.4	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.63	0.83	0.4	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.33	0.37	0.21	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.36	0.44	0.22	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.37	0.43	0.24	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.14	0.12	0.09	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.3	0.33	0.19	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.15	0.15	0.1	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.19	0.17	0.13	< 0.05
Total PAH							
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.69	5.48	2.27	< 0.80

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Analytical Report Number: 24-008736
Project / Site name: Bennett Street
Your Order No: 007685

Lab Sample Number				143999	144000	144001	144002
Sample Reference				IMP-SS001	IMP-SS002	IMP-SS003	IMP-SS004
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/03/2024	12/03/2024	12/03/2024	12/03/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.5	6.1	5.3	4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	11	8.9	7.8	7.2
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	22	9.8	8.1
Lead (aqua regia extractable)	mg/kg	1	MCERTS	47	35	20	8.1
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	7.7	8.9	7.5	7.1
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	48	51	30	21
Petroleum Hydrocarbons							
TPH (>C5 - C10) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH (>C5 - C6) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (>C6 - C8) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH (>C8 - C10) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH (>C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPH (>C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0
TPH (>C16 - C21) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10
TPH (>C21 - C35) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10
TPH (>C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10
TPH Total >C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	< 10	< 10	< 10	< 10
TPH (C10 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10

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

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Analytical Report Number : 24-008736
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
143999	IMP-SS001	None Supplied	None Supplied	Brown sand with gravel
144000	IMP-SS002	None Supplied	None Supplied	Brown sand with gravel
144001	IMP-SS003	None Supplied	None Supplied	Brown sand with gravel
144002	IMP-SS004	None Supplied	None Supplied	Brown sand with gravel

Analytical Report Number : 24-008736
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038B	D	MCERTS
Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080	W	MCERTS
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS

Analytical Report Number : 24-008736
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 24-008820

Project / Site name:	Bennett Street	**Samples received on:**	13/03/2024
Your job number:	15 974	**Samples instructed on/ Analysis started on:**	13/03/2024
Your order number:	007686	**Analysis completed by:**	20/03/2024
Report Issue Number:	1	**Report issued on:**	21/03/2024
Samples Analysed:	4 water samples		

Signed:

Joanna Szwagrzak
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 24-008820
Project / Site name: Bennett Street

Your Order No: 007686

Lab Sample Number				144310	144311	144312	144313
Sample Reference				CB DS	BB US	BB MS	BB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/03/2024	12/03/2024	12/03/2024	12/03/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L099)	pH Units	N/A	ISO 17025	7.7	7.7	7.7	7.8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.84	2.75	2.89	2.92
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	89	27	23	32
Total Phenols							
Total Phenols (Monohydric) Low Level 1ug/l	µg/l	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs							
Naphthalene	µg/l	0.01	ISO 17025	0.24	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	0.3	< 0.01	0.13	< 0.01
Fluorene	µg/l	0.01	ISO 17025	0.18	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	0.87	0.2	0.57	0.23
Anthracene	µg/l	0.01	ISO 17025	0.22	< 0.01	0.21	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	1.1	0.37	0.92	0.4
Pyrene	µg/l	0.01	ISO 17025	1	0.38	0.86	0.38
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.37	0.13	0.3	0.15
Chrysene	µg/l	0.01	ISO 17025	0.4	0.16	0.39	0.18
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	0.43	< 0.01	0.35	0.16
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	0.15	< 0.01	0.16	0.08
Benzo(a)pyrene	µg/l	0.01	ISO 17025	0.38	< 0.01	0.32	0.15
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	0.15	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	0.18	< 0.01	< 0.01	< 0.01
Heavy Metals / Metalloids							
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.15	0.92	0.95	0.96
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.06	0.07	0.07
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.8	0.3	< 0.2	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	5.5	11	12	11
Lead (dissolved)	µg/l	0.2	ISO 17025	0.4	3	2.9	4
Manganese (dissolved)	µg/l	0.05	ISO 17025	5.2	280	280	270
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.7	2.5	2.4	2.4
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6	0.7	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	41	54	20	54
Calcium (dissolved)	mg/l	0.012	ISO 17025	54	130	150	140
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 24-008820
Project / Site name: Bennett Street

Your Order No: 007686

Lab Sample Number				144310	144311	144312	144313
Sample Reference				CB DS	BB US	BB MS	BB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/03/2024	12/03/2024	12/03/2024	12/03/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Petroleum Hydrocarbons							
TPH - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH - Aliphatic >C5 - C35 $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH - Aromatic >EC10 - EC12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	10	< 10	< 10	< 10
TPH - Aromatic >EC12 - EC16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	20	< 10	< 10	12
TPH - Aromatic >EC16 - EC21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	30	< 10	< 10	20
TPH - Aromatic >EC21 - EC35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	60	< 10	< 10	33
TPH - Aromatic >EC5 - EC35 $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	120	< 10	< 10	65
TPH (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	NONE	120	< 10	< 10	65

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Analytical Report Number: 24-008820
Project / Site name: Bennett Street

Your Order No: 007686

Lab Sample Number				144310	144311	144312	144313
Sample Reference				CB DS	BB US	BB MS	BB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/03/2024	12/03/2024	12/03/2024	12/03/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 24-008820
Project / Site name: Bennett Street

Your Order No: 007686

Lab Sample Number				144310	144311	144312	144313
Sample Reference				CB DS	BB US	BB MS	BB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/03/2024	12/03/2024	12/03/2024	12/03/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 24-008820
Project / Site name: Bennett Street

Your Order No: 007686

Lab Sample Number				144310	144311	144312	144313
Sample Reference				CB DS	BB US	BB MS	BB DS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				12/03/2024	12/03/2024	12/03/2024	12/03/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
SVOCs							
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
3+4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 24-008820
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Suspended Solids in water	Determined gravimetrically with GFC filtration papers	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004B	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved organic carbon in water by TOC/DOC NDIR Analyser	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037B	W	ISO 17025
Total petroleum hydrocarbons with carbon banding by GC-MS in water	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L070B	W	NONE
Total petroleum hydrocarbons by GC-MS in water	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS	In-house method	L070B	W	NONE
BTEX and/or Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW	L080	W	ISO 17025
Monohydric phenols (low level) in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	NONE
Total cyanide (low level) in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	NONE
Total petroleum hydrocarbons by GC-MS HS in water	Determination of total petroleum hydrocarbons in water by GC-MS HS	In-house method	L088	W	ISO 17025
pH at 20°C in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In-house method	L099	W	ISO 17025
Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAH) in leachate by extraction in dichloromethane followed by GC-MS	In-house method based on USEPA 8270	L102B	W	ISO 17025
Phenols in water by GC-MS	Determination of phenols in water by GC-MS	In-house method	L102B	W	NONE
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices: SW, GW, PW, PrW (Al, Cu, Fe,Zn)	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 24-010773

Project / Site name:	Bennett Street	**Samples received on:**	22/03/2024
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	22/03/2024
Your order number:	007767	**Analysis completed by:**	28/03/2024
Report Issue Number:	1	**Report issued on:**	28/03/2024
Samples Analysed:	1 soil sample		

Signed:

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

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

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

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

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

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 24-010773
Project / Site name: Bennett Street
Your Order No: 007767

Lab Sample Number				153591
Sample Reference				IMP-SS005
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				21/03/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	12
Total mass of sample received	kg	0.1	NONE	0.3
Asbestos				
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	PDO
General Inorganics				
pH (L099)	pH Units	N/A	MCERTS	9.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO_4	mg/kg	50	MCERTS	970
Water Soluble SO_4 1hr extraction	mg/kg	2.5	MCERTS	440
Water Soluble SO_4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	221
Sulphide	mg/kg	1	MCERTS	3.2
Total Sulphur	mg/kg	50	MCERTS	3300
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.6
Total Phenols				
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0
Speciated PAHs				
Naphthalene	mg/kg	0.05	MCERTS	0.12
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.35
Fluorene	mg/kg	0.05	MCERTS	0.27
Phenanthrene	mg/kg	0.05	MCERTS	2
Anthracene	mg/kg	0.05	MCERTS	0.49
Fluoranthene	mg/kg	0.05	MCERTS	2.6
Pyrene	mg/kg	0.05	MCERTS	2.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.1
Chrysene	mg/kg	0.05	MCERTS	1.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.45
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.94
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.43
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.57
Total PAH				
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	13.9

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Analytical Report Number: 24-010773
Project / Site name: Bennett Street
Your Order No: 007767

Lab Sample Number				153591
Sample Reference				IMP-SS005
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				21/03/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	61
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	67
Petroleum Hydrocarbons				
TPH (>C5 - C10) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0
TPH (>C5 - C6) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1
TPH (>C6 - C8) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0
TPH (>C8 - C10) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0
TPH (>C10 - C12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	< 2.0
TPH (>C12 - C16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	< 4.0
TPH (>C16 - C21) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10
TPH (>C21 - C35) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10
TPH (>C35 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10
TPH Total >C5 - C40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	13
TPH (C10 - C40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	13

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

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Analytical Report Number : 24-010773
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
153591	IMP-SS005	None Supplied	None Supplied	Brown clay and sand with gravel

Analytical Report Number : 24-010773
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038B	D	MCERTS
Speciated EPA-16 PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080	W	MCERTS
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Analytical Report Number : 24-010773
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

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

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 24-77927

Project / Site name:	Roman Road	**Samples received on:**	11/01/2024
Your job number:	17 401	**Samples instructed on/ Analysis started on:**	11/01/2024
Your order number:	007151	**Analysis completed by:**	17/01/2024
Report Issue Number:	1	**Report issued on:**	17/01/2024
Samples Analysed:	6 soil samples		

Signed:

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

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

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

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

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

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

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Analytical Report Number: 24-77927
Project / Site name: Roman Road
Your Order No: 007151

Lab Sample Number				2926718	2926719	2926720	2926721	2926722
Sample Reference				TS001	TS002	TS003	SS001	SS002
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	25	20	17	19	17
Total mass of sample received	kg	0.001	NONE	0.3	0.4	0.3	0.1	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSA	DSA	DSA	DSA	DSA
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.8	7.9	8.1	6.9	7.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	250	210	79	190	200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.011	0.013	0.005	0.0069	0.0058
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	22	26	10	14	12
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	10.9	12.8	5	6.9	5.8
Sulphide	mg/kg	1	MCERTS	1.8	2.2	1.3	< 1.0	< 1.0
Total Sulphur	mg/kg	50	MCERTS	420	390	180	270	260
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.8	2.4	0.8	1.5	0.9
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.07	0.08	< 0.05	0.11	0.09
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.06	0.06	0.08	0.08	0.07
Fluorene	mg/kg	0.05	MCERTS	0.06	0.06	0.05	0.08	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.1	0.11	< 0.05	0.22	0.07
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.17	0.13	< 0.05	0.31	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.16	0.12	< 0.05	0.28	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.09	0.09	< 0.05	0.14	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.1	0.07	< 0.05	0.17	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.12	0.11	< 0.05	0.14	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.06	< 0.05	< 0.05	0.06	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.09	< 0.05	< 0.05	0.08	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.08	0.83	< 0.80	1.67	< 0.80

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-77927
Project / Site name: Roman Road
Your Order No: 007151

Lab Sample Number				2926718	2926719	2926720	2926721	2926722
Sample Reference				TS001	TS002	TS003	SS001	SS002
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				10/01/2024	10/01/2024	10/01/2024	10/01/2024	10/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.7	7.9	7.6	6.6	5.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	31	33	42	33	30
Copper (aqua regia extractable)	mg/kg	1	MCERTS	23	25	20	18	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	37	31	14	20	11
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	23	30	20	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	73	71	50	40	31
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	6.6	< 4.0	< 4.0	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	11	< 10	< 10	< 10	< 10

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-77927
Project / Site name: Roman Road
Your Order No: 007151

Lab Sample Number				2926723
Sample Reference				SS003
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				10/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	16
Total mass of sample received	kg	0.001	NONE	0.3

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

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	150
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.0061
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	12
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	6.1
Sulphide	mg/kg	1	MCERTS	< 1.0
Total Sulphur	mg/kg	50	MCERTS	240
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.11
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.1
Fluorene	mg/kg	0.05	MCERTS	0.07
Phenanthrene	mg/kg	0.05	MCERTS	0.08
Anthracene	mg/kg	0.05	MCERTS	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05

Total PAH

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

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Analytical Report Number: 24-77927
Project / Site name: Roman Road
Your Order No: 007151

Lab Sample Number				2926723
Sample Reference				SS003
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				10/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	5.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12
Lead (aqua regia extractable)	mg/kg	1	MCERTS	15
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	27
Petroleum Hydrocarbons				
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	< 10

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

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Analytical Report Number : 24-77927
Project / Site name: Roman Road

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2926718	TS001	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2926719	TS002	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2926720	TS003	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2926721	SS001	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2926722	SS002	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2926723	SS003	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.

Analytical Report Number : 24-77927
Project / Site name: Roman Road

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 24-77927
Project / Site name: Roman Road

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 24-77955

Project / Site name:	Bennett Street	**Samples received on:**	11/01/2024
Your job number:	15 974	**Samples instructed on/ Analysis started on:**	11/01/2024
Your order number:	007163	**Analysis completed by:**	16/01/2024
Report Issue Number:	1	**Report issued on:**	16/01/2024
Samples Analysed:	1 soil sample		

Signed: A. Czerwińska

Agnieszka Czerwińska
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 24-77955
Project / Site name: Bennett Street
Your Order No: 007163

Lab Sample Number				2926866
Sample Reference				ASB Bund
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				10/01/2024
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.021
Asbestos Quantification Total	%	0.001	ISO 17025	0.021
Asbestos Analyst ID	N/A	N/A	N/A	KSZ

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

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Analytical Report Number: 24-77955
Project / Site name: Bennett Street
Your Order No: 007163

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2926866	ASB Bund		122	Loose Fibrous Debris	**Chrysotile**	0.021	**0.021**

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 24-77955
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 24-79532

Project / Site name:	Bennett Street	**Samples received on:**	23/01/2024
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	23/01/2024
Your order number:	007239	**Analysis completed by:**	29/01/2024
Report Issue Number:	1	**Report issued on:**	29/01/2024
Samples Analysed:	3 soil samples		

Signed:

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

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

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

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

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

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

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Analytical Report Number: 24-79532
Project / Site name: Bennett Street
Your Order No: 007239

Lab Sample Number				2935406	2935407	2935408
Sample Reference				Bund 15	Bund 16	Bund 17
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				22/01/2024	22/01/2024	22/01/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	21	20	20
Total mass of sample received	kg	0.001	NONE	0.4	0.3	0.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile	Chrysotile	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.004	0.002	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	0.004	0.002	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.4	7.9	8.9
Total Cyanide	mg/kg	1	MCERTS	2.3	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	26000	30000	27000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.6	1.7	1.7
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	3300	3500	3500
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1630	1740	1730
Sulphide	mg/kg	1	MCERTS	8.3	17	20
Total Sulphur	mg/kg	50	MCERTS	13000	13000	14000
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.9	3.2	3.1

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.95	0.35	0.38
Acenaphthylene	mg/kg	0.05	MCERTS	0.25	0.21	0.21
Acenaphthene	mg/kg	0.05	MCERTS	1.2	0.71	0.66
Fluorene	mg/kg	0.05	MCERTS	0.95	0.59	0.52
Phenanthrene	mg/kg	0.05	MCERTS	7.1	5.3	4.2
Anthracene	mg/kg	0.05	MCERTS	1.9	1.4	1.2
Fluoranthene	mg/kg	0.05	MCERTS	11	8.6	7.4
Pyrene	mg/kg	0.05	MCERTS	10	8.2	6.9
Benzo(a)anthracene	mg/kg	0.05	MCERTS	5.7	4.1	3.7
Chrysene	mg/kg	0.05	MCERTS	6.1	4.4	3.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	6.9	5.1	4.5
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.8	2	1.6
Benzo(a)pyrene	mg/kg	0.05	MCERTS	6.5	4.7	4.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3.4	2.9	2.4
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.92	0.83	0.71
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.8	3.3	2.7

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	70.1	52.6	45.1

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Analytical Report Number: 24-79532
Project / Site name: Bennett Street
Your Order No: 007239

Lab Sample Number				2935406	2935407	2935408
Sample Reference				Bund 15	Bund 16	Bund 17
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				22/01/2024	22/01/2024	22/01/2024
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	11	15
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	0.9	0.5
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	25	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	220	680	140
Lead (aqua regia extractable)	mg/kg	1	MCERTS	340	240	200
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	27	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	370	1000	340
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	32	32	23
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	140	160	130
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	52	62	53
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	220	260	210

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

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 24-79532
Project / Site name: Bennett Street
Your Order No: 007239

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2935406	Bund 15		165	Bitumen	**Chrysotile**	0.004	**0.004**
2935407	Bund 16		181	Bitumen	**Chrysotile**	0.002	**0.002**
2935408	Bund 17		149	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

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

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Analytical Report Number : 24-79532
Project / Site name: Bennett Street

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2935406	Bund 15	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2935407	Bund 16	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.
2935408	Bund 17	None Supplied	None Supplied	Brown clay and loam with gravel and vegetation.

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Analytical Report Number : 24-79532
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 24-79532
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 24-81005

Project / Site name:	Bennett Street	**Samples received on:**	01/02/2024
Your job number:	15-974	**Samples instructed on/ Analysis started on:**	01/02/2024
Your order number:	007238	**Analysis completed by:**	08/02/2024
Report Issue Number:	1	**Report issued on:**	08/02/2024
Samples Analysed:	6 water samples		

Signed: A. Czerwińska

Agnieszka Czerwińska
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

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Analytical Report Number: 24-81005
Project / Site name: Bennett Street

Your Order No: 007238

Lab Sample Number				2943483	2943484	2943485	2943486	2943487
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/01/2024	31/01/2024	31/01/2024	31/01/2024	31/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH (L099)	pH Units	N/A	ISO 17025	8	8.1	8.2	7.9	8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	2.8	3	2.5	2.9	1.8
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	3.2	3.51	3.57	6	5.23
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	42	28	820	57	24
Total Phenols								
Total Phenols (monohydric)	µg/l	1	ISO 17025	2.4	2.2	2.5	2.6	1.6
Heavy Metals / Metalloids								
Calcium (dissolved)	mg/l	0.012	ISO 17025	160	160	140	140	150
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.16	1.13	2.13	3.7	3.46
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.06	0.06	0.07	0.08	0.09
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	0.4	0.7	0.8
Copper (dissolved)	µg/l	0.5	ISO 17025	12	11	12	3.2	3.9
Lead (dissolved)	µg/l	0.2	ISO 17025	1.4	1.4	4.1	0.3	0.3
Manganese (dissolved)	µg/l	0.05	ISO 17025	31	48	23	4.8	3.2
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	0.07	0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.8	2.8	2.8	3.8	3.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.6	0.9	0.9	1.2	1.1
Zinc (dissolved)	µg/l	0.5	ISO 17025	23	17	26	58	57
Monoaromatics & Oxygenates								
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 24-81005
Project / Site name: Bennett Street

Your Order No: 007238

Lab Sample Number				2943483	2943484	2943485	2943486	2943487
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/01/2024	31/01/2024	31/01/2024	31/01/2024	31/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	ISO 17025	62	53	100	52	67
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	10	10	18	10	12
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	20	20	35	20	24
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	32	23	49	22	31
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	62	53	100	52	67

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Analytical Report Number: 24-81005
Project / Site name: Bennett Street

Your Order No: 007238

Lab Sample Number				2943483	2943484	2943485	2943486	2943487
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/01/2024	31/01/2024	31/01/2024	31/01/2024	31/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
VOCs								
Chloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 24-81005
Project / Site name: Bennett Street

Your Order No: 007238

Lab Sample Number				2943483	2943484	2943485	2943486	2943487
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/01/2024	31/01/2024	31/01/2024	31/01/2024	31/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 24-81005
Project / Site name: Bennett Street

Your Order No: 007238

Lab Sample Number				2943483	2943484	2943485	2943486	2943487
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/01/2024	31/01/2024	31/01/2024	31/01/2024	31/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
SVOCs								
Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	0.18	< 0.01	0.19	< 0.01	0.12
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	0.33	0.13	0.37	< 0.01	0.16
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	0.22	0.07	0.24	< 0.01	0.09
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	1.4	0.52	1.9	0.21	0.72
Anthracene	µg/l	0.01	ISO 17025	0.42	0.14	0.48	0.06	0.21
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	2.7	0.83	2.8	0.52	1.4
Pyrene	µg/l	0.01	ISO 17025	2.5	0.75	2.5	0.54	1.4
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.75	0.34	1.1	0.22	0.63
Chrysene	µg/l	0.01	ISO 17025	0.84	0.38	1.4	0.25	0.67
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	0.81	0.39	1.3	0.25	0.74
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	0.36	0.14	0.46	0.11	0.25

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Analytical Report Number: 24-81005
Project / Site name: Bennett Street

Your Order No: 007238

Lab Sample Number				2943483	2943484	2943485	2943486	2943487
Sample Reference				BB US	BB MS	BB DS	CB US	CB MS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				31/01/2024	31/01/2024	31/01/2024	31/01/2024	31/01/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Benzo(a)pyrene	µg/l	0.01	ISO 17025	0.75	0.33	1.2	0.23	0.62
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	0.34	0.14	0.52	0.1	0.28
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	0.14	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	0.41	0.18	0.63	0.12	0.34
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

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

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Analytical Report Number: 24-81005
Project / Site name: Bennett Street

Your Order No: 007238

Lab Sample Number	2943488
Sample Reference	CB DS
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	31/01/2024
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (L099)	pH Units	N/A	ISO 17025	8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	NONE	3
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	5.84
Total Suspended Solids (L004B)	mg/l	2	ISO 17025	13
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	2.5
Heavy Metals / Metalloids				
Calcium (dissolved)	mg/l	0.012	ISO 17025	150
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Arsenic (dissolved)	µg/l	0.15	ISO 17025	3.14
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.07
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.9
Copper (dissolved)	µg/l	0.5	ISO 17025	3.7
Lead (dissolved)	µg/l	0.2	ISO 17025	0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	5.9
Mercury (dissolved)	µg/l	0.05	ISO 17025	0.06
Nickel (dissolved)	µg/l	0.5	ISO 17025	3.5
Selenium (dissolved)	µg/l	0.6	ISO 17025	1.3
Zinc (dissolved)	µg/l	0.5	ISO 17025	50
Monoaromatics & Oxygenates				
Benzene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0

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Analytical Report Number: 24-81005
Project / Site name: Bennett Street

Your Order No: 007238

Lab Sample Number				2943488
Sample Reference				CB DS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				31/01/2024
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Petroleum Hydrocarbons				
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	69
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	18
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	21
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	30
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	69

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Analytical Report Number: 24-81005
Project / Site name: Bennett Street

Your Order No: 007238

Lab Sample Number	2943488
Sample Reference	CB DS
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	31/01/2024
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
VOCs				
Chloromethane	µg/l	3	ISO 17025	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0
2,2-Dichloropropane	µg/l	3	NONE	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	NONE	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0

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Analytical Report Number: 24-81005
Project / Site name: Bennett Street

Your Order No: 007238

Lab Sample Number				2943488
Sample Reference				CB DS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				31/01/2024
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Butylbenzene	µg/l	3	ISO 17025	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0

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Analytical Report Number: 24-81005
Project / Site name: Bennett Street

Your Order No: 007238

Lab Sample Number	2943488
Sample Reference	CB DS
Sample Number	None Supplied
Depth (m)	None Supplied
Date Sampled	31/01/2024
Time Taken	None Supplied

Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status	
SVOCs				
Aniline	µg/l	0.05	NONE	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	0.18
Anthracene	µg/l	0.01	ISO 17025	0.06
Carbazole	µg/l	0.05	NONE	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05
Anthraquinone	µg/l	0.05	NONE	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	0.37
Pyrene	µg/l	0.01	ISO 17025	0.35
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	0.17
Chrysene	µg/l	0.01	ISO 17025	0.2
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	0.2
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	0.09

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Analytical Report Number: 24-81005
Project / Site name: Bennett Street

Your Order No: 007238

Lab Sample Number				2943488
Sample Reference				CB DS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				31/01/2024
Time Taken				None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Benzo(a)pyrene	µg/l	0.01	ISO 17025	0.16
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	0.08
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	0.1

3&4-Methylphenol	µg/l	0.1	NONE	< 0.10

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 24-81005
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Suspended solids in water	Determined gravimetrically with GFC filtration papers.Accredited Matrices PW, SW, GW, FSE, PrW, LL	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Analytical Report Number : 24-81005
Project / Site name: Bennett Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

HazWasteOnline™

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

P6CEA-MD24Y-JSLJW

Job name

15-974[1]

Description/Comments

This Waste Classification is based on the analytical results provided by E3P on the i2 Analytical Ltd 'Analytical Report' Number 23-69190. Soil Samples only. During the assessment we have considered the 'worst or most reasonable case' metals compounds as laboratory reports only provide total concentrations of a metal e.g. Cu but not which compound(s) (species) of the metal present within the respective soil samples e.g. CuSO4. If the assessment is non-hazardous based on these worst-case species no further 'species' consideration is required. With TPH, WM3 (EA) require assessment of the potential presence of an unknown 'oil' by assessing the TPH range C6 – C40. Where the concentration of TPH is >0.1% (1000mg/kg) the 'soil' will be classed as HP 7 Carcinogenic and HP 11 Mutagenic, unless the concentration of the marker benzo(a)pyrene is <0.01% of the TPH concentration and confirmation is received that the TPH result has not arisen from petrol or diesel sources. Note that samples consider moisture content correction factors. In the case of any samples exceeding the 1000mg/kg TPH value and also the marker benzo(a)pyrene at <0.01% of the TPH concentration, the moisture correction factor could make it 'non-hazardous'. It is the responsibility of the geo-environmental consultant to target the laboratory analysis suite and testing to appropriately reflect the nature of the site, its activities and its impact on surrounding soils. WM3 states that the assessment of asbestos containing waste considers both the presence of asbestos as a) fibres that are free and dispersed, and b) identifiable pieces of asbestos containing material. If the waste contains fibres that are free and dispersed then the waste will be hazardous if the waste as a whole contains 0.1% or more asbestos. Where the waste contains identifiable pieces of asbestos containing material (i.e. any size that can be identified as potentially being asbestos by a competent person by the naked eye) it is deemed hazardous.

Project

Waste Classification

Site

Bennett Street, Manchester

Classified by

Name:
Benjamin Prescott
Date:
24 Nov 2023 12:24 GMT
Telephone:
07856273713

Company:
RJT Consulting Partnerships Ltd
E3P Building
Taylor Road
Trafford Park, Manchester
M41 7JQ

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: **CERTIFIED**

Course	Date
Hazardous Waste Classification	06 Apr 2023

Next 3 year Refresher due by Apr 2026

Purpose of classification

2 - Material Characterisation

Address of the waste

Bennett Street, Manchester **Post Code** M12 5NL

SIC for the process giving rise to the waste

41202 Construction of domestic buildings

Description of industry/producer giving rise to the waste

Residential development on a former freight terminal.

Description of the specific process, sub-process and/or activity that created the waste

Coal Tar that has been uncovered beneath a slab on site. The material has been broken out and is due for removal.

Description of the waste

The laboratory test result describe the waste as brown sand with gravel.

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	CT001		Hazardous	HP 7, HP 10, HP 11, HP 14	4

Related documents

#	Name	Description
1	E3P I2 Characterisation Suite 4	waste stream template used to create this Job

Report

Created by: Benjamin Prescott

Created date: 24 Nov 2023 12:24 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	7
Appendix B: Rationale for selection of metal species	8
Appendix C: Version	9

Classification of sample: CT001

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample name:	LoW Code:
CT001	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	
17% (dry weight correction)	Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.325%)

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.222%)

HP 10: Toxic for reproduction "waste which has adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring"

Hazard Statements hit:

Repr. 1A; H360Df "May damage the unborn child. Suspected of damaging fertility."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.325%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.222%)

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinands:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.325%)
zinc sulphate: (compound conc.: 0.171%)

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
1		pH		PH		8.5	pH		8.5	pH	8.5 pH		
2		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<**LOD**
		006-007-00-5											
3		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
4		naphthalene				45	mg/kg		38.462	mg/kg	0.00385 %	✓	
		601-052-00-2	202-049-5	91-20-3									
5		acenaphthylene				4.6	mg/kg		3.932	mg/kg	0.000393 %	✓	
			205-917-1	208-96-8									
6		acenaphthene				95	mg/kg		81.197	mg/kg	0.00812 %	✓	
			201-469-6	83-32-9									
7		fluorene				73	mg/kg		62.393	mg/kg	0.00624 %	✓	
			201-695-5	86-73-7									
8		phenanthrene				460	mg/kg		393.162	mg/kg	0.0393 %	✓	
			201-581-5	85-01-8									
9		anthracene				120	mg/kg		102.564	mg/kg	0.0103 %	✓	
			204-371-1	120-12-7									
10		fluoranthene				520	mg/kg		444.444	mg/kg	0.0444 %	✓	
			205-912-4	206-44-0									
11		pyrene				480	mg/kg		410.256	mg/kg	0.041 %	✓	
			204-927-3	129-00-0									
12		benzo[a]anthracene				210	mg/kg		179.487	mg/kg	0.0179 %	✓	
		601-033-00-9	200-280-6	56-55-3									
13		chrysene				210	mg/kg		179.487	mg/kg	0.0179 %	✓	
		601-048-00-0	205-923-4	218-01-9									
14		benzo[b]fluoranthene				230	mg/kg		196.581	mg/kg	0.0197 %	✓	
		601-034-00-4	205-911-9	205-99-2									
15		benzo[k]fluoranthene				95	mg/kg		81.197	mg/kg	0.00812 %	✓	
		601-036-00-5	205-916-6	207-08-9									
16		benzo[a]pyrene; benzo[def]chrysene				220	mg/kg		188.034	mg/kg	0.0188 %	✓	
		601-032-00-3	200-028-5	50-32-8									
17		indeno[123-cd]pyrene				110	mg/kg		94.017	mg/kg	0.0094 %	✓	
			205-893-2	193-39-5									
18		dibenz[a,h]anthracene				31	mg/kg		26.496	mg/kg	0.00265 %	✓	
		601-041-00-2	200-181-8	53-70-3									
19		benzo[ghi]perylene				120	mg/kg		102.564	mg/kg	0.0103 %	✓	
			205-883-8	191-24-2									
20		arsenic { arsenic trioxide }				39	mg/kg	1.32	44.011	mg/kg	0.0044 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
21		cadmium { cadmium oxide }				2.3	mg/kg	1.142	2.246	mg/kg	0.000225 %	✓	
		048-002-00-0	215-146-2	1306-19-0									
22		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<**LOD**
		024-001-00-0	215-607-8	1333-82-0									
23		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				28	mg/kg	1.462	34.977	mg/kg	0.0035 %	✓	
			215-160-9	1308-38-9									
24		copper { dicopper oxide; copper (I) oxide }				470	mg/kg	1.126	452.28	mg/kg	0.0452 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
25		lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	3800	mg/kg		3247.863	mg/kg	0.325 %	✓	
		082-001-00-6											
26		mercury { mercury dichloride }				6.9	mg/kg	1.353	7.982	mg/kg	0.000798 %	✓	
		080-010-00-X	231-299-8	7487-94-7									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
27		nickel { nickel chromate }				46	mg/kg	2.976	117.016	mg/kg	0.0117 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
28		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<**LOD**
		034-002-00-8											
29		zinc { zinc sulphate }				810	mg/kg	2.469	1709.513	mg/kg	0.171 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
30		TPH (C6 to C40) petroleum group				2600	mg/kg		2222.222	mg/kg	0.222 %	✓	
				TPH									
										Total:	1.043 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because HP3(i) Flammable relates to liquids. However, this assessment was undertaken on a solid soil sample and therefore this hazardous property does not apply due to the concentration of this sample being below the upper threshold of 10,000mg/kg.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.222%)

Appendix A: Classifier defined and non GB MCL determinands

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

GB MCL index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2; H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **lead compounds with the exception of those specified elsewhere in this Annex (worst case)**

GB MCL index number: 082-001-00-6
Description/Comments: Worst Case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers lead compounds from smelting industries, flue dust and similar to be Carcinogenic category 1A
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html (worst case lead compounds). Review date 29/09/2015

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

Appendix B: Rationale for selection of metal species

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst Case

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected.

lead {lead compounds with the exception of those specified elsewhere in this Annex (worst case)}

No Chromium VI in sample

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil.

zinc {zinc sulphate}

No Chromium VI in sample

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2023.325.5817.10787 (21 Nov 2023)
HazWasteOnline Database: 2023.325.5817.10787 (21 Nov 2023)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

4TUB8-AIKI8-GWQIQ

Job name

15-974[2]

Description/Comments

This Waste Classification is based on the analytical results provided by E3P on the i2 Analytical Ltd 'Analytical Report' Number 23-74553. Soil Samples only. During the assessment we have considered the 'worst or most reasonable case' metals compounds as laboratory reports only provide total concentrations of a metal e.g. Cu but not which compound(s) (species) of the metal present within the respective soil samples e.g. CuSO4. If the assessment is non-hazardous based on these worst-case species no further 'species' consideration is required. With TPH, WM3 (EA) require assessment of the potential presence of an unknown 'oil' by assessing the TPH range C6 – C40. Where the concentration of TPH is >0.1% (1000mg/kg) the 'soil' will be classed as HP 7 Carcinogenic and HP 11 Mutagenic, unless the concentration of the marker benzo(a)pyrene is <0.01% of the TPH concentration and confirmation is received that the TPH result has not arisen from petrol or diesel sources. Note that samples consider moisture content correction factors. In the case of any samples exceeding the 1000mg/kg TPH value and also the marker benzo(a)pyrene at <0.01% of the TPH concentration, the moisture correction factor could make it 'non-hazardous'. It is the responsibility of the geo-environmental consultant to target the laboratory analysis suite and testing to appropriately reflect the nature of the site, its activities and its impact on surrounding soils. WM3 states that the assessment of asbestos containing waste considers both the presence of asbestos as a) fibres that are free and dispersed, and b) identifiable pieces of asbestos containing material. If the waste contains fibres that are free and dispersed then the waste will be hazardous if the waste as a whole contains 0.1% or more asbestos. Where the waste contains identifiable pieces of asbestos containing material (i.e. any size that can be identified as potentially being asbestos by a competent person by the naked eye) it is deemed hazardous.

Project

Waste Classification

Site

Bennett Street, Manchester

Classified by

Name:
Benjamin Prescott
Date:
20 Dec 2023 13:57 GMT
Telephone:
07856273713

Company:
RJT Consulting Partnerships Ltd
E3P Building
Taylor Road
Trafford Park, Manchester
M41 7JQ

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: **CERTIFIED**

Course	Date
Hazardous Waste Classification	06 Apr 2023

Next 3 year Refresher due by Apr 2026

Purpose of classification

2 - Material Characterisation

Address of the waste

Bennett Street, Manchester **Post Code** M12 5NL

SIC for the process giving rise to the waste

41202 Construction of domestic buildings

Description of industry/producer giving rise to the waste

Residential development on a former freight terminal.

Description of the specific process, sub-process and/or activity that created the waste

The sample is taken from an earth bund where some visible asbestos was noted.

Description of the waste

The laboratory test result describe the waste as brown sand with gravel.

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	ASB-001		Hazardous	HP 7, HP 11	4

Related documents

#	Name	Description
1	E3P I2 Characterisation Suite 4	waste stream template used to create this Job

Report

Created by: Benjamin Prescott

Created date: 20 Dec 2023 13:57 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	7
Appendix B: Rationale for selection of metal species	8
Appendix C: Version	9

Classification of sample: ASB-001

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample name:
ASB-001
Moisture content:
19%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.134%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.134%)

Determinands

Moisture content: 19% Dry Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
1		asbestos				360 mg/kg		302.521 mg/kg	0.0303 %	✓	
		650-013-00-6	- - - - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5							
2		pH				8 pH		8 pH	8pH		
				PH							
3		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**
		006-007-00-5									
4		phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
5		naphthalene				8.5 mg/kg		7.143 mg/kg	0.000714 %	✓	
		601-052-00-2	202-049-5	91-20-3							
6		acenaphthylene				0.65 mg/kg		0.546 mg/kg	0.0000546 %	✓	
			205-917-1	208-96-8							

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
7		acenaphthene		201-469-6	83-32-9		26	mg/kg		21.849	mg/kg	0.00218 %	✓	
8		fluorene		201-695-5	86-73-7		18	mg/kg		15.126	mg/kg	0.00151 %	✓	
9		phenanthrene		201-581-5	85-01-8		33	mg/kg		27.731	mg/kg	0.00277 %	✓	
10		anthracene		204-371-1	120-12-7		34	mg/kg		28.571	mg/kg	0.00286 %	✓	
11		fluoranthene		205-912-4	206-44-0		100	mg/kg		84.034	mg/kg	0.0084 %	✓	
12		pyrene		204-927-3	129-00-0		99	mg/kg		83.193	mg/kg	0.00832 %	✓	
13		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		65	mg/kg		54.622	mg/kg	0.00546 %	✓	
14		chrysene	601-048-00-0	205-923-4	218-01-9		62	mg/kg		52.101	mg/kg	0.00521 %	✓	
15		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		78	mg/kg		65.546	mg/kg	0.00655 %	✓	
16		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		23	mg/kg		19.328	mg/kg	0.00193 %	✓	
17		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		62	mg/kg		52.101	mg/kg	0.00521 %	✓	
18		indeno[123-cd]pyrene		205-893-2	193-39-5		35	mg/kg		29.412	mg/kg	0.00294 %	✓	
19		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		10	mg/kg		8.403	mg/kg	0.00084 %	✓	
20		benzo[ghi]perylene		205-883-8	191-24-2		38	mg/kg		31.933	mg/kg	0.00319 %	✓	
21		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12	mg/kg	1.32	13.314	mg/kg	0.00133 %	✓	
22		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.4	mg/kg	1.142	0.384	mg/kg	0.0000384 %	✓	
23		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<**LOD**
24		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		23	mg/kg	1.462	28.249	mg/kg	0.00282 %	✓	
25		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		120	mg/kg	1.126	113.535	mg/kg	0.0114 %	✓	
26		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	240	mg/kg	1.56	314.585	mg/kg	0.0202 %	✓	
27		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.3	mg/kg	1.353	0.341	mg/kg	0.0000341 %	✓	
28		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		17	mg/kg	2.976	42.518	mg/kg	0.00425 %	✓	
29		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<**LOD**
30		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		330	mg/kg	2.774	769.301	mg/kg	0.0769 %	✓	
31		TPH (C6 to C40) petroleum group			TPH		1600	mg/kg		1344.538	mg/kg	0.134 %	✓	
											Total:	0.341 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because HP3(i) Flammable relates to liquids. However, this assessment was undertaken on a solid soil sample and therefore this hazardous property does not apply due to the concentration of this sample being below the upper threshold of 12,000mg/kg.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.134%)

Appendix A: Classifier defined and non GB MCL determinands

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

GB MCL index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2; H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

Appendix B: Rationale for selection of metal species

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst Case

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected.

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil.

zinc {zinc chromate}

Worst case CLP species based on hazard statements/molecular weight

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2023.352.5868.10865 (18 Dec 2023)
HazWasteOnline Database: 2023.348.5858.10852 (16 Dec 2023)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
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The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023

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

Final Report

Report No.:	23-35498-1
Initial Date of Issue:	27-Oct-2023
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	Jonny Beer Matthew Dee
Project	15-974 Bennett Street

Quotation No.:		**Date Received:**	23-Oct-2023
Order No.:	6483	**Date Instructed:**	23-Oct-2023
No. of Samples:	3		
Turnaround (Wkdays):	5	**Results Due:**	27-Oct-2023
Date Approved:	27-Oct-2023		

Approved By:



Details: Stuart Henderson, Technical Manager

Results - Soil

Project: 15-974 Bennett Street

Client: E3P		**Chemtest Job No.:**			23-35498	23-35498	23-35498
Quotation No.:		**Chemtest Sample ID.:**			1721199	1721200	1721201
Order No.: 6483		Client Sample Ref.:			Bund 12	Bund 13	Bund 14
		Sample Type:			SOIL	SOIL	SOIL
		Date Sampled:			17-Oct-2023	17-Oct-2023	17-Oct-2023
		Asbestos Lab:			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
Moisture	N	2030	%	0.020	19	19	19
Soil Colour	N	2040		N/A	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture	N	2040		N/A	Loam	Loam	Loam
pH at 20C	M	2010		4.0	7.7	7.6	7.9
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	1.4	1.4	1.5
Total Sulphur	U	2175	%	0.010	1.6	2.0	2.6
Cyanide (Total)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	7.7	13	8.5
Sulphate (Total)	U	2430	%	0.010	3.9	2.7	2.5
Arsenic	M	2455	mg/kg	0.5	8.0	6.3	9.4
Cadmium	M	2455	mg/kg	0.10	0.57	0.44	0.44
Chromium	M	2455	mg/kg	0.5	23	62	20
Copper	M	2455	mg/kg	0.50	190	130	150
Mercury	M	2455	mg/kg	0.05	0.26	0.20	0.97
Nickel	M	2455	mg/kg	0.50	18	17	22
Lead	M	2455	mg/kg	0.50	260	200	770
Selenium	M	2455	mg/kg	0.25	0.48	0.40	0.58
Zinc	M	2455	mg/kg	0.50	450	430	530
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon	M	2625	%	0.20	4.5	4.1	4.7
TPH >C6-C8	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	N	2670	mg/kg	1.0	< 1.0	15	11
TPH >C16-C21	N	2670	mg/kg	1.0	30	50	46
TPH >C21-C25	N	2670	mg/kg	1.0	68	93	170
TPH >C25-C35	N	2670	mg/kg	1.0	68	810	1500
TPH >C35-C40	N	2670	mg/kg	1.0	5.5	250	980
Total TPH >C6-C40	M	2670	mg/kg	10	170	1200	2700
Naphthalene	M	2800	mg/kg	0.10	1.4	< 0.10	0.35
Acenaphthylene	N	2800	mg/kg	0.10	0.14	0.12	0.16
Acenaphthene	M	2800	mg/kg	0.10	2.8	0.39	0.54
Fluorene	M	2800	mg/kg	0.10	2.1	0.38	0.42
Phenanthrene	M	2800	mg/kg	0.10	15	4.4	4.1
Anthracene	M	2800	mg/kg	0.10	4.2	1.3	1.1
Fluoranthene	M	2800	mg/kg	0.10	20	8.3	6.7
Pyrene	M	2800	mg/kg	0.10	17	7.4	5.8
Benzo[a]anthracene	M	2800	mg/kg	0.10	8.5	4.0	0.21

Results - Soil

Project: 15-974 Bennett Street

Client: E3P		**Chemtest Job No.:**			23-35498	23-35498	23-35498
Quotation No.:		**Chemtest Sample ID.:**			1721199	1721200	1721201
Order No.: 6483		Client Sample Ref.:			Bund 12	Bund 13	Bund 14
		Sample Type:			SOIL	SOIL	SOIL
		Date Sampled:			17-Oct-2023	17-Oct-2023	17-Oct-2023
		Asbestos Lab:			NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**Accred.**	**SOP**	**Units**	**LOD**			
Chrysene	M	2800	mg/kg	0.10	8.3	4.2	2.6
Benzo[b]fluoranthene	M	2800	mg/kg	0.10	11	6.0	4.5
Benzo[k]fluoranthene	M	2800	mg/kg	0.10	3.4	2.1	1.7
Benzo[a]pyrene	M	2800	mg/kg	0.10	9.3	5.4	4.1
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10	5.2	3.4	2.3
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10	0.86	0.59	0.52
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10	4.9	3.5	2.6
Total Of 16 PAH's	N	2800	mg/kg	2.0	110	52	38
Total Phenols	M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH at 20°C	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key

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

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

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

Final Report

Report No.:	24-09948-1
Initial Date of Issue:	05-Apr-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; jbeer@e3p.co.uk
Project	Bennett Street (15-974)

Quotation No.:	Q23-31421	**Date Received:**	02-Apr-2024
Order No.:	007817	**Date Instructed:**	02-Apr-2024
No. of Samples:	6		
Turnaround (Wkdays):	4	**Results Due:**	05-Apr-2024
Date Approved:	05-Apr-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Water

Project: Bennett Street (15-974)

Client: E3P				**Chemtest Job No.:**		24-09948	24-09948	24-09948	24-09948	24-09948	24-09948
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1787242	1787243	1787244	1787245	1787246	1787247
				Client Sample ID.:		CB US	CB MS	CB DS	BB US	BB MS	BB DS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		28-Mar-2024	28-Mar-2024	28-Mar-2024	28-Mar-2024	28-Mar-2024	28-Mar-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
pH at 20C		U	1010		4.0	8.3	8.4	8.4	8.1	8.0	7.8
Suspended Solids At 105C		U	1030	mg/l	5.0	63	21	19	54	43	15
Cyanide (Total)		U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Arsenic (Dissolved)		U	1455	µg/l	0.20	3.5	0.26	3.5	3.5	1.6	1.3
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Copper (Dissolved)		U	1455	µg/l	0.50	2.6	< 0.50	2.3	2.0	12	12
Mercury (Dissolved)		U	1455	µg/l	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (Dissolved)		U	1455	µg/l	0.50	4.4	< 0.50	3.3	3.2	2.5	2.2
Lead (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.3	2.3
Selenium (Dissolved)		U	1455	µg/l	0.50	2.1	0.72	1.9	1.7	1.2	1.1
Zinc (Dissolved)		U	1455	µg/l	2.5	31	< 2.5	32	33	27	28
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Water

Project: Bennett Street (15-974)

Client: E3P				**Chemtest Job No.:**		24-09948	24-09948	24-09948	24-09948	24-09948	24-09948
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1787242	1787243	1787244	1787245	1787246	1787247
				Client Sample ID.:		CB US	CB MS	CB DS	BB US	BB MS	BB DS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		28-Mar-2024	28-Mar-2024	28-Mar-2024	28-Mar-2024	28-Mar-2024	28-Mar-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Water

Project: Bennett Street (15-974)

Client: E3P				**Chemtest Job No.:**		24-09948	24-09948	24-09948	24-09948	24-09948	24-09948
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1787242	1787243	1787244	1787245	1787246	1787247
				Client Sample ID.:		CB US	CB MS	CB DS	BB US	BB MS	BB DS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		28-Mar-2024	28-Mar-2024	28-Mar-2024	28-Mar-2024	28-Mar-2024	28-Mar-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results - Water

Project: Bennett Street (15-974)

Client: E3P			**Chemtest Job No.:**			24-09948	24-09948	24-09948	24-09948	24-09948	24-09948
Quotation No.: Q23-31421			**Chemtest Sample ID.:**			1787242	1787243	1787244	1787245	1787246	1787247
			Client Sample ID.:			CB US	CB MS	CB DS	BB US	BB MS	BB DS
			Sample Type:			WATER	WATER	WATER	WATER	WATER	WATER
			Sample Sub Type:								
			Date Sampled:			28-Mar-2024	28-Mar-2024	28-Mar-2024	28-Mar-2024	28-Mar-2024	28-Mar-2024
			Time Sampled:			12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Phenols		U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1030	Total Suspended Solids	Total suspended solids	Filtration of a mixed sample through a standard glass fibre filter and determination of the mass of residue retained dried at 105°C.	SW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	GW
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

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

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable
PL - Prepared Leachate
PW - Processed Water

Report Information

RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

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

HWOL Acronym System

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

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

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

Final Report

Report No.:	24-12322-1
Initial Date of Issue:	26-Apr-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	jbeer@e3p.co.uk; mdee@e3p.co.uk
Project	Bennett Street

Quotation No.:		**Date Received:**	19-Apr-2024
Order No.:	007989	**Date Instructed:**	19-Apr-2024
No. of Samples:	3		
Turnaround (Wkdays):	5	**Results Due:**	25-Apr-2024
Date Approved:	26-Apr-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-12322	24-12322	24-12322
Quotation No.:				**Chemtest Sample ID.:**		1796772	1796773	1796774
Order No.: 007989				Client Sample Ref.:		TS101	TS102	TS103
				Client Sample ID.:		TS101	TS102	TS103
				Sample Location:		Topsoil 1	Topsoil 2	Topsoil 3
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		17-Apr-2024	17-Apr-2024	18-Apr-2024
				Time Sampled:		12:00	12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type		U	2192		N/A	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	11	11	12
Soil Colour		N	2040		N/A	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture		N	2040		N/A	Clay	Clay	Clay
pH at 20C		M	2010		4.0	8.2	8.0	8.0
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.013	0.055	< 0.010
Total Sulphur		U	2175	%	0.010	0.17	0.14	0.026
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	6.1	2.9	2.6
Sulphate (Total)		U	2430	%	0.010	0.14	0.21	0.11
Arsenic		M	2455	mg/kg	0.5	5.0	4.8	3.3
Cadmium		M	2455	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	21	19	16
Copper		M	2455	mg/kg	0.50	16	14	9.6
Mercury		M	2455	mg/kg	0.05	0.07	0.06	< 0.05
Nickel		M	2455	mg/kg	0.50	16	15	12
Lead		M	2455	mg/kg	0.50	24	23	16
Selenium		M	2455	mg/kg	0.25	0.29	0.29	< 0.25
Zinc		M	2455	mg/kg	0.50	44	38	27
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Total Organic Carbon		M	2625	%	0.20	2.3	2.5	1.6
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	5.4	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	18	< 1.0
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	12	< 1.0
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	38	< 1.0
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	3.6	< 1.0
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	< 10	78	< 10
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-12322	24-12322	24-12322
Quotation No.:				**Chemtest Sample ID.:**		1796772	1796773	1796774
Order No.: 007989				Client Sample Ref.:		TS101	TS102	TS103
				Client Sample ID.:		TS101	TS102	TS103
				Sample Location:		Topsoil 1	Topsoil 2	Topsoil 3
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		17-Apr-2024	17-Apr-2024	18-Apr-2024
				Time Sampled:		12:00	12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	0.27	0.16	< 0.10
Anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	0.41	0.25	< 0.10
Pyrene		M	2800	mg/kg	0.10	0.32	0.23	< 0.10
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Chrysene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
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I/S	Insufficient Sample
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All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
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A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
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D - Broken Container
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Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
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Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

PL - Prepared Leachate
PW - Processed Water
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SW - Surface Water
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TS - Treated Sewage
UL - Unspecified Liquid

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

HWOL Acronym System

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

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

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

Final Report

Report No.:	24-12813-1
Initial Date of Issue:	30-Apr-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; jbeer@e3p.co.uk
Project	Bennett Street

Quotation No.:	Q23-31421	**Date Received:**	24-Apr-2024
Order No.:	008032	**Date Instructed:**	24-Apr-2024
No. of Samples:	2		
Turnaround (Wkdays):	5	**Results Due:**	30-Apr-2024
Date Approved:	30-Apr-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Leachate

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-12813
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1798324
Order No.: 008032				Client Sample Ref.:		SP07
				Client Sample ID.:		SP07
				Sample Type:		SOIL
				Date Sampled:		23-Apr-2024
				Time Sampled:		12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**	
pH at 20C	U	1010	2:1		4.0	10.9
Cyanide (Total) Low-Level	N	1300	2:1	mg/l	0.0050	< 0.0050
Arsenic (Dissolved)	U	1455	2:1	µg/l	0.20	8.2
Cadmium (Dissolved)	U	1455	2:1	µg/l	0.11	< 0.11
Chromium (Dissolved)	U	1455	2:1	µg/l	0.50	9.5
Copper (Dissolved)	U	1455	2:1	µg/l	0.50	120
Mercury (Dissolved)	U	1455	2:1	µg/l	0.05	0.05
Nickel (Dissolved)	U	1455	2:1	µg/l	0.50	20
Lead (Dissolved)	U	1455	2:1	µg/l	0.50	1.3
Selenium (Dissolved)	U	1455	2:1	µg/l	0.50	2.8
Zinc (Dissolved)	U	1455	2:1	µg/l	2.5	2.8
Chromium (Hexavalent)	U	1490	2:1	µg/l	20	< 20
C2 Aliphatic TPH >C5-C6	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C6-C8	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	2:1	µg/l	5.0	< 5.0
C2 Aromatic TPH >C5-C7	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C7-C8	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	280
C2 Aromatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10
C2 Total Aromatic Hydrocarbons	N	1675	2:1	µg/l	5.0	280
Total Petroleum Hydrocarbons	N	1675	2:1	µg/l	10	280
Benzene	U	1760	2:1	µg/l	1.0	< 1.0
Toluene	U	1760	2:1	µg/l	1.0	< 1.0
Ethylbenzene	U	1760	2:1	µg/l	1.0	< 1.0
m & p-Xylene	U	1760	2:1	µg/l	1.0	< 1.0
o-Xylene	U	1760	2:1	µg/l	1.0	< 1.0
Methyl Tert-Butyl Ether	N	1760	2:1	µg/l	1.0	< 1.0
Naphthalene	N	1800	2:1	µg/l	0.010	200
Acenaphthylene	N	1800	2:1	µg/l	0.010	< 0.010

Results - Leachate

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-12813
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1798324
Order No.: 008032				Client Sample Ref.:		SP07
				Client Sample ID.:		SP07
				Sample Type:		SOIL
				Date Sampled:		23-Apr-2024
				Time Sampled:		12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**	
Acenaphthene	N	1800	2:1	µg/l	0.010	59
Fluorene	N	1800	2:1	µg/l	0.010	23
Phenanthrene	N	1800	2:1	µg/l	0.010	36
Anthracene	N	1800	2:1	µg/l	0.010	< 0.010
Fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010
Pyrene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[a]anthracene	N	1800	2:1	µg/l	0.010	< 0.010
Chrysene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[b]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[k]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[a]pyrene	N	1800	2:1	µg/l	0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	2:1	µg/l	0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	2:1	µg/l	0.010	< 0.010
Total Of 16 PAH's	N	1800	2:1	µg/l	0.20	320
Total Phenols	U	1920	2:1	mg/l	0.030	0.093

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-12813	24-12813
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1798324	1798325
Order No.: 008032				Client Sample Ref.:		SP07	SP12A
				Client Sample ID.:		SP07	SP12A
				Sample Type:		SOIL	SOIL
				Date Sampled:		23-Apr-2024	23-Apr-2024
				Time Sampled:		12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**		
ACM Type		U	2192		N/A	Fibres/Clumps	-
Asbestos Identification		U	2192		N/A	Chrysotile	No Asbestos Detected
Asbestos by Gravimetry		U	2192	%	0.001	<0.001	
Total Asbestos		U	2192	%	0.001	<0.001	
Moisture		N	2030	%	0.020	16	
Soil Colour		N	2040		N/A	Brown	
Other Material		N	2040		N/A	Stones	
Soil Texture		N	2040		N/A	Loam	
pH at 20C		M	2010		4.0	10.5	
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	1.1	
Total Sulphur		U	2175	%	0.010	0.18	
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	4.9	
Sulphate (Total)		U	2430	%	0.010	0.88	
Arsenic		M	2455	mg/kg	0.5	21	
Cadmium		M	2455	mg/kg	0.10	0.54	
Chromium		M	2455	mg/kg	0.5	23	
Copper		M	2455	mg/kg	0.50	110	
Mercury		M	2455	mg/kg	0.05	1.4	
Nickel		M	2455	mg/kg	0.50	30	
Lead		M	2455	mg/kg	0.50	430	
Selenium		M	2455	mg/kg	0.25	0.37	
Zinc		M	2455	mg/kg	0.50	170	
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	
Total Organic Carbon		M	2625	%	0.20	4.3	
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	1.9	
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	64	
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	510	
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	1600	
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	900	
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	1400	
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	290	
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	4800	
Naphthalene		M	2800	mg/kg	0.10	28	
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	
Acenaphthene		M	2800	mg/kg	0.10	41	

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-12813	24-12813
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1798324	1798325
Order No.: 008032				Client Sample Ref.:		SP07	SP12A
				Client Sample ID.:		SP07	SP12A
				Sample Type:		SOIL	SOIL
				Date Sampled:		23-Apr-2024	23-Apr-2024
				Time Sampled:		12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**		
Fluorene		M	2800	mg/kg	0.10	31	
Phenanthrene		M	2800	mg/kg	0.10	150	
Anthracene		M	2800	mg/kg	0.10	47	
Fluoranthene		M	2800	mg/kg	0.10	140	
Pyrene		M	2800	mg/kg	0.10	110	
Benzo[a]anthracene		M	2800	mg/kg	0.10	52	
Chrysene		M	2800	mg/kg	0.10	52	
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	56	
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	21	
Benzo[a]pyrene		M	2800	mg/kg	0.10	51	
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	27	
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	6.2	
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	25	
Total Of 16 PAH's		N	2800	mg/kg	2.0	840	
Total Phenols		M	2920	mg/kg	0.10	0.17	

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

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All results are expressed on a dry weight basis.

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

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A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
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All water samples will be retained for 14 days from the date of receipt.
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TS - Treated Sewage
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Clean Up Codes

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MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

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

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

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

Final Report

Report No.:	24-13816-1
Initial Date of Issue:	09-May-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	jbeer@e3p.co.uk; mdee@e3p.co.uk
Project	Bennett Street
Quotation No.:	Q23-31421
Order No.:	008118
No. of Samples:	10
Turnaround (Wkdays):	5
Date Approved:	09-May-2024
Approved By:	
Details:	David Smith, Technical Director

Date Received:	02-May-2024
Date Instructed:	02-May-2024
Results Due:	09-May-2024

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

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-13816	24-13816	24-13816	24-13816	24-13816	24-13816	24-13816	24-13816
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1801952	1801953	1801954	1801955	1801956	1801957	1801958	1801959
Order No.: 008118				Client Sample Ref.:		TS-104	TS-105	TS-106	TS-107	TS-108	TS-109	TS-110	TS-111
				Client Sample ID.:		TS-104	TS-105	TS-106	TS-107	TS-108	TS-109	TS-110	TS-111
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
				Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	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	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	20	19	18	23	21	18	22	19
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture		N	2040		N/A	Clay	Sand	Clay	Clay	Clay	Clay	Clay	Clay
pH at 20C		M	2010		4.0	7.8	8.2	7.7	7.7	7.7	7.8	8.5	8.1
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.081	0.056	0.059	0.088	0.090	0.11	0.35	0.15
Total Sulphur		U	2175	%	0.010	0.070	0.057	0.069	0.050	0.045	0.072	0.10	0.064
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	6.9	4.4	3.6	3.2	5.2	3.8	4.8	5.3
Sulphate (Total)		U	2430	%	0.010	0.10	0.12	0.12	0.071	0.12	0.17	0.17	0.14
Arsenic		M	2455	mg/kg	0.5	4.8	17	4.1	3.8	6.1	5.4	5.3	4.9
Cadmium		M	2455	mg/kg	0.10	< 0.10	0.21	< 0.10	< 0.10	< 0.10	< 0.10	0.85	< 0.10
Chromium		M	2455	mg/kg	0.5	17	35	15	16	24	19	17	17
Copper		M	2455	mg/kg	0.50	12	50	12	11	16	16	17	15
Mercury		M	2455	mg/kg	0.05	0.08	0.39	0.07	0.05	0.10	0.09	0.11	0.07
Nickel		M	2455	mg/kg	0.50	13	30	12	13	19	15	15	15
Lead		M	2455	mg/kg	0.50	24	150	21	17	27	27	30	27
Selenium		M	2455	mg/kg	0.25	< 0.25	0.83	< 0.25	< 0.25	< 0.25	< 0.25	0.61	< 0.25
Zinc		M	2455	mg/kg	0.50	36	160	32	29	45	44	46	36
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	3.8	3.5	5.5	3.2	2.5	3.8	1.9	4.0
Total Organic Carbon		M	2625	%	0.20	2.2	2.0	3.2	1.9	1.5	2.2	1.1	2.3
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	6.4	1.5	1.0	1.2	6.7	10	7.3
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	4.0	13	10	12	15	11	17	14
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	11	11	9.9	7.8	10	10	11	11
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	19	12	11	10	14	9.3	21	14
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	12	14	28	5.8	30	24	12	9.1
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	64	44	49	16	43	33	26	25
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	6.9	5.6	13	2.5	76	3.5	6.3	4.0
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	120	110	120	55	190	98	100	85
Naphthalene		M	2800	mg/kg	0.10	0.54	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.47	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-13816	24-13816	24-13816	24-13816	24-13816	24-13816	24-13816	24-13816
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1801952	1801953	1801954	1801955	1801956	1801957	1801958	1801959
Order No.: 008118				Client Sample Ref.:		TS-104	TS-105	TS-106	TS-107	TS-108	TS-109	TS-110	TS-111
				Client Sample ID.:		TS-104	TS-105	TS-106	TS-107	TS-108	TS-109	TS-110	TS-111
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
				Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	2.3	0.41	< 0.10	0.46	< 0.10	0.64	4.1	1.9
Anthracene		M	2800	mg/kg	0.10	0.55	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.2	0.53
Fluoranthene		M	2800	mg/kg	0.10	2.1	0.58	< 0.10	0.73	0.60	0.84	5.1	2.1
Pyrene		M	2800	mg/kg	0.10	1.8	0.51	< 0.10	0.63	0.60	0.76	4.5	1.6
Benzo[a]anthracene		M	2800	mg/kg	0.10	0.76	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.8	0.71
Chrysene		M	2800	mg/kg	0.10	0.62	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.7	0.78
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	0.84	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	2.4	0.97
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	0.30	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.87	0.33
Benzo[a]pyrene		M	2800	mg/kg	0.10	0.76	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	2.6	0.93
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	0.47	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.3	0.52
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.32	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	0.46	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	1.4	0.63
Total Of 16 PAH's		N	2800	mg/kg	2.0	12	< 2.0	< 2.0	< 2.0	< 2.0	2.2	28	11
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-13816	24-13816
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1801960	1801961
Order No.: 008118				Client Sample Ref.:		TS-112	TS-113
				Client Sample ID.:		TS-112	TS-113
				Sample Type:		SOIL	SOIL
				Date Sampled:		30-Apr-2024	30-Apr-2024
				Time Sampled:		12:00	12:00
				Asbestos Lab:		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
Moisture		N	2030	%	0.020	20	21
Soil Colour		N	2040		N/A	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones and Roots
Soil Texture		N	2040		N/A	Clay	Clay
pH at 20C		M	2010		4.0	8.2	8.0
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.20	0.14
Total Sulphur		U	2175	%	0.010	0.070	0.032
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	4.3	4.1
Sulphate (Total)		U	2430	%	0.010	0.16	0.22
Arsenic		M	2455	mg/kg	0.5	4.5	5.4
Cadmium		M	2455	mg/kg	0.10	< 0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	16	21
Copper		M	2455	mg/kg	0.50	15	16
Mercury		M	2455	mg/kg	0.05	0.09	0.07
Nickel		M	2455	mg/kg	0.50	14	17
Lead		M	2455	mg/kg	0.50	28	27
Selenium		M	2455	mg/kg	0.25	< 0.25	< 0.25
Zinc		M	2455	mg/kg	0.50	36	41
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	3.8	2.8
Total Organic Carbon		M	2625	%	0.20	2.2	1.6
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	6.4	2.7
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	12	12
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	17	9.3
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	31	14
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	34	10
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	39	23
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	4.5	4.1
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	140	75
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-13816	24-13816
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1801960	1801961
Order No.: 008118				Client Sample Ref.:		TS-112	TS-113
				Client Sample ID.:		TS-112	TS-113
				Sample Type:		SOIL	SOIL
				Date Sampled:		30-Apr-2024	30-Apr-2024
				Time Sampled:		12:00	12:00
				Asbestos Lab:		NEW-ASB	NEW-ASB
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**		
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	2.6	2.1
Anthracene		M	2800	mg/kg	0.10	0.73	0.48
Fluoranthene		M	2800	mg/kg	0.10	3.5	2.2
Pyrene		M	2800	mg/kg	0.10	3.1	1.9
Benzo[a]anthracene		M	2800	mg/kg	0.10	1.4	0.92
Chrysene		M	2800	mg/kg	0.10	1.5	0.74
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	1.8	1.1
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	0.70	0.29
Benzo[a]pyrene		M	2800	mg/kg	0.10	1.7	1.1
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	0.87	0.59
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	0.98	0.63
Total Of 16 PAH's		N	2800	mg/kg	2.0	19	12
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

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

Final Report

Report No.:	24-13863-1
Initial Date of Issue:	09-May-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	jbeer@e3p.co.uk; mdee@e3p.co.uk
Project	Bennett Street

Quotation No.:	Q23-31421	**Date Received:**	02-May-2024
Order No.:	008116	**Date Instructed:**	02-May-2024
No. of Samples:	6		
Turnaround (Wkdays):	5	**Results Due:**	09-May-2024
Date Approved:	09-May-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-13863	24-13863	24-13863	24-13863	24-13863	24-13863
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1802097	1802098	1802099	1802100	1802101	1802102
Order No.: 008116				Client Sample Ref.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Client Sample ID.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
pH at 20C		U	1010		4.0	8.2	8.2	8.3	7.7	7.8	8.0
Cyanide (Total) Low-Level		N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Arsenic (Dissolved)		U	1455	µg/l	0.20	4.3	4.6	4.3	1.1	1.1	1.1
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	0.85	0.63	0.83	< 0.50	0.62	0.86
Copper (Dissolved)		U	1455	µg/l	0.50	0.70	0.67	0.77	9.1	8.8	8.9
Manganese (Dissolved)		U	1455	µg/l	0.50	130	140	170	410	430	510
Nickel (Dissolved)		U	1455	µg/l	0.50	2.9	3.3	3.2	2.9	3.2	3.5
Lead (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	1.7	1.7	1.8
Selenium (Dissolved)		U	1455	µg/l	0.50	0.96	0.99	0.87	0.51	0.55	< 0.50
Zinc (Dissolved)		U	1455	µg/l	2.5	36	38	41	18	18	21
Mercury Low Level		U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chromium (Hexavalent)		U	1490	µg/l	20	< 20	< 20	< 20	< 20	< 20	< 20
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-13863	24-13863	24-13863	24-13863	24-13863	24-13863
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1802097	1802098	1802099	1802100	1802101	1802102
Order No.: 008116				Client Sample Ref.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Client Sample ID.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-13863	24-13863	24-13863	24-13863	24-13863	24-13863
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1802097	1802098	1802099	1802100	1802101	1802102
Order No.: 008116				Client Sample Ref.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Client Sample ID.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-13863	24-13863	24-13863	24-13863	24-13863	24-13863
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1802097	1802098	1802099	1802100	1802101	1802102
Order No.: 008116				Client Sample Ref.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Client Sample ID.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024	30-Apr-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Phenols		U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.	PL GW
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	PL GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

Report Information

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U/S	Unsuitable Sample
N/E	not evaluated
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>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

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Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
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Charges may apply to extended sample storage.

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

Report Information

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SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

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

HWOL Acronym System

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

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

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

Final Report

Report No.:	24-16336-1
Initial Date of Issue:	04-Jun-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; jbeer@e3p.co.uk
Project	Bennett Street
Quotation No.:	Q23-31421
Order No.:	008299
No. of Samples:	5
Turnaround (Wkdays):	5
Date Approved:	04-Jun-2024
Approved By:	
Details:	David Smith, Technical Director

Date Received:	23-May-2024
Date Instructed:	23-May-2024
Results Due:	30-May-2024

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

Results - Leachate

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-16336	24-16336	24-16336	24-16336
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1811854	1811855	1811857	1811858
Order No.: 008299				Client Sample Ref.:		NWHS A	NWHS B	NWHS D	NWHS E
				Client Sample ID.:		NWHS A	NWHS B	NWHS D	NWHS E
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		1.8	1.8	1.8	2.0
				Date Sampled:		21-May-2024	21-May-2024	21-May-2024	21-May-2024
				Time Sampled:		12:00	12:00	12:00	12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**				
pH at 20C	U	1010	2:1		4.0	8.0	8.0	8.2	8.2
Cyanide (Total) Low-Level	N	1300	2:1	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Arsenic (Dissolved)	U	1455	2:1	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20
Cadmium (Dissolved)	U	1455	2:1	µg/l	0.11	< 0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)	U	1455	2:1	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Copper (Dissolved)	U	1455	2:1	µg/l	0.50	1.6	1.1	1.3	1.2
Mercury (Dissolved)	U	1455	2:1	µg/l	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (Dissolved)	U	1455	2:1	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Lead (Dissolved)	U	1455	2:1	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Selenium (Dissolved)	U	1455	2:1	µg/l	0.50	0.65	< 0.50	< 0.50	< 0.50
Zinc (Dissolved)	U	1455	2:1	µg/l	2.5	< 2.5	< 2.5	< 2.5	< 2.5
Chromium (Hexavalent)	U	1490	2:1	µg/l	20	< 20	< 20	< 20	< 20
C2 Aliphatic TPH >C5-C6	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C6-C8	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	2:1	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0
C2 Aromatic TPH >C5-C7	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C7-C8	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10
C2 Total Aromatic Hydrocarbons	N	1675	2:1	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	2:1	µg/l	10	< 10	< 10	< 10	< 10
Benzene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	N	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Leachate

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-16336	24-16336	24-16336	24-16336
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1811854	1811855	1811857	1811858
Order No.: 008299				Client Sample Ref.:		NWHS A	NWHS B	NWHS D	NWHS E
				Client Sample ID.:		NWHS A	NWHS B	NWHS D	NWHS E
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		1.8	1.8	1.8	2.0
				Date Sampled:		21-May-2024	21-May-2024	21-May-2024	21-May-2024
				Time Sampled:		12:00	12:00	12:00	12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**				
Acenaphthylene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acenaphthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluorene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Phenanthrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Pyrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chrysene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[b]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[k]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]pyrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Of 16 PAH's	N	1800	2:1	µg/l	0.20	< 0.20	< 0.20	< 0.20	< 0.20
Total Phenols	U	1920	2:1	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030

Results - Soil

Project: Bennett Street

Client: E3P			**Chemtest Job No.:**			24-16336	24-16336	24-16336	24-16336	24-16336
Quotation No.: Q23-31421			**Chemtest Sample ID.:**			1811854	1811855	1811856	1811857	1811858
Order No.: 008299			Client Sample Ref.:			NWHS A	NWHS B	NWHS C	NWHS D	NWHS E
			Client Sample ID.:			NWHS A	NWHS B	NWHS C	NWHS D	NWHS E
			Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):			1.8	1.8	2.0	1.8	2.0
			Date Sampled:			21-May-2024	21-May-2024	21-May-2024	21-May-2024	21-May-2024
			Time Sampled:			12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**					
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Clay	Clay	Clay	Clay	Clay

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

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HWOL Acronym System

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AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

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

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

Final Report

Report No.:	24-17365-1
Initial Date of Issue:	07-Jun-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; jbeer@e3p.co.uk
Project	Bennett Street - 15974
Quotation No.:	Q23-31421
Order No.:	8374
No. of Samples:	3
Turnaround (Wkdays):	5
Date Approved:	07-Jun-2024
Approved By:	
Details:	David Smith, Technical Director

Date Received:	03-Jun-2024
Date Instructed:	03-Jun-2024
Results Due:	07-Jun-2024

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

Results - Water

Project: Bennett Street - 15974

Client: E3P			**Chemtest Job No.:**			24-17365	24-17365	24-17365
Quotation No.: Q23-31421			**Chemtest Sample ID.:**			1815565	1815566	1815567
				Client Sample ID.:		BB - US	BB - MID	BB - DS
				Sample Type:		WATER	WATER	WATER
				Sample Sub Type:				
				Date Sampled:		30-May-2024	30-May-2024	30-May-2024
				Time Sampled:		0:00	0:00	0:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
pH at 20C		U	1010		4.0	8.1	8.3	8.0
Cyanide (Total) Low-Level		N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050
Calcium (Dissolved)		U	1455	mg/l	2.00	140	140	140
Arsenic (Dissolved)		U	1455	µg/l	0.20	1.3	1.5	1.3
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50
Copper (Dissolved)		U	1455	µg/l	0.50	11	11	11
Manganese (Dissolved)		U	1455	µg/l	0.50	160	190	190
Nickel (Dissolved)		U	1455	µg/l	0.50	2.6	2.5	2.7
Lead (Dissolved)		U	1455	µg/l	0.50	1.0	0.93	0.93
Selenium (Dissolved)		U	1455	µg/l	0.50	0.76	0.76	< 0.50
Zinc (Dissolved)		U	1455	µg/l	2.5	20	23	25
Mercury Low Level		U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010
Chromium (Hexavalent)		U	1490	µg/l	20	[B] < 20	[B] < 20	[B] < 20
Dissolved Organic Carbon		U	1610	mg/l	2.0	7.9	9.5	9.1
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10	< 10	< 10
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Bromomethane		U	1760	µg/l	5	< 5	< 5	< 5
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0

Results - Water

Project: Bennett Street - 15974

Client: E3P				**Chemtest Job No.:**		24-17365	24-17365	24-17365
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1815565	1815566	1815567
				Client Sample ID.:		BB - US	BB - MID	BB - DS
				Sample Type:		WATER	WATER	WATER
				Sample Sub Type:				
				Date Sampled:		30-May-2024	30-May-2024	30-May-2024
				Time Sampled:		0:00	0:00	0:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane		U	1760	µg/l	5	< 5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0

Results - Water

Project: Bennett Street - 15974

Client: E3P				**Chemtest Job No.:**		24-17365	24-17365	24-17365
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1815565	1815566	1815567
				Client Sample ID.:		BB - US	BB - MID	BB - DS
				Sample Type:		WATER	WATER	WATER
				Sample Sub Type:				
				Date Sampled:		30-May-2024	30-May-2024	30-May-2024
				Time Sampled:		0:00	0:00	0:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50

Results - Water

Project: Bennett Street - 15974

Client: E3P				**Chemtest Job No.:**		24-17365	24-17365	24-17365
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1815565	1815566	1815567
				Client Sample ID.:		BB - US	BB - MID	BB - DS
				Sample Type:		WATER	WATER	WATER
				Sample Sub Type:				
				Date Sampled:		30-May-2024	30-May-2024	30-May-2024
				Time Sampled:		0:00	0:00	0:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50
Total Phenols		U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1815565		BB - US		30-May-2024	B	Coloured Winchester 1000ml
1815565		BB - US		30-May-2024	B	EPA Vial 40ml
1815565		BB - US		30-May-2024	B	Plastic Bottle 1000ml
1815566		BB - MID		30-May-2024	B	Coloured Winchester 1000ml
1815566		BB - MID		30-May-2024	B	EPA Vial 40ml
1815566		BB - MID		30-May-2024	B	Plastic Bottle 1000ml
1815567		BB - DS		30-May-2024	B	Coloured Winchester 1000ml
1815567		BB - DS		30-May-2024	B	EPA Vial 40ml
1815567		BB - DS		30-May-2024	B	Plastic Bottle 1000ml

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.	PL GW
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	PL GW
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	PL SW GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

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

Final Report

Report No.:	24-18029-1
Initial Date of Issue:	26-Jun-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; jbeer@e3p.co.uk
Project	Bennett Street 15-974
Quotation No.:	Q23-31421
Order No.:	008445
No. of Samples:	3
Turnaround (Wkdays):	5
Date Approved:	26-Jun-2024
Approved By:	
Details:	David Smith, Technical Director

Date Received:	07-Jun-2024
Date Instructed:	07-Jun-2024
Results Due:	13-Jun-2024

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

Results - Leachate

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-18029	24-18029	24-18029
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1818095	1818096	1818097
Order No.: 008445				Client Sample Ref.:		SW-MG-011	SW-MG-012	SW-MG-013
				Client Sample ID.:		SW-MG-011	SW-MG-012	SW-MG-013
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		06-Jun-2024	06-Jun-2024	06-Jun-2024
				Time Sampled:		12:00	12:00	12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**			
pH at 20C	U	1010	2:1		4.0	7.9	10.1	9.0
Cyanide (Total) Low-Level	N	1300	2:1	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050
Arsenic (Dissolved)	U	1455	2:1	µg/l	0.20	3.7	14	15
Cadmium (Dissolved)	U	1455	2:1	µg/l	0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)	U	1455	2:1	µg/l	0.50	0.57	1.7	< 0.50
Copper (Dissolved)	U	1455	2:1	µg/l	0.50	5.2	120	18
Mercury (Dissolved)	U	1455	2:1	µg/l	0.05	< 0.05	0.06	0.06
Nickel (Dissolved)	U	1455	2:1	µg/l	0.50	4.2	42	4.0
Lead (Dissolved)	U	1455	2:1	µg/l	0.50	0.74	1.0	0.53
Selenium (Dissolved)	U	1455	2:1	µg/l	0.50	1.1	3.7	4.2
Zinc (Dissolved)	U	1455	2:1	µg/l	2.5	47	< 2.5	13
Chromium (Hexavalent)	U	1490	2:1	µg/l	20	< 20	< 20	< 20
C2 Aliphatic TPH >C5-C6	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C6-C8	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	2:1	µg/l	5.0	< 5.0	< 5.0	< 5.0
C2 Aromatic TPH >C5-C7	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C7-C8	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Total Aromatic Hydrocarbons	N	1675	2:1	µg/l	5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	2:1	µg/l	10	< 10	< 10	< 10
Benzene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
Toluene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	N	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
Naphthalene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Acenaphthylene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010

Results - Leachate

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-18029	24-18029	24-18029
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1818095	1818096	1818097
Order No.: 008445				Client Sample Ref.:		SW-MG-011	SW-MG-012	SW-MG-013
				Client Sample ID.:		SW-MG-011	SW-MG-012	SW-MG-013
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		06-Jun-2024	06-Jun-2024	06-Jun-2024
				Time Sampled:		12:00	12:00	12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**			
Acenaphthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Fluorene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Phenanthrene	N	1800	2:1	µg/l	0.010	0.54	< 0.010	1.3
Anthracene	N	1800	2:1	µg/l	0.010	0.14	< 0.010	0.30
Fluoranthene	N	1800	2:1	µg/l	0.010	0.95	1.3	2.0
Pyrene	N	1800	2:1	µg/l	0.010	0.89	1.2	1.8
Benzo[a]anthracene	N	1800	2:1	µg/l	0.010	0.27	0.52	0.68
Chrysene	N	1800	2:1	µg/l	0.010	0.31	0.63	0.71
Benzo[b]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	0.66	0.83
Benzo[k]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	0.23	0.23
Benzo[a]pyrene	N	1800	2:1	µg/l	0.010	< 0.010	0.49	0.55
Indeno(1,2,3-c,d)Pyrene	N	1800	2:1	µg/l	0.010	< 0.010	0.28	0.29
Dibenz(a,h)Anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	2:1	µg/l	0.010	< 0.010	0.29	< 0.010
Total Of 16 PAH's	N	1800	2:1	µg/l	0.20	3.1	5.6	8.7
Total Phenols	U	1920	2:1	mg/l	0.030	< 0.030	< 0.030	< 0.030

Results - Soil

Project: Bennett Street 15-974

Client: E3P					**Chemtest Job No.:**	24-18029	24-18029	24-18029
Quotation No.: Q23-31421					**Chemtest Sample ID.:**	1818095	1818096	1818097
Order No.: 008445					Client Sample Ref.:	SW-MG-011	SW-MG-012	SW-MG-013
					Client Sample ID.:	SW-MG-011	SW-MG-012	SW-MG-013
					Sample Type:	SOIL	SOIL	SOIL
					Date Sampled:	06-Jun-2024	06-Jun-2024	06-Jun-2024
					Time Sampled:	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Soil Colour		N	2040		N/A	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Clay	Sand	Sand

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

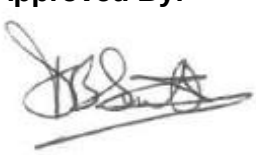
Eurofins Chemtest Ltd
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Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-20643-1
Initial Date of Issue:	10-Jul-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	gcalvert@e3p.co.uk; jbeer@e3p.co.uk; mdee@e3p.co.uk
Project	Bennett Street 15-974

Quotation No.:	Q23-31421	**Date Received:**	28-Jun-2024
Order No.:	008630	**Date Instructed:**	28-Jun-2024
No. of Samples:	3		
Turnaround (Wkdays):	5	**Results Due:**	04-Jul-2024
Date Approved:	10-Jul-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Leachate

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-20643
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1828018
Order No.: 008630				Client Sample Ref.:		AST-101
				Client Sample ID.:		AST-101
				Sample Type:		SOIL
				Date Sampled:		27-Jun-2024
				Time Sampled:		12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**	
pH at 20C	U	1010	2:1		4.0	9.8
Cyanide (Total) Low-Level	N	1300	2:1	mg/l	0.0050	< 0.0050
Arsenic (Dissolved)	U	1455	2:1	µg/l	0.20	8.8
Cadmium (Dissolved)	U	1455	2:1	µg/l	0.11	< 0.11
Chromium (Dissolved)	U	1455	2:1	µg/l	0.50	6.9
Copper (Dissolved)	U	1455	2:1	µg/l	0.50	57
Mercury (Dissolved)	U	1455	2:1	µg/l	0.05	< 0.05
Nickel (Dissolved)	U	1455	2:1	µg/l	0.50	7.0
Lead (Dissolved)	U	1455	2:1	µg/l	0.50	< 0.50
Selenium (Dissolved)	U	1455	2:1	µg/l	0.50	3.0
Zinc (Dissolved)	U	1455	2:1	µg/l	2.5	< 2.5
Chromium (Hexavalent)	U	1490	2:1	µg/l	20	< 20
C2 Aliphatic TPH >C5-C6	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C6-C8	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	2:1	µg/l	5.0	< 5.0
C2 Aromatic TPH >C5-C7	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C7-C8	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10
C2 Total Aromatic Hydrocarbons	N	1675	2:1	µg/l	5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	2:1	µg/l	10	< 10
Benzene	U	1760	2:1	µg/l	1.0	< 1.0
Toluene	U	1760	2:1	µg/l	1.0	< 1.0
Ethylbenzene	U	1760	2:1	µg/l	1.0	< 1.0
m & p-Xylene	U	1760	2:1	µg/l	1.0	< 1.0
o-Xylene	U	1760	2:1	µg/l	1.0	< 1.0
Methyl Tert-Butyl Ether	N	1760	2:1	µg/l	1.0	< 1.0
Naphthalene	N	1800	2:1	µg/l	0.010	57
Acenaphthylene	N	1800	2:1	µg/l	0.010	< 0.010

Results - Leachate

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-20643
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1828018
Order No.: 008630				Client Sample Ref.:		AST-101
				Client Sample ID.:		AST-101
				Sample Type:		SOIL
				Date Sampled:		27-Jun-2024
				Time Sampled:		12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**	
Acenaphthene	N	1800	2:1	µg/l	0.010	< 0.010
Fluorene	N	1800	2:1	µg/l	0.010	< 0.010
Phenanthrene	N	1800	2:1	µg/l	0.010	< 0.010
Anthracene	N	1800	2:1	µg/l	0.010	< 0.010
Fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010
Pyrene	N	1800	2:1	µg/l	0.010	6.0
Benzo[a]anthracene	N	1800	2:1	µg/l	0.010	< 0.010
Chrysene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[b]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[k]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[a]pyrene	N	1800	2:1	µg/l	0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	2:1	µg/l	0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	2:1	µg/l	0.010	< 0.010
Total Of 16 PAH's	N	1800	2:1	µg/l	0.20	63
Total Phenols	U	1920	2:1	mg/l	0.030	< 0.030

Results - Soil

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-20643	24-20643	24-20643
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1828018	1828019	1828020
Order No.: 008630				Client Sample Ref.:		AST-101	AST-102	AST-103
				Client Sample ID.:		AST-101	AST-102	AST-103
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		27-Jun-2024	27-Jun-2024	27-Jun-2024
				Time Sampled:		12:00	12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type		U	2192		N/A	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	4.6	3.6	3.9
Soil Colour		N	2040		N/A	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Loam	Loam	Loam
pH at 20C		M	2010		4.0	8.4	8.2	7.9
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	1.1	1.0	0.73
Total Sulphur		U	2175	%	0.010	0.24	0.25	0.17
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	4.4	5.0	7.2
Sulphate (Total)		U	2430	%	0.010	0.61	0.42	0.29
Arsenic		M	2455	mg/kg	0.5	20	13	9.7
Cadmium		M	2455	mg/kg	0.10	0.50	0.25	0.21
Chromium		M	2455	mg/kg	0.5	23	18	14
Copper		M	2455	mg/kg	0.50	110	73	46
Mercury		M	2455	mg/kg	0.05	1.6	1.1	0.58
Nickel		M	2455	mg/kg	0.50	30	18	16
Lead		M	2455	mg/kg	0.50	330	200	130
Selenium		M	2455	mg/kg	0.25	0.68	0.30	< 0.25
Zinc		M	2455	mg/kg	0.50	210	250	86
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	7.2	17	4.7
Total Organic Carbon		M	2625	%	0.20	4.2	9.6	2.7
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	16	23	14
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	83	150	98
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	320	510	420
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	230	320	310
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	400	500	490
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	90	77	66
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	1100	1600	1400
Naphthalene		M	2800	mg/kg	0.10	< 0.10	5.4	1.4
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	0.45	0.22
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	8.6	3.3
Fluorene		M	2800	mg/kg	0.10	< 0.10	7.5	2.5

Results - Soil

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-20643	24-20643	24-20643
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1828018	1828019	1828020
Order No.: 008630				Client Sample Ref.:		AST-101	AST-102	AST-103
				Client Sample ID.:		AST-101	AST-102	AST-103
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		27-Jun-2024	27-Jun-2024	27-Jun-2024
				Time Sampled:		12:00	12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Phenanthrene		M	2800	mg/kg	0.10	53	47	20
Anthracene		M	2800	mg/kg	0.10	15	14	6.0
Fluoranthene		M	2800	mg/kg	0.10	68	57	32
Pyrene		M	2800	mg/kg	0.10	59	49	28
Benzo[a]anthracene		M	2800	mg/kg	0.10	28	23	14
Chrysene		M	2800	mg/kg	0.10	28	23	14
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	32	27	16
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	11	9.5	5.3
Benzo[a]pyrene		M	2800	mg/kg	0.10	28	23	14
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	16	13	8.3
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	3.2	3.0	1.7
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	15	13	7.5
Total Of 16 PAH's		N	2800	mg/kg	2.0	360	320	170
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

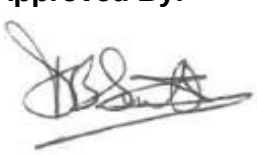
Eurofins Chemtest Ltd
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CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-21228-1
Initial Date of Issue:	11-Jul-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	gcalvert@e3p.co.uk; jbeer@e3p.co.uk; mdee@e3p.co.uk
Project	Bennett Street 15-974

Quotation No.:	Q23-31421	**Date Received:**	04-Jul-2024
Order No.:		**Date Instructed:**	04-Jul-2024
No. of Samples:	6		
Turnaround (Wkdays):	5	**Results Due:**	10-Jul-2024
Date Approved:	11-Jul-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Water

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-21228	24-21228	24-21228	24-21228	24-21228	24-21228
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1830211	1830212	1830213	1830214	1830215	1830216
Order No.:				Client Sample Ref.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Client Sample ID.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
pH at 20C		U	1010		4.0	8.5	8.3	8.3	8.3	8.2	8.2
Cyanide (Total)		U	1300	mg/l	0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Calcium (Dissolved)		U	1455	mg/l	2.00	220	220	210	220	210	220
Arsenic (Dissolved)		U	1455	µg/l	0.20	1.5	1.5	1.4	1.3	1.5	1.4
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	2.0	2.0	2.0	2.1	2.3	2.1
Copper (Dissolved)		U	1455	µg/l	0.50	6.9	7.1	7.1	7.3	6.8	7.6
Mercury (Dissolved)		U	1455	µg/l	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Manganese (Dissolved)		U	1455	µg/l	0.50	650	650	630	600	620	650
Nickel (Dissolved)		U	1455	µg/l	0.50	4.4	4.5	4.5	4.7	4.6	4.7
Lead (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51	< 0.50
Selenium (Dissolved)		U	1455	µg/l	0.50	0.58	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Zinc (Dissolved)		U	1455	µg/l	2.5	16	10	9.9	9.4	10	11
Dissolved Organic Carbon		U	1610	mg/l	2.0	4.5	4.4	4.4	4.4	4.0	4.3
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0

Results - Water

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-21228	24-21228	24-21228	24-21228	24-21228	24-21228
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1830211	1830212	1830213	1830214	1830215	1830216
Order No.:				Client Sample Ref.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Client Sample ID.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Water

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-21228	24-21228	24-21228	24-21228	24-21228	24-21228
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1830211	1830212	1830213	1830214	1830215	1830216
Order No.:				Client Sample Ref.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Client Sample ID.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorocyclopentadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results - Water

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-21228	24-21228	24-21228	24-21228	24-21228	24-21228
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1830211	1830212	1830213	1830214	1830215	1830216
Order No.:				Client Sample Ref.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Client Sample ID.:		CBDS	CBMS	CBUS	BBDS	BBMS	BBUS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024	02-Jul-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Phenols		U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	GW
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	PL SW GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

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

Final Report

Report No.:	24-24013-1
Initial Date of Issue:	05-Aug-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; gcalvert@e3p.co.uk
Project	Bennett Street

Quotation No.:	Q23-31421	**Date Received:**	29-Jul-2024
Order No.:	008900	**Date Instructed:**	29-Jul-2024
No. of Samples:	4		
Turnaround (Wkdays):	5	**Results Due:**	02-Aug-2024
Date Approved:	05-Aug-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-24013	24-24013	24-24013	24-24013
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1841964	1841965	1841966	1841967
				Client Sample ID.:		SW-MG-014 (A)	SW-MG-015 (A)	SW-MG-016 (A)	SW-MG-017 (A)
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Date Sampled:		25-Jul-2024	25-Jul-2024	25-Jul-2024	25-Jul-2024
				Time Sampled:		0:00	0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**				
ACM Type		U	2192		N/A	-	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	21	23	28	24
Soil Colour		N	2040		N/A	Brown	Brown	Black	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Sand	Sand	Sand	Sand
pH at 20C		M	2010		4.0	8.3	8.0	8.2	8.3
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.62	0.92	0.93	1.2
Total Sulphur		U	2175	%	0.010	0.59	0.30	0.21	0.39
Cyanide (Total)		M	2300	mg/kg	0.50	0.60	1.1	0.80	1.1
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	4.9	14	6.3	5.2
Sulphate (Total)		U	2430	%	0.010	0.35	0.37	0.33	0.44
Arsenic		M	2455	mg/kg	0.5	91	60	53	78
Cadmium		M	2455	mg/kg	0.10	0.50	0.54	0.39	1.8
Chromium		M	2455	mg/kg	0.5	25	18	16	22
Copper		M	2455	mg/kg	0.50	270	290	200	250
Mercury		M	2455	mg/kg	0.05	8.4	1.6	6.6	5.6
Nickel		M	2455	mg/kg	0.50	59	43	35	47
Lead		M	2455	mg/kg	0.50	1100	420	820	760
Selenium		M	2455	mg/kg	0.25	1.8	1.4	1.5	1.8
Zinc		M	2455	mg/kg	0.50	250	420	250	380
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	36	31	17	47
Total Organic Carbon		M	2625	%	0.20	21	18	10	27
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	2.2	2.7	13
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	9.8	9.8	11	9.7
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	69	28	34	22
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	560	91	100	73
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	540	46	120	32
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	920	93	130	62
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	250	14	23	9.2
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	2400	280	430	220
Naphthalene		M	2800	mg/kg	0.10	0.59	0.51	< 0.10	0.96
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	0.15	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	0.61	0.78	< 0.10	1.3
Fluorene		M	2800	mg/kg	0.10	0.60	0.65	< 0.10	1.0

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-24013	24-24013	24-24013	24-24013
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1841964	1841965	1841966	1841967
				Client Sample ID.:		SW-MG-014 (A)	SW-MG-015 (A)	SW-MG-016 (A)	SW-MG-017 (A)
				Sample Type:		SOIL	SOIL	SOIL	SOIL
				Date Sampled:		25-Jul-2024	25-Jul-2024	25-Jul-2024	25-Jul-2024
				Time Sampled:		0:00	0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**				
Phenanthrene		M	2800	mg/kg	0.10	7.1	5.0	1.8	7.4
Anthracene		M	2800	mg/kg	0.10	1.8	1.5	0.52	2.1
Fluoranthene		M	2800	mg/kg	0.10	12	11	3.7	13
Pyrene		M	2800	mg/kg	0.10	11	8.6	3.3	10
Benzo[a]anthracene		M	2800	mg/kg	0.10	6.0	5.0	1.7	5.7
Chrysene		M	2800	mg/kg	0.10	6.3	4.3	1.6	5.4
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	6.8	6.2	2.2	7.4
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	2.2	2.0	0.73	2.8
Benzo[a]pyrene		M	2800	mg/kg	0.10	6.7	5.7	2.0	6.9
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	3.4	3.7	1.4	4.4
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	0.69	< 0.10	0.68
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	3.4	0.13	< 0.10	4.2
Total Of 16 PAH's		N	2800	mg/kg	2.0	69	56	19	73
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

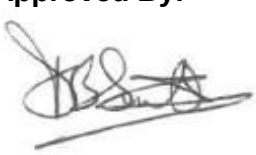
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-24980-1
Initial Date of Issue:	09-Aug-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; gcalvert@e3p.co.uk
Project	Bennett Street Waters July 24

Quotation No.:		**Date Received:**	05-Aug-2024
Order No.:	008999	**Date Instructed:**	05-Aug-2024
No. of Samples:	6		
Turnaround (Wkdays):	5	**Results Due:**	09-Aug-2024
Date Approved:	09-Aug-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Water

Project: Bennett Street Waters July 24

Client: E3P					**Chemtest Job No.:**	24-24980	24-24980	24-24980	24-24980	24-24980	24-24980
Quotation No.:					**Chemtest Sample ID.:**	1846072	1846073	1846074	1846075	1846076	1846077
					Client Sample ID.:	BB US	BB MID	BB DS	CB US	CB MID	CB DS
					Sample Type:	WATER	WATER	WATER	WATER	WATER	WATER
					Sample Sub Type:						
					Date Sampled:	30-Jul-2024	30-Jul-2024	30-Jul-2024	30-Jul-2024	30-Jul-2024	30-Jul-2024
					Time Sampled:	12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
pH at 20C		U	1010		4.0	8.1	7.8	7.8	8.2	8.2	8.3
Cyanide (Total) Low-Level		N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Calcium (Dissolved)		U	1455	mg/l	2.00	180	180	180	130	140	140
Arsenic (Dissolved)		U	1455	µg/l	0.20	0.62	0.56	0.57	3.9	3.7	3.8
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Copper (Dissolved)		U	1455	µg/l	0.50	2.9	2.5	2.3	0.51	< 0.50	0.52
Manganese (Dissolved)		U	1455	µg/l	0.50	350	320	370	1.8	1.3	1.5
Nickel (Dissolved)		U	1455	µg/l	0.50	2.1	1.8	1.8	2.8	2.9	2.8
Lead (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Selenium (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Zinc (Dissolved)		U	1455	µg/l	2.5	6.6	3.4	3.9	17	18	18
Mercury Low Level		U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chromium (Hexavalent)		U	1490	µg/l	20	[B] < 20	[B] < 20	[B] < 20	[B] < 20	[B] < 20	[B] < 20
Dissolved Organic Carbon		U	1610	mg/l	2.0	3.8	3.7	3.5	6.3	6.1	6.4
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0

Results - Water

Project: Bennett Street Waters July 24

Client: E3P				**Chemtest Job No.:**		24-24980	24-24980	24-24980	24-24980	24-24980	24-24980
Quotation No.:				**Chemtest Sample ID.:**		1846072	1846073	1846074	1846075	1846076	1846077
				Client Sample ID.:		BB US	BB MID	BB DS	CB US	CB MID	CB DS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		30-Jul-2024	30-Jul-2024	30-Jul-2024	30-Jul-2024	30-Jul-2024	30-Jul-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Water

Project: Bennett Street Waters July 24

Client: E3P				**Chemtest Job No.:**		24-24980	24-24980	24-24980	24-24980	24-24980	24-24980
Quotation No.:				**Chemtest Sample ID.:**		1846072	1846073	1846074	1846075	1846076	1846077
				Client Sample ID.:		BB US	BB MID	BB DS	CB US	CB MID	CB DS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		30-Jul-2024	30-Jul-2024	30-Jul-2024	30-Jul-2024	30-Jul-2024	30-Jul-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results - Water

Project: Bennett Street Waters July 24

Client: E3P				**Chemtest Job No.:**		24-24980	24-24980	24-24980	24-24980	24-24980	24-24980
Quotation No.:				**Chemtest Sample ID.:**		1846072	1846073	1846074	1846075	1846076	1846077
				Client Sample ID.:		BB US	BB MID	BB DS	CB US	CB MID	CB DS
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		30-Jul-2024	30-Jul-2024	30-Jul-2024	30-Jul-2024	30-Jul-2024	30-Jul-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Phenols		U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1846072		BB US		30-Jul-2024	B	Coloured Winchester 1000ml
1846072		BB US		30-Jul-2024	B	EPA Vial 40ml
1846072		BB US		30-Jul-2024	B	Plastic Bottle 1000ml
1846073		BB MID		30-Jul-2024	B	Coloured Winchester 1000ml
1846073		BB MID		30-Jul-2024	B	EPA Vial 40ml
1846073		BB MID		30-Jul-2024	B	Plastic Bottle 1000ml
1846074		BB DS		30-Jul-2024	B	Coloured Winchester 1000ml
1846074		BB DS		30-Jul-2024	B	EPA Vial 40ml
1846074		BB DS		30-Jul-2024	B	Plastic Bottle 1000ml
1846075		CB US		30-Jul-2024	B	Coloured Winchester 1000ml
1846075		CB US		30-Jul-2024	B	EPA Vial 40ml
1846075		CB US		30-Jul-2024	B	Plastic Bottle 1000ml
1846076		CB MID		30-Jul-2024	B	Coloured Winchester 1000ml
1846076		CB MID		30-Jul-2024	B	EPA Vial 40ml
1846076		CB MID		30-Jul-2024	B	Plastic Bottle 1000ml
1846077		CB DS		30-Jul-2024	B	Coloured Winchester 1000ml
1846077		CB DS		30-Jul-2024	B	EPA Vial 40ml
1846077		CB DS		30-Jul-2024	B	Plastic Bottle 1000ml

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.	PL GW
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	PL GW
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	PL SW GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

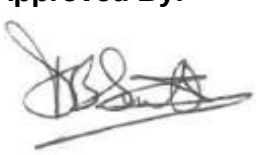
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-25212-1
Initial Date of Issue:	14-Aug-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	gcalvert@e3p.co.uk; mdee@e3p.co.uk
Project	Bennett Street (15-974)

Quotation No.:		**Date Received:**	07-Aug-2024
Order No.:	9019	**Date Instructed:**	07-Aug-2024
No. of Samples:	5		
Turnaround (Wkdays):	5	**Results Due:**	13-Aug-2024
Date Approved:	14-Aug-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Soil

Project: Bennett Street (15-974)

Client: E3P				**Chemtest Job No.:**		24-25212	24-25212	24-25212	24-25212	24-25212
Quotation No.:				**Chemtest Sample ID.:**		1847257	1847258	1847259	1847260	1847261
				Client Sample ID.:		001	002	003	004	005
				Sample Location:		SW-CLAY	SW-CLAY	SW-CLAY	SW-CLAY	SW-CLAY
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		02-Aug-2024	02-Aug-2024	02-Aug-2024	02-Aug-2024	02-Aug-2024
				Time Sampled:		0:00	0:00	0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**					
ACM Type		U	2192		N/A	-	-	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	10	13	11	12	9.6
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Gravel	Sand	Clay	Clay	Clay
pH at 20C		M	2010		4.0	8.7	8.7	8.7	8.6	8.5
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.24	0.16	< 0.010	0.023	0.052
Total Sulphur		U	2175	%	0.010	0.080	0.080	0.020	0.060	0.12
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	11	4.0	3.4	8.1	4.9
Sulphate (Total)		U	2430	%	0.010	0.31	0.42	0.067	0.30	1.7
Arsenic		M	2455	mg/kg	0.5	12	5.4	5.9	5.0	7.0
Cadmium		M	2455	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	22	20	14	18	19
Copper		M	2455	mg/kg	0.50	32	23	15	20	22
Mercury		M	2455	mg/kg	0.05	0.09	< 0.05	0.06	< 0.05	< 0.05
Nickel		M	2455	mg/kg	0.50	15	30	16	27	29
Lead		M	2455	mg/kg	0.50	65	17	26	11	15
Selenium		M	2455	mg/kg	0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25
Zinc		M	2455	mg/kg	0.50	200	68	53	51	56
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	5.2	29	1.2	2.9	1.3
Total Organic Carbon		M	2625	%	0.20	3.0	17	0.69	1.7	0.76
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	13	< 1.0	< 1.0	< 1.0
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	5.1	< 1.0	< 1.0	< 1.0
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	15	< 1.0	< 1.0	< 1.0
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	1.1	< 1.0	< 1.0	< 1.0
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	< 10	33	< 10	< 10	< 10
Naphthalene		M	2800	mg/kg	0.10	0.13	0.20	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	0.36	< 0.10	< 0.10	< 0.10
Fluorene		M	2800	mg/kg	0.10	< 0.10	0.28	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Bennett Street (15-974)

Client: E3P				**Chemtest Job No.:**		24-25212	24-25212	24-25212	24-25212	24-25212
Quotation No.:				**Chemtest Sample ID.:**		1847257	1847258	1847259	1847260	1847261
				Client Sample ID.:		001	002	003	004	005
				Sample Location:		SW-CLAY	SW-CLAY	SW-CLAY	SW-CLAY	SW-CLAY
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		02-Aug-2024	02-Aug-2024	02-Aug-2024	02-Aug-2024	02-Aug-2024
				Time Sampled:		0:00	0:00	0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**					
Phenanthrene		M	2800	mg/kg	0.10	4.1	1.7	0.19	0.34	0.50
Anthracene		M	2800	mg/kg	0.10	1.0	0.44	< 0.10	< 0.10	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	8.1	2.7	0.38	0.36	0.45
Pyrene		M	2800	mg/kg	0.10	6.2	2.3	0.36	0.33	0.41
Benzo[a]anthracene		M	2800	mg/kg	0.10	3.7	1.1	< 0.10	< 0.10	< 0.10
Chrysene		M	2800	mg/kg	0.10	3.8	1.2	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	4.9	1.4	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	1.7	0.45	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	3.7	1.0	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	2.3	0.60	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	0.49	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	2.2	0.67	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	42	14	< 2.0	< 2.0	< 2.0
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key

U	UKAS accredited
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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

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Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

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

Final Report

Report No.:	24-25843-1
Initial Date of Issue:	19-Aug-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	gcalvert@e3p.co.uk; mdee@e3p.co.uk
Project	Bennett Street

Quotation No.:		**Date Received:**	13-Aug-2024
Order No.:	9075	**Date Instructed:**	13-Aug-2024
No. of Samples:	5		
Turnaround (Wkdays):	5	**Results Due:**	19-Aug-2024
Date Approved:	19-Aug-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-25843	24-25843	24-25843	24-25843	24-25843
Quotation No.:				**Chemtest Sample ID.:**		1850124	1850125	1850126	1850127	1850128
				Client Sample ID.:		SW-CLAY-006	SW-CLAY-007	SW-CLAY-008	SW-CLAY-009	SW-CLAY-010
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		09-Aug-2024	09-Aug-2024	09-Aug-2024	09-Aug-2024	09-Aug-2024
				Time Sampled:		0:00	0:00	0:00	0:00	0:00
				Asbestos Lab:		NEW-ASB	NEW-ASB	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	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	8.4	0.91	9.2	1.4	9.8
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones and Roots	Stones	Stones and Roots
Soil Texture		N	2040		N/A	Clay	Loam	Clay	Loam	Loam
pH at 20C		M	2010		4.0	7.7	7.6	8.4	7.2	7.3
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	< 0.010	0.033	0.036	0.054	< 0.010
Total Sulphur		U	2175	%	0.010	0.040	0.020	0.050	0.040	0.050
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	2.3	2.7	2.6	8.9	8.8
Sulphate (Total)		U	2430	%	0.010	0.076	0.060	0.070	0.030	0.064
Arsenic		M	2455	mg/kg	0.5	5.9	11	8.4	5.8	7.4
Cadmium		M	2455	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	19	44	33	18	23
Copper		M	2455	mg/kg	0.50	21	37	30	19	25
Mercury		M	2455	mg/kg	0.05	< 0.05	< 0.05	0.24	0.05	0.05
Nickel		M	2455	mg/kg	0.50	25	56	40	24	32
Lead		M	2455	mg/kg	0.50	27	22	32	15	18
Selenium		M	2455	mg/kg	0.25	0.38	0.99	0.74	0.34	0.58
Zinc		M	2455	mg/kg	0.50	52	94	72	49	62
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	2.8	2.8	4.1	4.8	2.9
Total Organic Carbon		M	2625	%	0.20	1.6	1.6	2.4	2.8	1.7
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	6.6	< 1.0	< 1.0	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	19	< 1.0	< 1.0	< 1.0
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	12	< 1.0	< 1.0	< 1.0
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	25	< 1.0	< 1.0	< 1.0
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	3.2	< 1.0	< 1.0	< 1.0
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	< 10	65	< 10	< 10	< 10
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	0.17	< 0.10	0.20
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.20

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-25843	24-25843	24-25843	24-25843	24-25843
Quotation No.:				**Chemtest Sample ID.:**		1850124	1850125	1850126	1850127	1850128
				Client Sample ID.:		SW-CLAY-006	SW-CLAY-007	SW-CLAY-008	SW-CLAY-009	SW-CLAY-010
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		09-Aug-2024	09-Aug-2024	09-Aug-2024	09-Aug-2024	09-Aug-2024
				Time Sampled:		0:00	0:00	0:00	0:00	0:00
				Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**					
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.23
Phenanthrene		M	2800	mg/kg	0.10	0.72	< 0.10	0.76	0.26	1.1
Anthracene		M	2800	mg/kg	0.10	0.19	< 0.10	0.21	< 0.10	0.27
Fluoranthene		M	2800	mg/kg	0.10	0.61	< 0.10	0.66	0.37	0.95
Pyrene		M	2800	mg/kg	0.10	0.65	< 0.10	0.71	0.32	0.94
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.35
Chrysene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.39
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	2.2	< 2.0	2.5	< 2.0	4.6
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

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C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

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SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

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

HWOL Acronym System

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

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

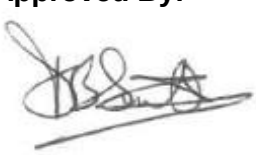
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-27345-1
Initial Date of Issue:	03-Sep-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; gcalvert@e3p.co.uk
Project	Bennet Street

Quotation No.:	Q23-31421	**Date Received:**	27-Aug-2024
Order No.:	009231	**Date Instructed:**	27-Aug-2024
No. of Samples:	5		
Turnaround (Wkdays):	5	**Results Due:**	02-Sep-2024
Date Approved:	03-Sep-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Leachate

Project: Bennet Street

Client: E3P				**Chemtest Job No.:**		24-27345	24-27345	24-27345	24-27345	24-27345
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1856415	1856416	1856417	1856418	1856419
				Client Sample ID.:		SW-MG-014	SW-MG-015	SW-MG-016	SW-MG-017	SW-MG-018
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**					
pH at 20C	U	1010	2:1		4.0	8.5	8.3	8.4	8.7	7.5
Cyanide (Total) Low-Level	N	1300	2:1	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Arsenic (Dissolved)	U	1455	2:1	µg/l	0.20	11	7.0	9.7	9.7	5.0
Cadmium (Dissolved)	U	1455	2:1	µg/l	0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.18
Chromium (Dissolved)	U	1455	2:1	µg/l	0.50	0.97	3.2	1.3	1.8	< 0.50
Copper (Dissolved)	U	1455	2:1	µg/l	0.50	160	100	180	120	140
Mercury (Dissolved)	U	1455	2:1	µg/l	0.05	0.12	0.10	0.12	0.10	0.06
Nickel (Dissolved)	U	1455	2:1	µg/l	0.50	7.6	4.5	7.0	4.1	15
Lead (Dissolved)	U	1455	2:1	µg/l	0.50	0.71	0.84	0.81	0.85	1.7
Selenium (Dissolved)	U	1455	2:1	µg/l	0.50	10	8.0	9.1	9.3	4.9
Zinc (Dissolved)	U	1455	2:1	µg/l	2.5	4.5	9.1	11	3.7	65
Chromium (Hexavalent)	U	1490	2:1	µg/l	20	< 20	< 20	< 20	< 20	< 20
C2 Aliphatic TPH >C5-C6	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C6-C8	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
Total Aliphatic Hydrocarbons	N	1675	2:1	µg/l	5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0
C2 Aromatic TPH >C5-C7	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C7-C8	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Total Aromatic Hydrocarbons	N	1675	2:1	µg/l	5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0
Total Petroleum Hydrocarbons	N	1675	2:1	µg/l	10	[C] < 10	[C] < 10	[C] < 10	[C] < 10	[C] < 10
Benzene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
Toluene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
Ethylbenzene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
m & p-Xylene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
o-Xylene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
Methyl Tert-Butyl Ether	N	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
Naphthalene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acenaphthylene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acenaphthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Leachate

Project: Bennet Street

Client: E3P				**Chemtest Job No.:**	24-27345	24-27345	24-27345	24-27345	24-27345
Quotation No.: Q23-31421				**Chemtest Sample ID.:**	1856415	1856416	1856417	1856418	1856419
				Client Sample ID.:	SW-MG-014	SW-MG-015	SW-MG-016	SW-MG-017	SW-MG-018
				Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:	22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024
				Time Sampled:	12:00	12:00	12:00	12:00	12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**				
Fluorene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Phenanthrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	9.5	< 0.010	< 0.010	< 0.010
Pyrene	N	1800	2:1	µg/l	0.010	< 0.010	9.9	< 0.010	< 0.010	< 0.010
Benzo[a]anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chrysene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[b]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[k]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]pyrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Of 16 PAH's	N	1800	2:1	µg/l	0.20	< 0.20	19	< 0.20	< 0.20	< 0.20
Total Phenols	U	1920	2:1	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1856415		SW-MG-014		22-Aug-2024	C	Plastic Tub 500g
1856416		SW-MG-015		22-Aug-2024	C	Plastic Tub 500g
1856417		SW-MG-016		22-Aug-2024	C	Plastic Tub 500g
1856418		SW-MG-017		22-Aug-2024	C	Plastic Tub 500g
1856419		SW-MG-018		22-Aug-2024	C	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

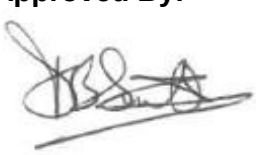
If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

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

Amended Report

Report No.:	24-27345-2		
Initial Date of Issue:	03-Sep-2024	**Date of Re-Issue:**	08-Sep-2024
Re-Issue Details:	This report has been revised and directly supersedes 24-27345-1 in its entirety		
Client	E3P		
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ		
Contact(s):	mdee@e3p.co.uk; gcalvert@e3p.co.uk		
Project	Bennet Street		
Quotation No.:	Q23-31421	**Date Received:**	27-Aug-2024
Order No.:	009231	**Date Instructed:**	27-Aug-2024
No. of Samples:	5		
Turnaround (Wkdays):	11	**Results Due:**	10-Sep-2024
Date Approved:	08-Sep-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Leachate

Project: Bennet Street

Client: E3P				**Chemtest Job No.:**		24-27345	24-27345	24-27345	24-27345	24-27345
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1856415	1856416	1856417	1856418	1856419
				Client Sample ID.:		SW-MG-014	SW-MG-015	SW-MG-016	SW-MG-017	SW-MG-018
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**					
pH at 20C	U	1010	2:1		4.0	8.5	8.3	8.4	8.7	7.5
Cyanide (Total) Low-Level	N	1300	2:1	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Arsenic (Dissolved)	U	1455	2:1	µg/l	0.20	11	7.0	9.7	9.7	5.0
Cadmium (Dissolved)	U	1455	2:1	µg/l	0.11	< 0.11	< 0.11	< 0.11	< 0.11	0.18
Chromium (Dissolved)	U	1455	2:1	µg/l	0.50	0.97	3.2	1.3	1.8	< 0.50
Copper (Dissolved)	U	1455	2:1	µg/l	0.50	160	100	180	120	140
Mercury (Dissolved)	U	1455	2:1	µg/l	0.05	0.12	0.10	0.12	0.10	0.06
Nickel (Dissolved)	U	1455	2:1	µg/l	0.50	7.6	4.5	7.0	4.1	15
Lead (Dissolved)	U	1455	2:1	µg/l	0.50	0.71	0.84	0.81	0.85	1.7
Selenium (Dissolved)	U	1455	2:1	µg/l	0.50	10	8.0	9.1	9.3	4.9
Zinc (Dissolved)	U	1455	2:1	µg/l	2.5	4.5	9.1	11	3.7	65
Chromium (Hexavalent)	U	1490	2:1	µg/l	20	< 20	< 20	< 20	< 20	< 20
C2 Aliphatic TPH >C5-C6	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C6-C8	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
Total Aliphatic Hydrocarbons	N	1675	2:1	µg/l	5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0
C2 Aromatic TPH >C5-C7	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C7-C8	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Total Aromatic Hydrocarbons	N	1675	2:1	µg/l	5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0
Total Petroleum Hydrocarbons	N	1675	2:1	µg/l	10	[C] < 10	[C] < 10	[C] < 10	[C] < 10	[C] < 10
Benzene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
Toluene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
Ethylbenzene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
m & p-Xylene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
o-Xylene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
Methyl Tert-Butyl Ether	N	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
Naphthalene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acenaphthylene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Acenaphthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010

Results - Leachate

Project: Bennet Street

Client: E3P				**Chemtest Job No.:**		24-27345	24-27345	24-27345	24-27345	24-27345
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1856415	1856416	1856417	1856418	1856419
				Client Sample ID.:		SW-MG-014	SW-MG-015	SW-MG-016	SW-MG-017	SW-MG-018
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**					
Fluorene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Phenanthrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	9.5	< 0.010	< 0.010	< 0.010
Pyrene	N	1800	2:1	µg/l	0.010	< 0.010	9.9	< 0.010	< 0.010	< 0.010
Benzo[a]anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chrysene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[b]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[k]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[a]pyrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Of 16 PAH's	N	1800	2:1	µg/l	0.20	< 0.20	19	< 0.20	< 0.20	< 0.20
Total Phenols	U	1920	2:1	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

Results - Soil

Project: Bennet Street

Client: E3P					**Chemtest Job No.:**	24-27345	24-27345	24-27345	24-27345	24-27345
Quotation No.: Q23-31421					**Chemtest Sample ID.:**	1856415	1856416	1856417	1856418	1856419
					Client Sample ID.:	SW-MG-014	SW-MG-015	SW-MG-016	SW-MG-017	SW-MG-018
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL
					Date Sampled:	22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024
					Time Sampled:	12:00	12:00	12:00	12:00	12:00
					Asbestos Lab:	NEW-ASB	NEW-ASB	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	No Asbestos Detected	No Asbestos Detected

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1856415		SW-MG-014		22-Aug-2024	C	Plastic Tub 500g
1856416		SW-MG-015		22-Aug-2024	C	Plastic Tub 500g
1856417		SW-MG-016		22-Aug-2024	C	Plastic Tub 500g
1856418		SW-MG-017		22-Aug-2024	C	Plastic Tub 500g
1856419		SW-MG-018		22-Aug-2024	C	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

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

Final Report

Report No.:	24-27346-1
Initial Date of Issue:	02-Sep-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	gcalvert@e3p.co.uk; mdee@e3p.co.uk
Project	Bennett Street CLAY

Quotation No.:	Q23-31421	**Date Received:**	27-Aug-2024
Order No.:	009230	**Date Instructed:**	27-Aug-2024
No. of Samples:	5		
Turnaround (Wkdays):	5	**Results Due:**	02-Sep-2024
Date Approved:	02-Sep-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Soil

Project: Bennett Street CLAY

Client: E3P				**Chemtest Job No.:**		24-27346	24-27346	24-27346	24-27346	24-27346
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1856420	1856421	1856422	1856423	1856424
				Client Sample ID.:		SW-CLAY 011	SW-CLAY 012	SW-CLAY 013	SW-CLAY 014	SW-CLAY 015
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00
				Asbestos Lab:		NEW-ASB	NEW-ASB	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	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	6.3	5.3	5.0	8.2	15
Soil Colour		N	2040		N/A	Brown	Grey	Grey	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones	Stones	Roots and Stones
Soil Texture		N	2040		N/A	Loam	Loam	Loam	Loam	Loam
pH at 20C		M	2010		4.0	8.8	8.7	8.6	8.5	8.4
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	< 0.010	0.027	0.023	0.029	< 0.010
Total Sulphur		U	2175	%	0.010	0.040	0.030	0.040	0.040	0.050
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	2.9	3.9	4.6	4.9	2.5
Sulphate (Total)		U	2430	%	0.010	0.12	0.031	0.055	0.058	0.065
Arsenic		M	2455	mg/kg	0.5	6.0	8.7	8.7	7.4	6.7
Cadmium		M	2455	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	25	25	31	31	30
Copper		M	2455	mg/kg	0.50	20	24	32	28	43
Mercury		M	2455	mg/kg	0.05	0.05	< 0.05	< 0.05	< 0.05	0.05
Nickel		M	2455	mg/kg	0.50	29	34	40	38	39
Lead		M	2455	mg/kg	0.50	11	13	23	14	21
Selenium		M	2455	mg/kg	0.25	< 0.25	0.39	0.50	0.40	1.0
Zinc		M	2455	mg/kg	0.50	47	62	70	63	68
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	1.7	1.5	6.4	1.7	4.0
Total Organic Carbon		M	2625	%	0.20	1.0	0.89	3.7	1.0	2.3
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total TPH >C6-C40	EH_1D_Total	U	2670	mg/kg	10	< 10	< 10	< 10	< 10	< 10
Naphthalene		M	2800	mg/kg	0.10	18	< 0.10	< 0.10	< 0.10	0.27
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	15	< 0.10	< 0.10	< 0.10	0.20

Results - Soil

Project: Bennett Street CLAY

Client: E3P				**Chemtest Job No.:**		24-27346	24-27346	24-27346	24-27346	24-27346
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1856420	1856421	1856422	1856423	1856424
				Client Sample ID.:		SW-CLAY 011	SW-CLAY 012	SW-CLAY 013	SW-CLAY 014	SW-CLAY 015
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00
				Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**					
Fluorene		M	2800	mg/kg	0.10	13	< 0.10	< 0.10	< 0.10	0.20
Phenanthrene		M	2800	mg/kg	0.10	64	0.36	0.28	0.32	0.73
Anthracene		M	2800	mg/kg	0.10	14	< 0.10	< 0.10	< 0.10	0.19
Fluoranthene		M	2800	mg/kg	0.10	42	0.13	0.23	0.21	0.62
Pyrene		M	2800	mg/kg	0.10	33	0.15	0.20	0.20	0.59
Benzo[a]anthracene		M	2800	mg/kg	0.10	14	< 0.10	< 0.10	< 0.10	0.29
Chrysene		M	2800	mg/kg	0.10	15	< 0.10	< 0.10	< 0.10	0.32
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	14	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	5.2	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	11	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	5.6	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	1.4	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	6.1	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	270	< 2.0	< 2.0	< 2.0	3.4
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

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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

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Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

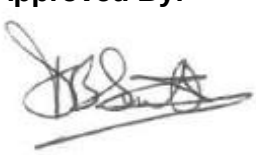
eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-27347-1
Initial Date of Issue:	02-Sep-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	gcalvert@e3p.co.uk; mdee@e3p.co.uk
Project	Bennett Street Crush

Quotation No.:	Q23-31421	**Date Received:**	27-Aug-2024
Order No.:	009227	**Date Instructed:**	27-Aug-2024
No. of Samples:	5		
Turnaround (Wkdays):	5	**Results Due:**	02-Sep-2024
Date Approved:	02-Sep-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Soil

Project: Bennett Street Crush

Client: E3P				**Chemtest Job No.:**		24-27347	24-27347	24-27347	24-27347	24-27347
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1856425	1856426	1856427	1856428	1856429
				Client Sample ID.:		SW-CRUSH-007	SW-CRUSH-008	SW-CRUSH-009	SW-CRUSH-010	SW-CRUSH-011
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00
				Asbestos Lab:		NEW-ASB	NEW-ASB	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	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	23	50	23	25	25
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Loam	Loam	Loam	Loam	Loam
pH at 20C		M	2010		4.0	8.9	8.8	8.6	8.7	8.6
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.78	1.0	1.1	1.0	0.86
Total Sulphur		U	2175	%	0.010	0.35	0.33	0.34	0.34	0.50
Cyanide (Total)		M	2300	mg/kg	0.50	0.70	< 0.50	< 0.50	0.50	0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	6.1	3.2	9.6	3.3	7.7
Sulphate (Total)		U	2430	%	0.010	0.34	0.38	0.65	0.47	0.46
Arsenic		M	2455	mg/kg	0.5	25	23	30	16	23
Cadmium		M	2455	mg/kg	0.10	1.3	0.19	0.53	0.30	0.56
Chromium		M	2455	mg/kg	0.5	25	20	33	19	25
Copper		M	2455	mg/kg	0.50	150	76	130	68	110
Mercury		M	2455	mg/kg	0.05	0.63	5.1	5.4	0.72	0.81
Nickel		M	2455	mg/kg	0.50	33	24	40	25	32
Lead		M	2455	mg/kg	0.50	580	260	360	210	310
Selenium		M	2455	mg/kg	0.25	0.55	0.56	0.77	0.32	0.70
Zinc		M	2455	mg/kg	0.50	320	140	260	130	240
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	21	16	11	9.8	13
Total Organic Carbon		M	2625	%	0.20	12	9.1	6.6	5.7	7.5
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	1.9	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	13	19	16	25	12
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	48	99	74	99	54
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	180	310	250	290	170
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	110	180	190	170	100
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	250	320	620	310	220
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	45	54	160	51	56
Total TPH >C6-C40	EH_1D_Total	U	2670	mg/kg	10	650	980	1300	950	620
Naphthalene		M	2800	mg/kg	0.10	12	2.6	2.3	2.6	2.3
Acenaphthylene		N	2800	mg/kg	0.10	1.8	0.82	1.3	0.59	0.54
Acenaphthene		M	2800	mg/kg	0.10	6.9	2.9	2.6	3.6	3.0
Fluorene		M	2800	mg/kg	0.10	7.1	3.2	3.5	3.5	2.7

Results - Soil

Project: Bennett Street Crush

Client: E3P				**Chemtest Job No.:**		24-27347	24-27347	24-27347	24-27347	24-27347
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1856425	1856426	1856427	1856428	1856429
				Client Sample ID.:		SW-CRUSH-007	SW-CRUSH-008	SW-CRUSH-009	SW-CRUSH-010	SW-CRUSH-011
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024	22-Aug-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00
				Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**					
Phenanthrene		M	2800	mg/kg	0.10	39	17	17	24	19
Anthracene		M	2800	mg/kg	0.10	9.6	4.6	4.5	6.2	4.7
Fluoranthene		M	2800	mg/kg	0.10	42	22	22	31	26
Pyrene		M	2800	mg/kg	0.10	37	19	18	28	23
Benzo[a]anthracene		M	2800	mg/kg	0.10	19	10	10	14	11
Chrysene		M	2800	mg/kg	0.10	18	10	9.6	14	11
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	22	12	12	16	14
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	7.6	4.0	4.4	5.8	5.0
Benzo[a]pyrene		M	2800	mg/kg	0.10	20	11	11	14	12
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	11	6.2	6.6	9.0	8.4
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	2.4	1.3	1.3	1.6	1.3
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	11	5.8	6.1	7.8	6.7
Total Of 16 PAH's		N	2800	mg/kg	2.0	270	130	130	180	150
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

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A - Date of sampling not supplied
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E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

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1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

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customerservices@chemtest.com

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

Final Report

Report No.:	24-27684-1
Initial Date of Issue:	04-Sep-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	gcalvert@e3p.co.uk; mdee@e3p.co.uk; pwinstanley@e3p.co.uk
Project	Bennett Street

Quotation No.:	Q23-31421	**Date Received:**	29-Aug-2024
Order No.:	9249	**Date Instructed:**	29-Aug-2024
No. of Samples:	2		
Turnaround (Wkdays):	5	**Results Due:**	04-Sep-2024
Date Approved:	04-Sep-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-27684	24-27684
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1857901	1857902
				Client Sample ID.:		ASB A	ASB B
				Sample Type:		SOIL	SOIL
				Date Sampled:		27-Aug-2024	27-Aug-2024
				Time Sampled:		9:30	9:30
				Asbestos Lab:		NEW-ASB	NEW-ASB
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**		
ACM Type		U	2192		N/A	Cement	-
Asbestos Identification		U	2192		N/A	Chrysotile	No Asbestos Detected
Asbestos by Gravimetry		U	2192	%	0.001	3.1	
Total Asbestos		U	2192	%	0.001	3.1	
Moisture		N	2030	%	0.020	15	19
Soil Colour		N	2040		N/A	Brown	Brown
Other Material		N	2040		N/A	Stones, Roots and brick	Stones and Roots
Soil Texture		N	2040		N/A	Sand	Sand
pH at 20C		M	2010		4.0	8.8	8.9
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.79	1.7
Total Sulphur		U	2175	%	0.010	0.63	0.60
Cyanide (Total)		M	2300	mg/kg	0.50	5.5	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	12	32
Sulphate (Total)		U	2430	%	0.010	1.1	1.8
Arsenic		M	2455	mg/kg	0.5	31	23
Cadmium		M	2455	mg/kg	0.10	< 0.10	< 0.10
Chromium		M	2455	mg/kg	0.5	39	23
Copper		M	2455	mg/kg	0.50	130	100
Mercury		M	2455	mg/kg	0.05	0.41	0.80
Nickel		M	2455	mg/kg	0.50	41	25
Lead		M	2455	mg/kg	0.50	400	320
Selenium		M	2455	mg/kg	0.25	0.57	< 0.25
Zinc		M	2455	mg/kg	0.50	180	240
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	12	7.8
Total Organic Carbon		M	2625	%	0.20	6.9	4.5
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	9.7	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	120	5.3
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	770	22
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	2800	31
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	2100	45
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	3800	24
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	930	< 1.0
Total TPH >C6-C40	EH_1D_Total	U	2670	mg/kg	10	11000	130
Naphthalene		M	2800	mg/kg	0.10	2.5	2.9
Acenaphthylene		N	2800	mg/kg	0.10	0.36	0.40

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-27684	24-27684
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1857901	1857902
				Client Sample ID.:		ASB A	ASB B
				Sample Type:		SOIL	SOIL
				Date Sampled:		27-Aug-2024	27-Aug-2024
				Time Sampled:		9:30	9:30
				Asbestos Lab:		NEW-ASB	NEW-ASB
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**		
Acenaphthene		M	2800	mg/kg	0.10	2.7	3.7
Fluorene		M	2800	mg/kg	0.10	2.9	3.5
Phenanthrene		M	2800	mg/kg	0.10	16	16
Anthracene		M	2800	mg/kg	0.10	4.3	4.0
Fluoranthene		M	2800	mg/kg	0.10	20	17
Pyrene		M	2800	mg/kg	0.10	18	15
Benzo[a]anthracene		M	2800	mg/kg	0.10	8.3	6.8
Chrysene		M	2800	mg/kg	0.10	8.8	7.4
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	9.1	7.5
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	3.1	2.7
Benzo[a]pyrene		M	2800	mg/kg	0.10	7.9	6.4
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	4.1	3.2
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	0.95	0.80
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	4.4	3.6
Total Of 16 PAH's		N	2800	mg/kg	2.0	110	100
Total Phenols		M	2920	mg/kg	0.10	2.2	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

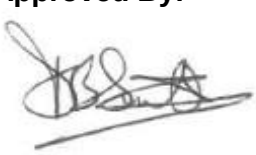
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-27697-1
Initial Date of Issue:	04-Sep-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; gcalvert@e3p.co.uk
Project	Bennett Street

Quotation No.:	Q23-31421	**Date Received:**	29-Aug-2024
Order No.:	9248	**Date Instructed:**	29-Aug-2024
No. of Samples:	6		
Turnaround (Wkdays):	5	**Results Due:**	04-Sep-2024
Date Approved:	04-Sep-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-27697	24-27697	24-27697	24-27697	24-27697	24-27697
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1858015	1858016	1858017	1858018	1858019	1858020
				Client Sample ID.:		CB-UP	CB-MID	CB-DOWN	BB-UP	BB-MID	BB-DOWN
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		27-Aug-2024	27-Aug-2024	27-Aug-2024	27-Aug-2024	27-Aug-2024	27-Aug-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
pH at 20C		U	1010		4.0	8.2	8.2	8.0	8.0	8.1	7.9
Suspended Solids At 105C		U	1030	µg/l	5000	< 5000	6000	< 5000	150000	150000	750000
Cyanide (Total) Low-Level		N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Calcium (Dissolved)		U	1455	mg/l	2.00	120	120	120	430	390	640
Arsenic (Dissolved)		U	1455	µg/l	0.20	4.7	4.5	5.0	6.1	5.9	11
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	1.5	1.6	1.9	2.4	2.3	2.4
Copper (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	3.8	4.2	2.2
Manganese (Dissolved)		U	1455	µg/l	0.50	260	260	260	860	870	1500
Nickel (Dissolved)		U	1455	µg/l	0.50	2.4	2.1	2.9	7.1	7.2	13
Lead (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	1.0	0.98	1.5
Selenium (Dissolved)		U	1455	µg/l	0.50	1.4	1.4	2.7	< 0.50	1.0	5.7
Zinc (Dissolved)		U	1455	µg/l	2.5	15	15	27	57	52	51
Mercury Low Level		U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chromium (Hexavalent)		U	1490	µg/l	20	< 20	< 20	< 20	< 20	< 20	< 20
Dissolved Organic Carbon		U	1610	mg/l	2.0	15	15	7.4	50	47	85
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	60
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	9.6
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	70
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10	70
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-27697	24-27697	24-27697	24-27697	24-27697	24-27697
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1858015	1858016	1858017	1858018	1858019	1858020
				Client Sample ID.:		CB-UP	CB-MID	CB-DOWN	BB-UP	BB-MID	BB-DOWN
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		27-Aug-2024	27-Aug-2024	27-Aug-2024	27-Aug-2024	27-Aug-2024	27-Aug-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.6
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-27697	24-27697	24-27697	24-27697	24-27697	24-27697
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1858015	1858016	1858017	1858018	1858019	1858020
				Client Sample ID.:		CB-UP	CB-MID	CB-DOWN	BB-UP	BB-MID	BB-DOWN
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		27-Aug-2024	27-Aug-2024	27-Aug-2024	27-Aug-2024	27-Aug-2024	27-Aug-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-27697	24-27697	24-27697	24-27697	24-27697	24-27697
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1858015	1858016	1858017	1858018	1858019	1858020
				Client Sample ID.:		CB-UP	CB-MID	CB-DOWN	BB-UP	BB-MID	BB-DOWN
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		27-Aug-2024	27-Aug-2024	27-Aug-2024	27-Aug-2024	27-Aug-2024	27-Aug-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	19	20	14
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Phenols		U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1030	Total Suspended Solids	Total suspended solids	Filtration of a mixed sample through a standard glass fibre filter and determination of the mass of residue retained dried at 105°C.	SW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.	PL GW
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	PL GW
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	PL SW GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

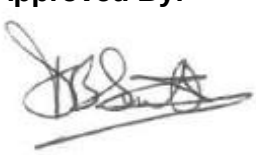
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-29407-1
Initial Date of Issue:	23-Sep-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	gcalvert@e3p.co.uk; mdee@e3p.co.uk
Project	Bennett Street

Quotation No.:	Q23-31421	**Date Received:**	13-Sep-2024
Order No.:	009435	**Date Instructed:**	13-Sep-2024
No. of Samples:	3		
Turnaround (Wkdays):	5	**Results Due:**	19-Sep-2024
Date Approved:	23-Sep-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-29407	24-29407	24-29407
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1865568	1865569	1865570
				Client Sample ID.:		SW-CLAY-016	SW-CLAY-017	SW-CLAY-018
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		11-Sep-2024	11-Sep-2024	11-Sep-2024
				Time Sampled:		12:00	12:00	12:00
				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
Moisture		N	2030	%	0.020	6.9	15	9.3
Soil Colour		N	2040		N/A	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Sand	Clay	Clay
pH at 20C		M	2010		4.0	8.2	8.3	8.4
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.062	0.36	0.098
Total Sulphur		U	2175	%	0.010	0.060	0.21	0.10
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	8.5	8.8	9.1
Sulphate (Total)		U	2430	%	0.010	0.099	0.46	0.15
Arsenic		M	2455	mg/kg	0.5	12	17	10
Cadmium		M	2455	mg/kg	0.10	0.27	0.15	< 0.10
Chromium		M	2455	mg/kg	0.5	30	35	22
Copper		M	2455	mg/kg	0.50	43	62	32
Mercury		M	2455	mg/kg	0.05	0.26	0.24	0.13
Nickel		M	2455	mg/kg	0.50	39	42	29
Lead		M	2455	mg/kg	0.50	44	62	31
Selenium		M	2455	mg/kg	0.25	0.94	1.4	0.73
Zinc		M	2455	mg/kg	0.50	81	100	58
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	2.6	4.3	2.6
Total Organic Carbon		M	2625	%	0.20	1.5	2.5	1.5
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	8.6	22	10
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	7.5	17	9.5
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	13	35	26
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Total TPH >C6-C40	EH_1D_Total	U	2670	mg/kg	10	29	74	45
Naphthalene		M	2800	mg/kg	0.10	0.22	0.27	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	0.29	0.40	< 0.10
Fluorene		M	2800	mg/kg	0.10	0.28	0.42	< 0.10

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-29407	24-29407	24-29407
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1865568	1865569	1865570
				Client Sample ID.:		SW-CLAY-016	SW-CLAY-017	SW-CLAY-018
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		11-Sep-2024	11-Sep-2024	11-Sep-2024
				Time Sampled:		12:00	12:00	12:00
				Asbestos Lab:		NEW-ASB	NEW-ASB	NEW-ASB
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Phenanthrene		M	2800	mg/kg	0.10	1.7	2.3	0.38
Anthracene		M	2800	mg/kg	0.10	0.47	0.51	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	2.0	2.7	0.42
Pyrene		M	2800	mg/kg	0.10	2.0	2.7	0.50
Benzo[a]anthracene		M	2800	mg/kg	0.10	0.86	1.0	< 0.10
Chrysene		M	2800	mg/kg	0.10	0.95	1.2	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	0.85	1.1	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	0.32	0.39	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	0.77	0.82	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	0.42	0.49	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	0.40	0.55	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	12	15	< 2.0
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key

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M	MCERTS and UKAS accredited
N	Unaccredited
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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

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Uncertainty of measurement for the determinands tested are available upon request .
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All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
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Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
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All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

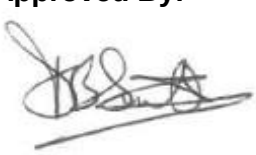
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-29418-1
Initial Date of Issue:	19-Sep-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	gcalvert@e3p.co.uk; mdee@e3p.co.uk
Project	Bennett Street

Quotation No.:	Q23-31421	**Date Received:**	13-Sep-2024
Order No.:	009437	**Date Instructed:**	13-Sep-2024
No. of Samples:	5		
Turnaround (Wkdays):	5	**Results Due:**	19-Sep-2024
Date Approved:	19-Sep-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-29418	24-29418	24-29418	24-29418	24-29418
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1865612	1865613	1865614	1865615	1865616
				Client Sample ID.:		TS IMP 101	TS IMP 102	TS IMP 103	TS IMP 104	TS IMP 105
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		11-Sep-2024	11-Sep-2024	11-Sep-2024	11-Sep-2024	11-Sep-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**					
ACM Type		U	2192		N/A	-	-	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	18	17	17	14	15
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots	Roots and Stones	Stones and Roots
Soil Texture		N	2040		N/A	Loam	Loam	Loam	Sand	Sand
pH at 20C		M	2010		4.0	7.6	7.5	7.3	7.2	7.2
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	< 0.010	< 0.010	0.035	0.011	0.017
Total Sulphur		U	2175	%	0.010	0.050	0.030	0.040	0.030	0.040
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	13	4.1	4.0	4.2	4.2
Sulphate (Total)		U	2430	%	0.010	0.075	0.065	0.061	0.034	0.031
Arsenic		M	2455	mg/kg	0.5	16	14	11	11	11
Cadmium		M	2455	mg/kg	0.10	0.43	0.19	0.15	0.16	0.17
Chromium		M	2455	mg/kg	0.5	25	24	17	18	17
Copper		M	2455	mg/kg	0.50	48	46	41	43	43
Mercury		M	2455	mg/kg	0.05	0.14	0.13	0.11	0.11	0.14
Nickel		M	2455	mg/kg	0.50	19	19	15	14	13
Lead		M	2455	mg/kg	0.50	57	62	49	48	52
Selenium		M	2455	mg/kg	0.25	0.75	0.69	0.55	0.47	0.36
Zinc		M	2455	mg/kg	0.50	88	87	75	75	79
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	3.5	2.9	3.1	2.8	2.6
Total Organic Carbon		M	2625	%	0.20	2.0	1.7	1.8	1.6	1.5
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	2.4	3.2	1.8	2.9	3.5
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	1.2	2.4	2.4	2.2	2.3
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	7.4	13	12	8.8	8.2
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	1.2	1.1	< 1.0	< 1.0
Total TPH >C6-C40	EH_1D_Total	U	2670	mg/kg	10	11	19	18	14	14
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.12
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.26
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.16

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-29418	24-29418	24-29418	24-29418	24-29418
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1865612	1865613	1865614	1865615	1865616
				Client Sample ID.:		TS IMP 101	TS IMP 102	TS IMP 103	TS IMP 104	TS IMP 105
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		11-Sep-2024	11-Sep-2024	11-Sep-2024	11-Sep-2024	11-Sep-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**					
Phenanthrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.27	1.3
Anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.32
Fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.34	1.6
Pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.29	1.3
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.56
Chrysene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.66
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.73
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.24
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.55
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.35
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.34
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	8.5
Total Phenols		M	2920	mg/kg	0.10	< 0.10	0.13	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

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2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

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customerservices@chemtest.com

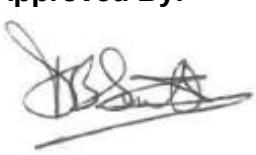
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-29961-1
Initial Date of Issue:	23-Sep-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; gcalvert@e3p.co.uk
Project	Bennett Street

Quotation No.:	Q23-31421	**Date Received:**	17-Sep-2024
Order No.:	009468	**Date Instructed:**	17-Sep-2024
No. of Samples:	3		
Turnaround (Wkdays):	5	**Results Due:**	23-Sep-2024
Date Approved:	23-Sep-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Leachate

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-29961	24-29961	24-29961
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1867619	1867620	1867621
				Client Sample ID.:		SW-MG-019	SW-MG-020	SW-MG-021
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		16-Sep-2024	16-Sep-2024	16-Sep-2024
				Time Sampled:		12:00	12:00	12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**			
pH at 20C	U	1010	2:1		4.0	10.7	10.9	11.2
Cyanide (Total) Low-Level	N	1300	2:1	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050
Arsenic (Dissolved)	U	1455	2:1	µg/l	0.20	3.9	2.1	3.9
Cadmium (Dissolved)	U	1455	2:1	µg/l	0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)	U	1455	2:1	µg/l	0.50	2.6	1.9	5.6
Copper (Dissolved)	U	1455	2:1	µg/l	0.50	13	3.0	16
Mercury (Dissolved)	U	1455	2:1	µg/l	0.05	< 0.05	< 0.05	< 0.05
Nickel (Dissolved)	U	1455	2:1	µg/l	0.50	5.5	4.1	7.4
Lead (Dissolved)	U	1455	2:1	µg/l	0.50	0.58	< 0.50	0.91
Selenium (Dissolved)	U	1455	2:1	µg/l	0.50	1.4	0.98	1.3
Zinc (Dissolved)	U	1455	2:1	µg/l	2.5	5.5	12	6.7
Chromium (Hexavalent)	U	1490	2:1	µg/l	20	< 20	< 20	< 20
C2 Aliphatic TPH >C5-C6	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C6-C8	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	2:1	µg/l	5.0	< 5.0	< 5.0	< 5.0
C2 Aromatic TPH >C5-C7	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C7-C8	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	12	4.9	38
C2 Aromatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	26
C2 Aromatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Total Aromatic Hydrocarbons	N	1675	2:1	µg/l	5.0	12	< 5.0	65
Total Petroleum Hydrocarbons	N	1675	2:1	µg/l	10	12	< 10	65
Benzene	U	1760	2:1	µg/l	1.0	21	2.8	9.7
Toluene	U	1760	2:1	µg/l	1.0	1.1	< 1.0	1.1
Ethylbenzene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	N	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
Naphthalene	N	1800	2:1	µg/l	0.010	10	3.3	19
Acenaphthylene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Acenaphthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010

Results - Leachate

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-29961	24-29961	24-29961
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1867619	1867620	1867621
				Client Sample ID.:		SW-MG-019	SW-MG-020	SW-MG-021
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		16-Sep-2024	16-Sep-2024	16-Sep-2024
				Time Sampled:		12:00	12:00	12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**			
Fluorene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Phenanthrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Pyrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Benzo[a]anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Chrysene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Benzo[b]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Benzo[k]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Benzo[a]pyrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	2:1	µg/l	0.010	< 0.010	< 0.010	< 0.010
Total Of 16 PAH's	N	1800	2:1	µg/l	0.20	10	3.3	19
Total Phenols	U	1920	2:1	mg/l	0.030	< 0.030	< 0.030	0.040

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

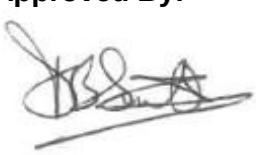
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-32045-1
Initial Date of Issue:	11-Oct-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; gcalvert@e3p.co.uk
Project	Bennett Street

Quotation No.:	Q23-31421	**Date Received:**	03-Oct-2024
Order No.:	9436	**Date Instructed:**	03-Oct-2024
No. of Samples:	6		
Turnaround (Wkdays):	5	**Results Due:**	09-Oct-2024
Date Approved:	11-Oct-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-32045	24-32045	24-32045	24-32045	24-32045	24-32045
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1875875	1875876	1875877	1875878	1875879	1875880
				Client Sample ID.:		US	MID	DS	US	MID	DS
				Sample Location:		BB	BB	BB	CB	CB	CB
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
pH at 20C		U	1010		4.0	8.4	8.4	8.4	8.4	8.2	8.5
Suspended Solids At 105C		U	1030	mg/l	5.0	13	14	16	25	14	26
Cyanide (Total) Low-Level		N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Calcium (Dissolved)		U	1455	mg/l	2.00	77	77	77	75	77	77
Arsenic (Dissolved)		U	1455	µg/l	0.20	1.1	1.0	1.1	1.1	1.1	1.2
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Copper (Dissolved)		U	1455	µg/l	0.50	8.5	9.0	9.0	8.7	8.9	8.0
Manganese (Dissolved)		U	1455	µg/l	0.50	1.7	0.93	1.5	3.2	0.69	2.2
Nickel (Dissolved)		U	1455	µg/l	0.50	1.2	0.94	0.92	1.1	0.95	1.4
Lead (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	0.50	0.56	0.52	< 0.50
Selenium (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Zinc (Dissolved)		U	1455	µg/l	2.5	14	13	15	13	13	14
Mercury Low Level		U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chromium (Hexavalent)		U	1490	µg/l	20	< 20	< 20	< 20	< 20	< 20	< 20
Dissolved Organic Carbon		U	1610	mg/l	2.0	3.8	3.6	3.8	3.5	3.6	3.5
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-32045	24-32045	24-32045	24-32045	24-32045	24-32045
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1875875	1875876	1875877	1875878	1875879	1875880
				Client Sample ID.:		US	MID	DS	US	MID	DS
				Sample Location:		BB	BB	BB	CB	CB	CB
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
Bromomethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-32045	24-32045	24-32045	24-32045	24-32045	24-32045
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1875875	1875876	1875877	1875878	1875879	1875880
				Client Sample ID.:		US	MID	DS	US	MID	DS
				Sample Location:		BB	BB	BB	CB	CB	CB
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-32045	24-32045	24-32045	24-32045	24-32045	24-32045
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1875875	1875876	1875877	1875878	1875879	1875880
				Client Sample ID.:		US	MID	DS	US	MID	DS
				Sample Location:		BB	BB	BB	CB	CB	CB
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results - Water

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-32045	24-32045	24-32045	24-32045	24-32045	24-32045
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1875875	1875876	1875877	1875878	1875879	1875880
				Client Sample ID.:		US	MID	DS	US	MID	DS
				Sample Location:		BB	BB	BB	CB	CB	CB
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024	30-Sep-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
Total Phenols		U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1030	Total Suspended Solids	Total suspended solids	Filtration of a mixed sample through a standard glass fibre filter and determination of the mass of residue retained dried at 105°C.	SW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.	PL GW
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	PL GW
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	PL SW GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

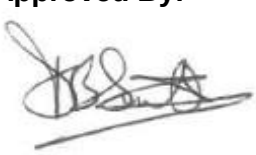
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-35015-1
Initial Date of Issue:	05-Nov-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; gcalvert@e3p.co.uk
Project	Bennett Street

Quotation No.:	Q23-31421	**Date Received:**	29-Oct-2024
Order No.:	009851	**Date Instructed:**	29-Oct-2024
No. of Samples:	3		
Turnaround (Wkdays):	5	**Results Due:**	04-Nov-2024
Date Approved:	05-Nov-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Leachate

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-35015	24-35015	24-35015
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1886860	1886861	1886862
				Client Sample ID.:		SW MG- 019	SW MG- 020	SW MG- 021
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		24-Oct-2024	24-Oct-2024	24-Oct-2024
				Time Sampled:		12:00	12:00	12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**			
pH at 20C	U	1010	2:1		4.0	8.4	8.3	8.2
Cyanide (Total) Low-Level	N	1300	2:1	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050
Arsenic (Dissolved)	U	1455	2:1	µg/l	0.20	7.7	3.2	8.5
Cadmium (Dissolved)	U	1455	2:1	µg/l	0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)	U	1455	2:1	µg/l	0.50	< 0.50	< 0.50	< 0.50
Copper (Dissolved)	U	1455	2:1	µg/l	0.50	7.8	6.2	8.6
Mercury (Dissolved)	U	1455	2:1	µg/l	0.05	< 0.05	< 0.05	< 0.05
Nickel (Dissolved)	U	1455	2:1	µg/l	0.50	< 0.50	< 0.50	< 0.50
Lead (Dissolved)	U	1455	2:1	µg/l	0.50	0.80	0.92	0.81
Selenium (Dissolved)	U	1455	2:1	µg/l	0.50	1.9	0.94	2.8
Zinc (Dissolved)	U	1455	2:1	µg/l	2.5	7.9	7.4	8.5
Chromium (Hexavalent)	U	1490	2:1	µg/l	20	< 20	< 20	< 20
C2 Aliphatic TPH >C5-C6	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C6-C8	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aliphatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	2:1	µg/l	5.0	< 5.0	< 5.0	< 5.0
C2 Aromatic TPH >C5-C7	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C7-C8	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Aromatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
C2 Total Aromatic Hydrocarbons	N	1675	2:1	µg/l	5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	2:1	µg/l	10	< 10	< 10	< 10
Benzene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
Toluene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
o-Xylene	U	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	N	1760	2:1	µg/l	1.0	< 1.0	< 1.0	< 1.0
Naphthalene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10

Results - Leachate

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-35015	24-35015	24-35015
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1886860	1886861	1886862
				Client Sample ID.:		SW MG- 019	SW MG- 020	SW MG- 021
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		24-Oct-2024	24-Oct-2024	24-Oct-2024
				Time Sampled:		12:00	12:00	12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**			
Fluorene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Chrysene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	1800	2:1	µg/l	0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	1800	2:1	µg/l	2.0	< 2.0	< 2.0	< 2.0
Total Phenols	U	1920	2:1	mg/l	0.030	< 0.030	< 0.030	< 0.030

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-35015	24-35015	24-35015
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1886860	1886861	1886862
				Client Sample ID.:		SW MG- 019	SW MG- 020	SW MG- 021
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		24-Oct-2024	24-Oct-2024	24-Oct-2024
				Time Sampled:		12:00	12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type		U	2192		N/A	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	17	19	20
Soil Colour		N	2040		N/A	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones and brick
Soil Texture		N	2040		N/A	Loam	Loam	Loam
pH at 20C		M	2010		4.0	8.8	9.3	8.6
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.32	0.29	0.28
Total Sulphur		U	2175	%	0.010	0.085	0.084	0.12
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	3.0	3.6	5.2
Sulphate (Total)		U	2430	%	0.010	0.27	0.31	0.32
Arsenic		M	2455	mg/kg	0.5	24	27	26
Cadmium		M	2455	mg/kg	0.10	0.32	0.51	0.40
Chromium		M	2455	mg/kg	0.5	39	46	30
Copper		M	2455	mg/kg	0.50	66	80	74
Mercury		M	2455	mg/kg	0.05	0.42	0.42	0.45
Nickel		M	2455	mg/kg	0.50	33	37	34
Lead		M	2455	mg/kg	0.50	230	440	150
Selenium		M	2455	mg/kg	0.25	0.99	1.1	1.0
Zinc		M	2455	mg/kg	0.50	110	140	120
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	4.0	5.9	9.1
Total Organic Carbon		M	2625	%	0.20	2.3	3.4	5.3
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	5.7	< 1.0	41
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	34	38	160
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	110	170	280
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	91	130	170
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	82	130	210
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	7.1	14	17
Total TPH >C6-C40	EH_1D_Total	U	2670	mg/kg	10	330	480	880
Naphthalene		M	2800	mg/kg	0.10	1.2	1.0	0.62
Acenaphthylene		N	2800	mg/kg	0.10	0.41	0.60	0.45
Acenaphthene		M	2800	mg/kg	0.10	1.7	1.4	1.5
Fluorene		M	2800	mg/kg	0.10	1.4	1.5	1.4

Results - Soil

Project: Bennett Street

Client: E3P				**Chemtest Job No.:**		24-35015	24-35015	24-35015
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1886860	1886861	1886862
				Client Sample ID.:		SW MG- 019	SW MG- 020	SW MG- 021
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		24-Oct-2024	24-Oct-2024	24-Oct-2024
				Time Sampled:		12:00	12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Phenanthrene		M	2800	mg/kg	0.10	9.7	9.3	10
Anthracene		M	2800	mg/kg	0.10	2.8	2.7	3.0
Fluoranthene		M	2800	mg/kg	0.10	12	13	15
Pyrene		M	2800	mg/kg	0.10	11	11	13
Benzo[a]anthracene		M	2800	mg/kg	0.10	5.7	6.0	6.7
Chrysene		M	2800	mg/kg	0.10	5.8	6.1	6.8
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	6.3	7.0	7.6
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	2.3	2.5	2.7
Benzo[a]pyrene		M	2800	mg/kg	0.10	5.2	5.8	6.3
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	2.6	2.9	3.3
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	0.55	0.65	0.71
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	2.5	2.9	3.3
Total Of 16 PAH's		N	2800	mg/kg	2.0	71	74	82
Total Phenols		M	2920	mg/kg	0.10	0.50	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW FW
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

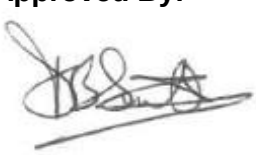
Eurofins Chemtest Ltd
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CB8 0AL
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Email: info@chemtest.com

Final Report

Report No.:	24-35026-1
Initial Date of Issue:	05-Nov-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; gcalvert@e3p.co.uk
Project	Bennett Street Waters

Quotation No.:	Q23-31421	**Date Received:**	29-Oct-2024
Order No.:	009844	**Date Instructed:**	29-Oct-2024
No. of Samples:	6		
Turnaround (Wkdays):	5	**Results Due:**	04-Nov-2024
Date Approved:	05-Nov-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Water

Project: Bennett Street Waters

Client: E3P					**Chemtest Job No.:**	24-35026	24-35026	24-35026	24-35026	24-35026	24-35026
Quotation No.: Q23-31421					**Chemtest Sample ID.:**	1886910	1886911	1886912	1886913	1886914	1886915
					Client Sample ID.:	CB UP	CB MID	CB DOWN	BB UP	BB MID	BB DOWN
					Sample Type:	WATER	WATER	WATER	WATER	WATER	WATER
					Sample Sub Type:						
					Date Sampled:	24-Oct-2024	24-Oct-2024	24-Oct-2024	24-Oct-2024	24-Oct-2024	24-Oct-2024
					Time Sampled:	12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
pH at 20C		U	1010		4.0	8.3	8.2	8.3	8.0	8.1	8.0
Suspended Solids At 105C		U	1030	mg/l	5.0	< 5.0	< 5.0	8.0	< 5.0	< 5.0	< 5.0
Cyanide (Total) Low-Level		N	1300	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Calcium (Dissolved)		U	1455	mg/l	2.00	120	120	120	150	140	150
Arsenic (Dissolved)		U	1455	µg/l	0.20	3.2	3.4	3.1	1.3	1.2	1.3
Cadmium (Dissolved)		U	1455	µg/l	0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)		U	1455	µg/l	0.50	1.2	0.77	2.0	0.74	0.93	0.52
Copper (Dissolved)		U	1455	µg/l	0.50	4.1	3.1	2.6	9.1	8.2	8.6
Manganese (Dissolved)		U	1455	µg/l	0.50	58	73	60	270	230	280
Nickel (Dissolved)		U	1455	µg/l	0.50	5.5	4.1	4.3	3.4	3.5	3.0
Lead (Dissolved)		U	1455	µg/l	0.50	< 0.50	< 0.50	< 0.50	0.54	0.53	0.52
Selenium (Dissolved)		U	1455	µg/l	0.50	0.51	0.67	0.64	0.51	0.54	0.63
Zinc (Dissolved)		U	1455	µg/l	2.5	39	44	54	19	28	44
Mercury Low Level		U	1460	µg/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Chromium (Hexavalent)		U	1490	µg/l	20	[B] < 20	[B] < 20	[B] < 20	[B] < 20	[B] < 20	[B] < 20
Dissolved Organic Carbon		U	1610	mg/l	2.0	5.6	5.4	5.3	4.0	4.0	4.0
Aliphatic TPH >C5-C6	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C6-C8	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C8-C10	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C10-C12	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C12-C16	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C16-C21	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C21-C35	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aliphatic TPH >C35-C44	EH_2D_AL_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aliphatic Hydrocarbons	EH_2D_AL_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C7-C8	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C8-C10	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C10-C12	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C12-C16	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C16-C21	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C21-C35	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Aromatic TPH >C35-C44	EH_2D_AR_#1	N	1675	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aromatic Hydrocarbons	EH_2D_AR_#1	N	1675	µg/l	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	EH_2D_Total_#1	N	1675	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Dichlorodifluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5

Results - Water

Project: Bennett Street Waters

Client: E3P				**Chemtest Job No.:**		24-35026	24-35026	24-35026	24-35026	24-35026	24-35026
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1886910	1886911	1886912	1886913	1886914	1886915
				Client Sample ID.:		CB UP	CB MID	CB DOWN	BB UP	BB MID	BB DOWN
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		24-Oct-2024	24-Oct-2024	24-Oct-2024	24-Oct-2024	24-Oct-2024	24-Oct-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
Chloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichlorofluoromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis 1,2-Dichloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Trichloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Trichloroethene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Bromodichloromethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
cis-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Toluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-Dichloropropene		N	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,1,2-Trichloroethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dibromochloromethane		U	1760	µg/l	10	< 10	< 10	< 10	< 10	< 10	< 10
1,2-Dibromoethane		U	1760	µg/l	5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane		N	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
N-Propylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Water

Project: Bennett Street Waters

Client: E3P				**Chemtest Job No.:**		24-35026	24-35026	24-35026	24-35026	24-35026	24-35026
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1886910	1886911	1886912	1886913	1886914	1886915
				Client Sample ID.:		CB UP	CB MID	CB DOWN	BB UP	BB MID	BB DOWN
				Sample Type:		WATER	WATER	WATER	WATER	WATER	WATER
				Sample Sub Type:							
				Date Sampled:		24-Oct-2024	24-Oct-2024	24-Oct-2024	24-Oct-2024	24-Oct-2024	24-Oct-2024
				Time Sampled:		12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
Tert-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sec-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Isopropyltoluene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Butylbenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane		U	1760	µg/l	50	< 50	< 50	< 50	< 50	< 50	< 50
1,2,4-Trichlorobenzene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene		U	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene		U	1760	µg/l	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Methyl Tert-Butyl Ether		N	1760	µg/l	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
N-Nitrosodimethylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Chlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis-(2-Chloroethyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-Dichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylphenol (o-Cresol)		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroisopropyl)Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachloroethane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
N-Nitrosodi-n-propylamine		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Nitrobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Isophorone		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dimethylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Chloroethoxy)Methane		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2,4-Trichlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Naphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobutadiene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chloro-3-Methylphenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methylnaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,6-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4,5-Trichlorophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Results - Water

Project: Bennett Street Waters

Client: E3P			**Chemtest Job No.:**			24-35026	24-35026	24-35026	24-35026	24-35026	24-35026
Quotation No.: Q23-31421			**Chemtest Sample ID.:**			1886910	1886911	1886912	1886913	1886914	1886915
					Client Sample ID.:	CB UP	CB MID	CB DOWN	BB UP	BB MID	BB DOWN
					Sample Type:	WATER	WATER	WATER	WATER	WATER	WATER
					Sample Sub Type:						
					Date Sampled:	24-Oct-2024	24-Oct-2024	24-Oct-2024	24-Oct-2024	24-Oct-2024	24-Oct-2024
					Time Sampled:	12:00	12:00	12:00	12:00	12:00	12:00
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**						
2-Chloronaphthalene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dimethylphthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,6-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Acenaphthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
3-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenzofuran		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Chlorophenylphenylether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2,4-Dinitrotoluene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluorene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Diethyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitroaniline		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-Methyl-4,6-Dinitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Azobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Bromophenylphenyl Ether		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Hexachlorobenzene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Phenanthrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Carbazole		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Butyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Butylbenzyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chrysene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Bis(2-Ethylhexyl)Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Di-N-Octyl Phthalate		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[b]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[k]fluoranthene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[a]pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Indeno(1,2,3-c,d)Pyrene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Dibenz(a,h)Anthracene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Benzo[g,h,i]perylene		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
4-Nitrophenol		N	1790	µg/l	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Total Phenols		U	1920	mg/l	0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030	< 0.030

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1886910		CB UP		24-Oct-2024	B	Coloured Winchester 1000ml
1886910		CB UP		24-Oct-2024	B	EPA Vial 40ml
1886910		CB UP		24-Oct-2024	B	Plastic Bottle 1000ml
1886911		CB MID		24-Oct-2024	B	Coloured Winchester 1000ml
1886911		CB MID		24-Oct-2024	B	EPA Vial 40ml
1886911		CB MID		24-Oct-2024	B	Plastic Bottle 1000ml
1886912		CB DOWN		24-Oct-2024	B	Coloured Winchester 1000ml
1886912		CB DOWN		24-Oct-2024	B	EPA Vial 40ml
1886912		CB DOWN		24-Oct-2024	B	Plastic Bottle 1000ml
1886913		BB UP		24-Oct-2024	B	Coloured Winchester 1000ml
1886913		BB UP		24-Oct-2024	B	EPA Vial 40ml
1886913		BB UP		24-Oct-2024	B	Plastic Bottle 1000ml
1886914		BB MID		24-Oct-2024	B	Coloured Winchester 1000ml
1886914		BB MID		24-Oct-2024	B	EPA Vial 40ml
1886914		BB MID		24-Oct-2024	B	Plastic Bottle 1000ml
1886915		BB DOWN		24-Oct-2024	B	Coloured Winchester 1000ml
1886915		BB DOWN		24-Oct-2024	B	EPA Vial 40ml
1886915		BB DOWN		24-Oct-2024	B	Plastic Bottle 1000ml

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	RE PW TE TS PL DW GW
1030	Total Suspended Solids	Total suspended solids	Filtration of a mixed sample through a standard glass fibre filter and determination of the mass of residue retained dried at 105°C.	SW
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	RE PW PL SW DW GW
1460	Mercury low-level in Waters by AFS	Mercury	Atomic Fluorescence Spectrometry, with collimated UV source, wavelength 253.7 nm.	PL GW
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	PL GW
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation	PL SW GW
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	PL GW
1790	Semi-Volatile Organic Compounds (SVOCs) in Waters by GC-MS	Semi-volatile organic compounds	Solvent extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	PL GW

Report Information

Key

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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

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Uncertainty of measurement for the determinands tested are available upon request .
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All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

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

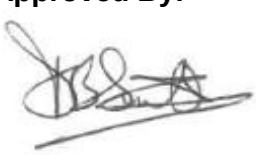
Final Report

Report No.:	24-36526-1
Initial Date of Issue:	13-Nov-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	mdee@e3p.co.uk; gcalvert@e3p.co.uk
Project	Bennett

Quotation No.:		**Date Received:**	08-Nov-2024
Order No.:	009989	**Date Instructed:**	08-Nov-2024
No. of Samples:	5		
Turnaround (Wkdays):	5	**Results Due:**	14-Nov-2024

Date Approved: 13-Nov-2024

Approved By:



Details: David Smith, Technical Director

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

Results - Soil

Project: Bennett

Client: E3P				**Chemtest Job No.:**		24-36526	24-36526	24-36526	24-36526	24-36526
Quotation No.:				**Chemtest Sample ID.:**		1892694	1892695	1892696	1892697	1892698
				Client Sample ID.:		CONG TS 001	CONG TS 002	CONG TS 003	CONG TS 004	CONG TS 005
				Sample Location:		IMP	IMP	IMP	IMP	IMP
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		05-Nov-2024	05-Nov-2024	05-Nov-2024	05-Nov-2024	05-Nov-2024
				Time Sampled:		0:00	0:00	0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**					
ACM Type		U	2192		N/A	-	-	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	12	11	13	14	11
Soil Colour		N	2040		N/A	Brown	Brown	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones	Stones and Roots	Stones and Roots
Soil Texture		N	2040		N/A	Loam	Loam	Loam	Loam	Loam
pH at 20C		M	2010		4.0	7.7	7.8	7.6	7.7	7.9
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.089	0.098	0.078	0.089	0.12
Total Sulphur		U	2175	%	0.010	0.030	0.040	0.080	0.050	0.040
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	3.0	3.1	2.1	2.7	3.7
Sulphate (Total)		U	2430	%	0.010	0.068	0.040	0.031	0.087	0.14
Arsenic		M	2455	mg/kg	0.5	6.1	6.0	4.5	5.0	11
Cadmium		M	2455	mg/kg	0.10	0.18	0.26	0.17	0.19	0.29
Chromium		M	2455	mg/kg	0.5	6.4	5.8	4.6	5.9	14
Copper		M	2455	mg/kg	0.50	20	22	14	14	39
Mercury		M	2455	mg/kg	0.05	0.13	0.11	0.08	0.09	0.21
Nickel		M	2455	mg/kg	0.50	7.6	7.5	5.4	6.6	16
Lead		M	2455	mg/kg	0.50	37	42	24	26	71
Selenium		M	2455	mg/kg	0.25	0.48	0.42	0.34	0.36	0.67
Zinc		M	2455	mg/kg	0.50	39	46	25	33	65
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	3.5	2.9	4.0	4.3	3.5
Total Organic Carbon		M	2625	%	0.20	2.0	1.7	2.3	2.5	2.0
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	7.8	3.8	3.8	5.8	4.1
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	18	6.0	6.2	8.1	9.6
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	31	15	19	16	15
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	5.3	3.4	3.2	3.0	2.4
Total TPH >C6-C40	EH_1D_Total	U	2670	mg/kg	10	62	28	32	33	31
Naphthalene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

Project: Bennett

Client: E3P				**Chemtest Job No.:**		24-36526	24-36526	24-36526	24-36526	24-36526
Quotation No.:				**Chemtest Sample ID.:**		1892694	1892695	1892696	1892697	1892698
				Client Sample ID.:		CONG TS 001	CONG TS 002	CONG TS 003	CONG TS 004	CONG TS 005
				Sample Location:		IMP	IMP	IMP	IMP	IMP
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL
				Date Sampled:		05-Nov-2024	05-Nov-2024	05-Nov-2024	05-Nov-2024	05-Nov-2024
				Time Sampled:		0:00	0:00	0:00	0:00	0:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**					
Fluorene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2800	mg/kg	0.10	0.28	0.28	0.24	0.37	0.36
Anthracene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.13	< 0.10
Fluoranthene		M	2800	mg/kg	0.10	0.40	0.41	0.37	0.75	0.58
Pyrene		M	2800	mg/kg	0.10	0.37	0.40	0.39	0.85	0.52
Benzo[a]anthracene		M	2800	mg/kg	0.10	< 0.10	0.21	< 0.10	0.53	< 0.10
Chrysene		M	2800	mg/kg	0.10	< 0.10	0.20	< 0.10	0.49	< 0.10
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.68	< 0.10
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.45	< 0.10
Benzo[a]pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.49	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.44	< 0.10
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.33	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	< 0.10	< 0.10	< 0.10	0.49	< 0.10
Total Of 16 PAH's		N	2800	mg/kg	2.0	< 2.0	< 2.0	< 2.0	6.0	< 2.0
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

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Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

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

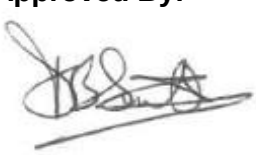
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	24-20643-1
Initial Date of Issue:	10-Jul-2024
Re-Issue Details:	
Client	E3P
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ
Contact(s):	gcalvert@e3p.co.uk; jbeer@e3p.co.uk; mdee@e3p.co.uk
Project	Bennett Street 15-974

Quotation No.:	Q23-31421	**Date Received:**	28-Jun-2024
Order No.:	008630	**Date Instructed:**	28-Jun-2024
No. of Samples:	3		
Turnaround (Wkdays):	5	**Results Due:**	04-Jul-2024
Date Approved:	10-Jul-2024		

Approved By:



Details: David Smith, Technical Director

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

Results - Leachate

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-20643
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1828018
Order No.: 008630				Client Sample Ref.:		AST-101
				Client Sample ID.:		AST-101
				Sample Type:		SOIL
				Date Sampled:		27-Jun-2024
				Time Sampled:		12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**	
pH at 20C	U	1010	2:1		4.0	9.8
Cyanide (Total) Low-Level	N	1300	2:1	mg/l	0.0050	< 0.0050
Arsenic (Dissolved)	U	1455	2:1	µg/l	0.20	8.8
Cadmium (Dissolved)	U	1455	2:1	µg/l	0.11	< 0.11
Chromium (Dissolved)	U	1455	2:1	µg/l	0.50	6.9
Copper (Dissolved)	U	1455	2:1	µg/l	0.50	57
Mercury (Dissolved)	U	1455	2:1	µg/l	0.05	< 0.05
Nickel (Dissolved)	U	1455	2:1	µg/l	0.50	7.0
Lead (Dissolved)	U	1455	2:1	µg/l	0.50	< 0.50
Selenium (Dissolved)	U	1455	2:1	µg/l	0.50	3.0
Zinc (Dissolved)	U	1455	2:1	µg/l	2.5	< 2.5
Chromium (Hexavalent)	U	1490	2:1	µg/l	20	< 20
C2 Aliphatic TPH >C5-C6	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C6-C8	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aliphatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10
Total Aliphatic Hydrocarbons	N	1675	2:1	µg/l	5.0	< 5.0
C2 Aromatic TPH >C5-C7	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C7-C8	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	< 0.10
C2 Aromatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	< 0.10
C2 Total Aromatic Hydrocarbons	N	1675	2:1	µg/l	5.0	< 5.0
Total Petroleum Hydrocarbons	N	1675	2:1	µg/l	10	< 10
Benzene	U	1760	2:1	µg/l	1.0	< 1.0
Toluene	U	1760	2:1	µg/l	1.0	< 1.0
Ethylbenzene	U	1760	2:1	µg/l	1.0	< 1.0
m & p-Xylene	U	1760	2:1	µg/l	1.0	< 1.0
o-Xylene	U	1760	2:1	µg/l	1.0	< 1.0
Methyl Tert-Butyl Ether	N	1760	2:1	µg/l	1.0	< 1.0
Naphthalene	N	1800	2:1	µg/l	0.010	57
Acenaphthylene	N	1800	2:1	µg/l	0.010	< 0.010

Results - Leachate

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-20643
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1828018
Order No.: 008630				Client Sample Ref.:		AST-101
				Client Sample ID.:		AST-101
				Sample Type:		SOIL
				Date Sampled:		27-Jun-2024
				Time Sampled:		12:00
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**	
Acenaphthene	N	1800	2:1	µg/l	0.010	< 0.010
Fluorene	N	1800	2:1	µg/l	0.010	< 0.010
Phenanthrene	N	1800	2:1	µg/l	0.010	< 0.010
Anthracene	N	1800	2:1	µg/l	0.010	< 0.010
Fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010
Pyrene	N	1800	2:1	µg/l	0.010	6.0
Benzo[a]anthracene	N	1800	2:1	µg/l	0.010	< 0.010
Chrysene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[b]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[k]fluoranthene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[a]pyrene	N	1800	2:1	µg/l	0.010	< 0.010
Indeno(1,2,3-c,d)Pyrene	N	1800	2:1	µg/l	0.010	< 0.010
Dibenz(a,h)Anthracene	N	1800	2:1	µg/l	0.010	< 0.010
Benzo[g,h,i]perylene	N	1800	2:1	µg/l	0.010	< 0.010
Total Of 16 PAH's	N	1800	2:1	µg/l	0.20	63
Total Phenols	U	1920	2:1	mg/l	0.030	< 0.030

Results - Soil

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-20643	24-20643	24-20643
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1828018	1828019	1828020
Order No.: 008630				Client Sample Ref.:		AST-101	AST-102	AST-103
				Client Sample ID.:		AST-101	AST-102	AST-103
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		27-Jun-2024	27-Jun-2024	27-Jun-2024
				Time Sampled:		12:00	12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type		U	2192		N/A	-	-	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture		N	2030	%	0.020	4.6	3.6	3.9
Soil Colour		N	2040		N/A	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones	Stones	Stones
Soil Texture		N	2040		N/A	Loam	Loam	Loam
pH at 20C		M	2010		4.0	8.4	8.2	7.9
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	1.1	1.0	0.73
Total Sulphur		U	2175	%	0.010	0.24	0.25	0.17
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	4.4	5.0	7.2
Sulphate (Total)		U	2430	%	0.010	0.61	0.42	0.29
Arsenic		M	2455	mg/kg	0.5	20	13	9.7
Cadmium		M	2455	mg/kg	0.10	0.50	0.25	0.21
Chromium		M	2455	mg/kg	0.5	23	18	14
Copper		M	2455	mg/kg	0.50	110	73	46
Mercury		M	2455	mg/kg	0.05	1.6	1.1	0.58
Nickel		M	2455	mg/kg	0.50	30	18	16
Lead		M	2455	mg/kg	0.50	330	200	130
Selenium		M	2455	mg/kg	0.25	0.68	0.30	< 0.25
Zinc		M	2455	mg/kg	0.50	210	250	86
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	7.2	17	4.7
Total Organic Carbon		M	2625	%	0.20	4.2	9.6	2.7
TPH >C6-C8	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C8-C10	EH_1D_Total	N	2670	mg/kg	1.0	< 1.0	< 1.0	< 1.0
TPH >C10-C12	EH_1D_Total	N	2670	mg/kg	1.0	16	23	14
TPH >C12-C16	EH_1D_Total	N	2670	mg/kg	1.0	83	150	98
TPH >C16-C21	EH_1D_Total	N	2670	mg/kg	1.0	320	510	420
TPH >C21-C25	EH_1D_Total	N	2670	mg/kg	1.0	230	320	310
TPH >C25-C35	EH_1D_Total	N	2670	mg/kg	1.0	400	500	490
TPH >C35-C40	EH_1D_Total	N	2670	mg/kg	1.0	90	77	66
Total TPH >C6-C40	EH_1D_Total	M	2670	mg/kg	10	1100	1600	1400
Naphthalene		M	2800	mg/kg	0.10	< 0.10	5.4	1.4
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10	0.45	0.22
Acenaphthene		M	2800	mg/kg	0.10	< 0.10	8.6	3.3
Fluorene		M	2800	mg/kg	0.10	< 0.10	7.5	2.5

Results - Soil

Project: Bennett Street 15-974

Client: E3P				**Chemtest Job No.:**		24-20643	24-20643	24-20643
Quotation No.: Q23-31421				**Chemtest Sample ID.:**		1828018	1828019	1828020
Order No.: 008630				Client Sample Ref.:		AST-101	AST-102	AST-103
				Client Sample ID.:		AST-101	AST-102	AST-103
				Sample Type:		SOIL	SOIL	SOIL
				Date Sampled:		27-Jun-2024	27-Jun-2024	27-Jun-2024
				Time Sampled:		12:00	12:00	12:00
				Asbestos Lab:		DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
Phenanthrene		M	2800	mg/kg	0.10	53	47	20
Anthracene		M	2800	mg/kg	0.10	15	14	6.0
Fluoranthene		M	2800	mg/kg	0.10	68	57	32
Pyrene		M	2800	mg/kg	0.10	59	49	28
Benzo[a]anthracene		M	2800	mg/kg	0.10	28	23	14
Chrysene		M	2800	mg/kg	0.10	28	23	14
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	32	27	16
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	11	9.5	5.3
Benzo[a]pyrene		M	2800	mg/kg	0.10	28	23	14
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	16	13	8.3
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	3.2	3.0	1.7
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	15	13	7.5
Total Of 16 PAH's		N	2800	mg/kg	2.0	360	320	170
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
1010	pH Value of Waters	pH at 20°C	pH Meter	
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.	
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).	
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	Aliphatics: >C5–C6, >C6–C8, >C8– C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Pentane extraction / GCxGC FID detection	
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.	
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection	
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.	
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenz[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge	

Report Information

Key

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

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

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

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

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

Report Information

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

Clean Up Codes

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

HWOL Acronym System

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

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

APPENDIX V
PHOTOGRAPHS

PLATE 1 CORDENED OFF JAPANESE KNOTWEED IN SOUTHEAST



PLATE 2 DEMOLITION TO NORTHERN SIDE OF SOUTH WEST STRUCTURE



PLATE 3 DEMOLITION OF STRUCTURES



PLATE 4 DEMOLITION OF STRUCTURES



PLATE 5 REMOVAL OF SANDSTONE SETTS AND COAL TAR



PLATE 6 SEGRATED DEMOLITION WASTE DURING SITE CLEARANCE



PLATE 7 DEMOLITION OF FORMER BUS TERMINAL



PLATE 8 SEGRATED AND BAGGED SANDSTONE SETTS



PLATE 9 SEGREGATION OF WASTE MATERIAL



PLATE 10 BREAKING OUT OF CONCRETE SLAB



PLATE 11 ALLOCATED SKIPS FOR ASBESTOS WASTE



PLATE 12 STOCKPILED MADE GROUND (SP1-01)



PLATE 13 ASBESTOS LAGGING



PLATE 14 VISIBLE ASBESTOS



PLATE 15 SOUTHERN BURIAL PIT



PLATE 16 NORTHERN BURIAL PIT



PLATE 17 VISIBLE ASBESTOS



PLATE 18 EXCAVATION OF HISTORIC INFILLED CHIMNEY BASE



PLATE 19 EXCAVATED COAL TAR STOCKPILE REMOVED FROM SITE



PLATE 20 NORTHWEST HOTSPOT



PLATE 21 EXCAVATION OF MADE GROUND TO TOP OF NATURAL STRATUM



PLATE 22 EXCAVATION AND REMOVAL OF DEEPER OBSTRUCTIONS WIHTIN MADE GROUND



PLATE 23 SORTING OF MADE GROUND TO REMOVE OVERSIZE MATERIAL



PLATE 24 OVERSIZED MATERIAL TO BE PROCESSED



PLATE 25 REMOVAL OF OBSTRUCTIONS



PLATE 26 SCREENED MADE GROUND



PLATE 27 REMOVAL OF DELETERIOUS MATERIAL



PLATE 28 REMOVAL OF DELETERIOUS MATERIAL



PLATE 29 REMOVAL OF DELETERIOUS MATERIAL



PLATE 30 REMOVAL OF AST



PLATE 31 EXCAVTION IN AREA OF HISTORIC UST



PLATE 32 SITE-WON MADE GROUND STOCKPILE



PLATE 33 UPFILL OF SITE-WON MADE GROUND



PLATE 34 UPFILL OF SITE-WON MADE GROUND



PLATE 35 UPFILL OF SITE-WON MADE GROUND



PLATE 36 PREPARATION FOR VIBRO



PLATE 37 PLACEMENT OF PILE MATS



PLATE 38 PLACEMENT OF PILE MATS



PLATE 39 PLACEMENT OF PILE MATS



PLATE 40 PLACEMENT OF PILE MATS



PLATE 41 PLACEMENT OF PILE MATS



PLATE 42 EXCAVTION OF SOFT CLAY AND MADE GROUND IN AREA OF INFILLED POND



PLATE 43 POND EXCAVATION IN PHASE 1

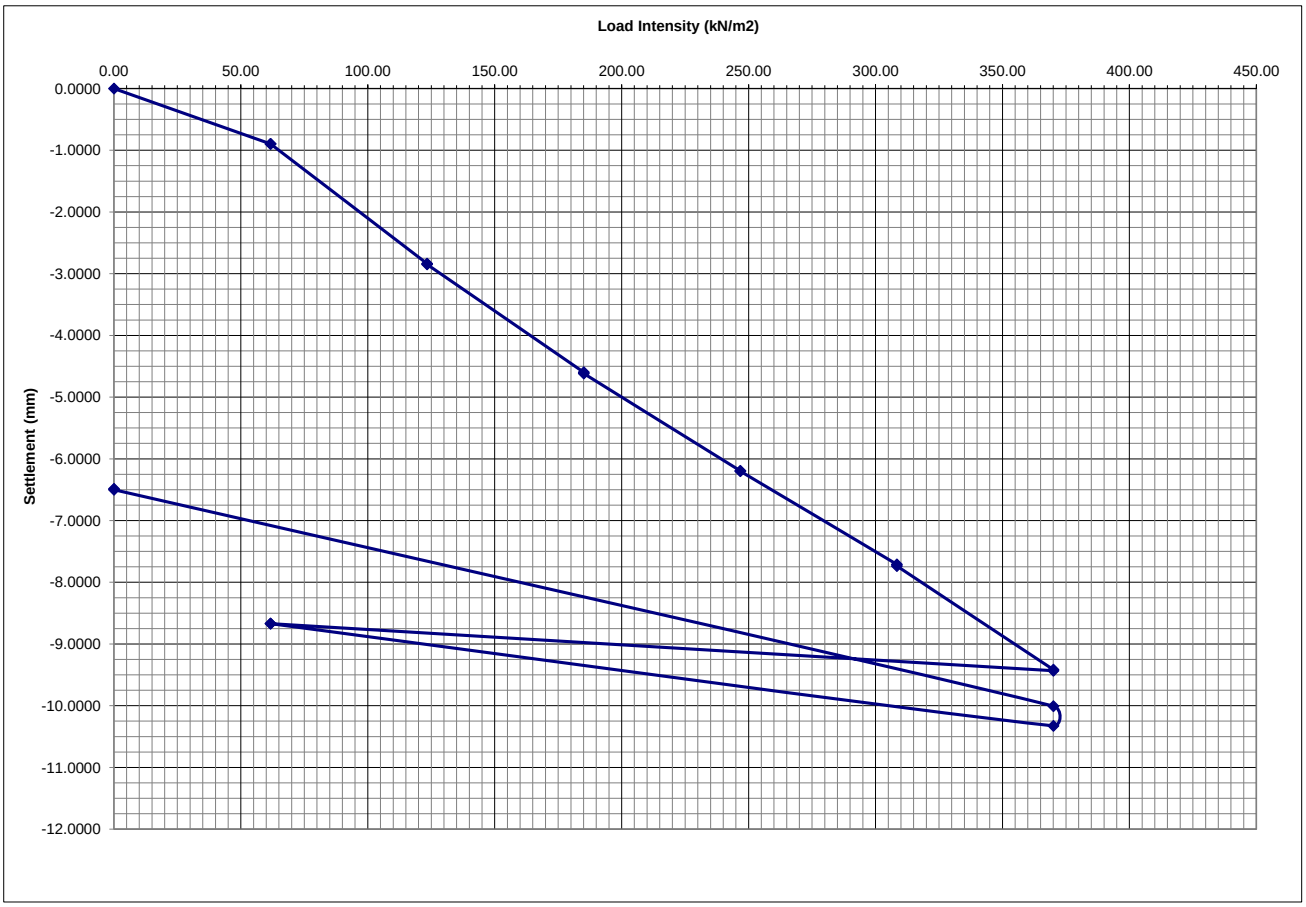


APPENDIX V
GEOTECHNICAL TESTING RESULTS

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	01/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	AB1-CBR101	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386239
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	396914
Maximum Deformation (mm):	-10.33	**Weather:**	Sunny
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 5%

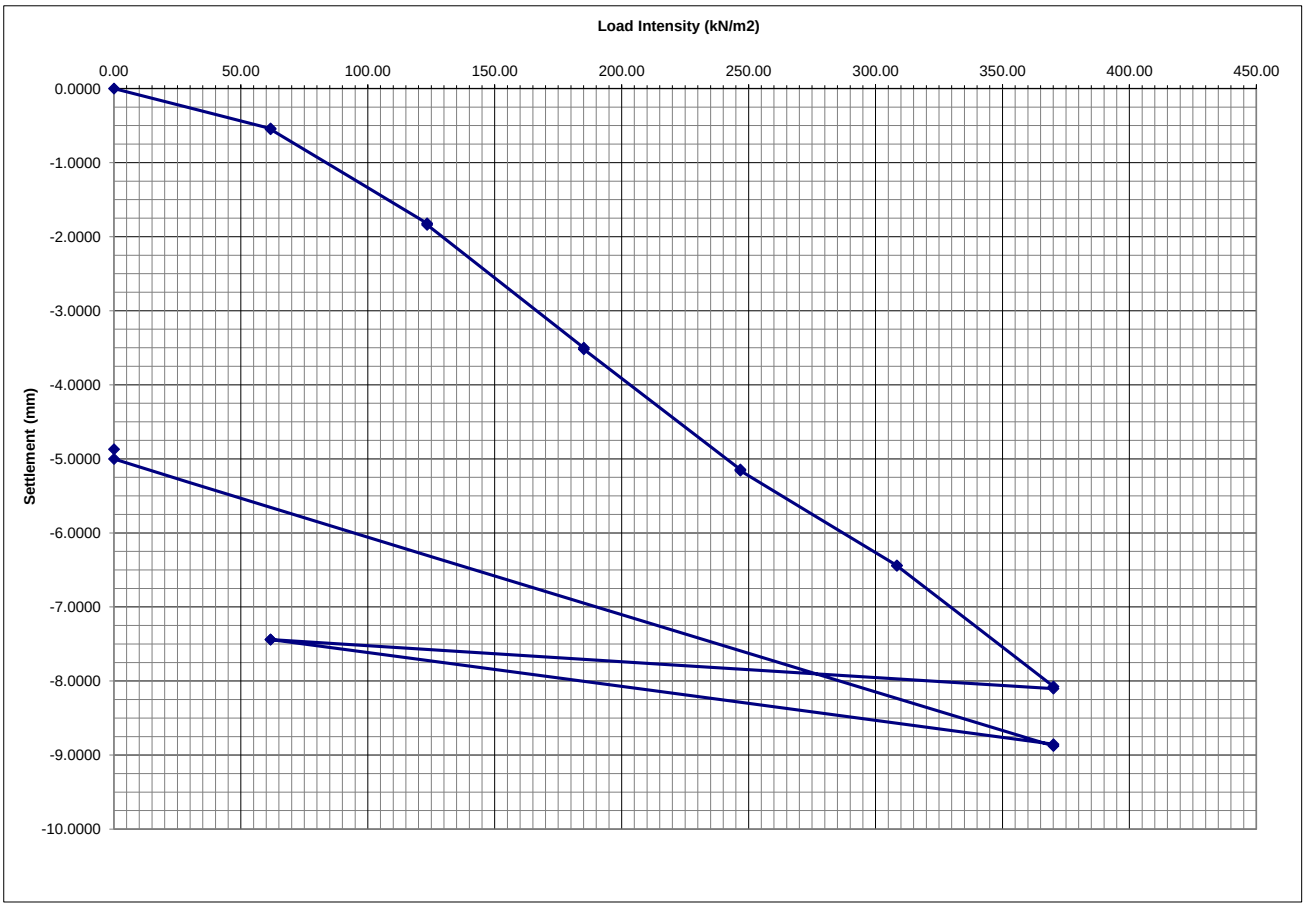
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	01/09/2023	S. Ellis	01/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	01/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	AB1-CBR102	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386239
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	396899
Maximum Deformation (mm):	-8.88	**Weather:**	Sunny
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 8%

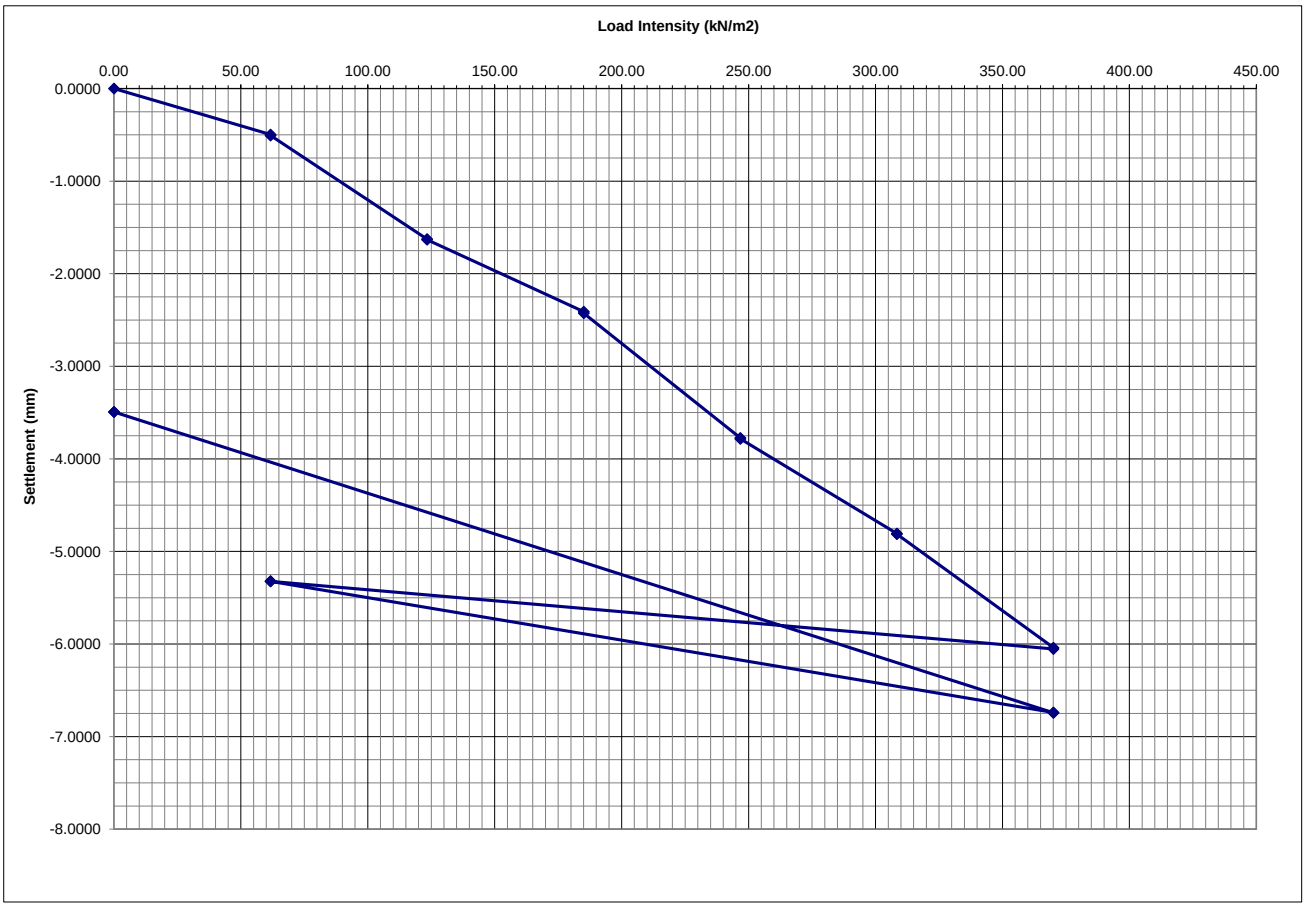
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	01/09/2023	S. Ellis	01/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	01/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	AB1-CBR103	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386233
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	396914
Maximum Deformation (mm):	-6.74	**Weather:**	Sunny
Strata Description:	Road Box (6F5)		



Equivalent CBR Value of 10%

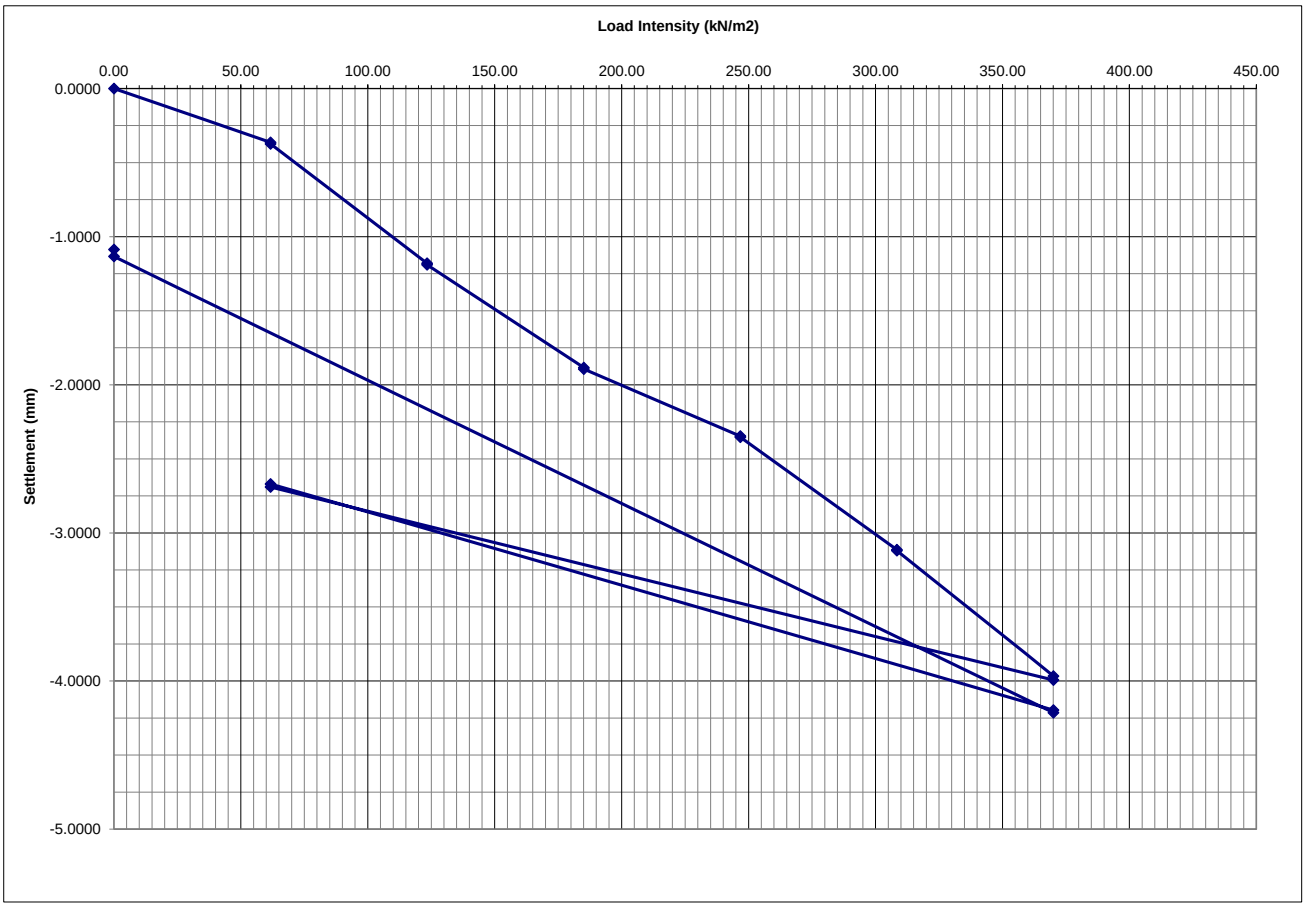
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	01/09/2023	S. Ellis	01/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	15/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	Plot 9/10-CBR	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386262
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	396920
Maximum Deformation (mm):	-4.21	**Weather:**	Dry
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 14%

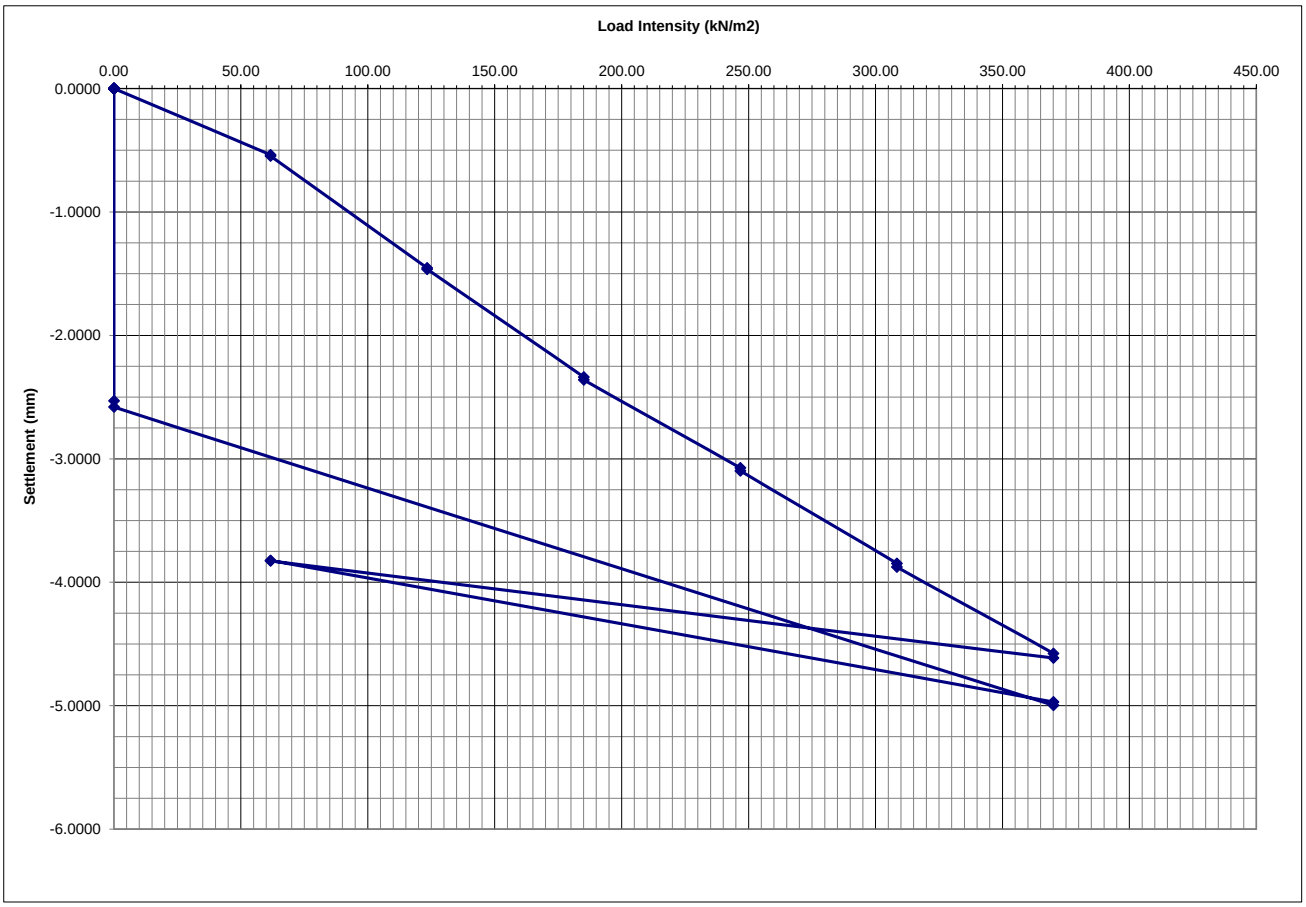
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R. Webster	M. Dee	15/09/2023	R. Walker	15/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	15/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	Plot 13/14-CBR	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386255
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	396933
Maximum Deformation (mm):	-5.00	**Weather:**	Dry
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 10%

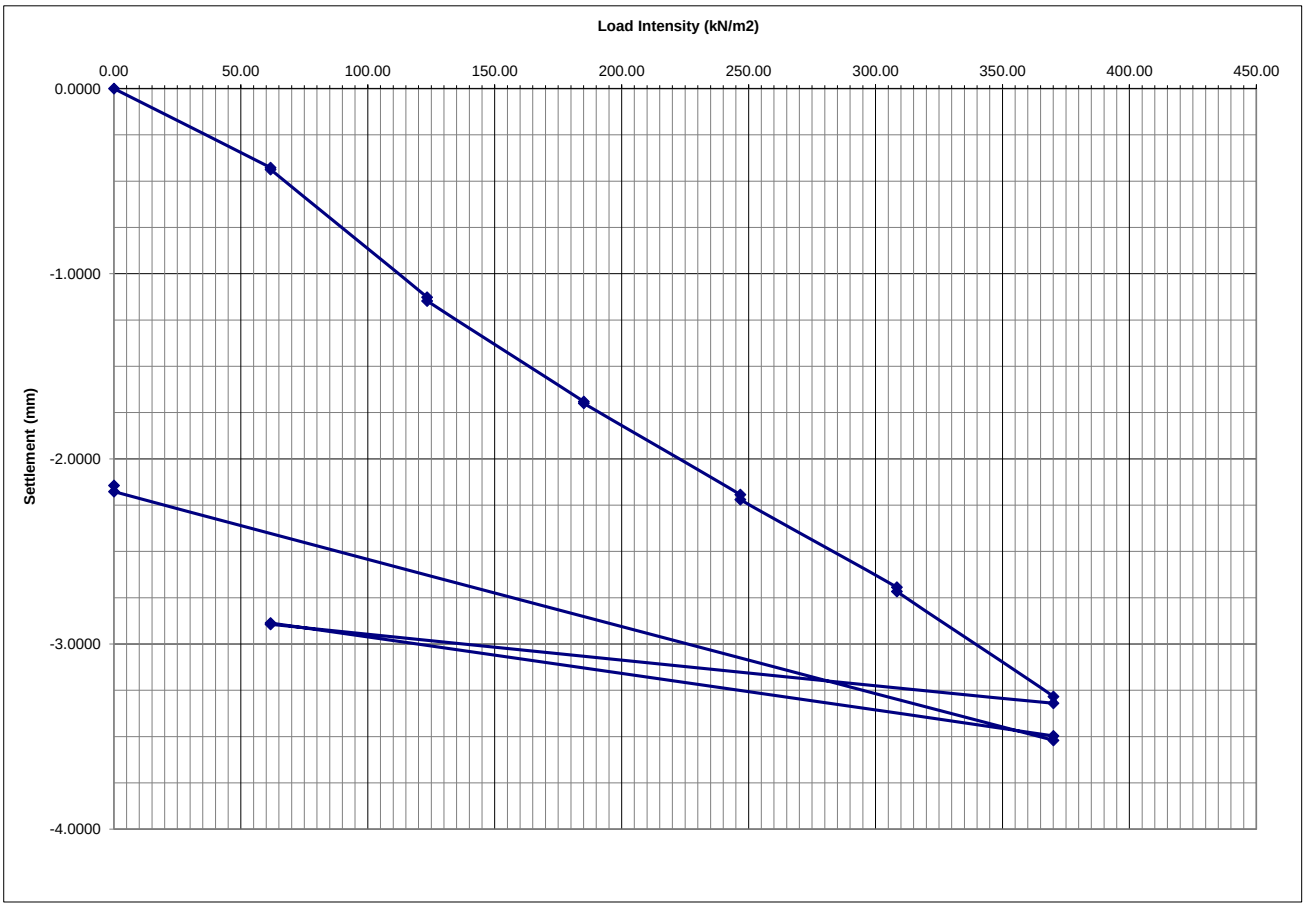
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R. Webster	M. Dee	15/09/2023	R. Walker	15/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	15/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	Plot16/17-CBR	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386249
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	396946
Maximum Deformation (mm):	-3.52	**Weather:**	Dry
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 15%

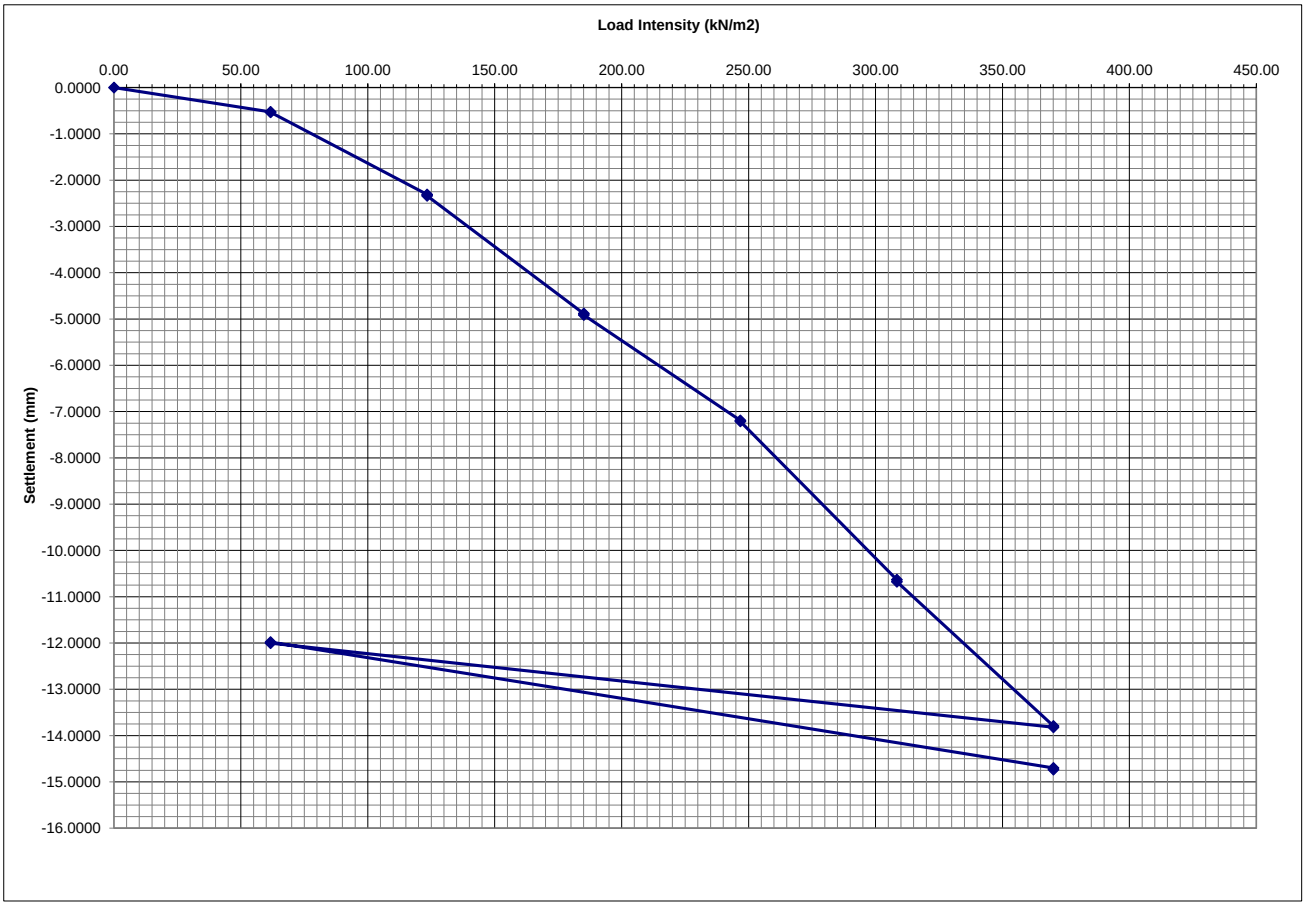
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R. Webster	M. Dee	15/09/2023	R. Walker	15/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	15/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	AB2-CBR101	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386251
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	396911
Maximum Deformation (mm):	-14.74	**Weather:**	Dry
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 7%

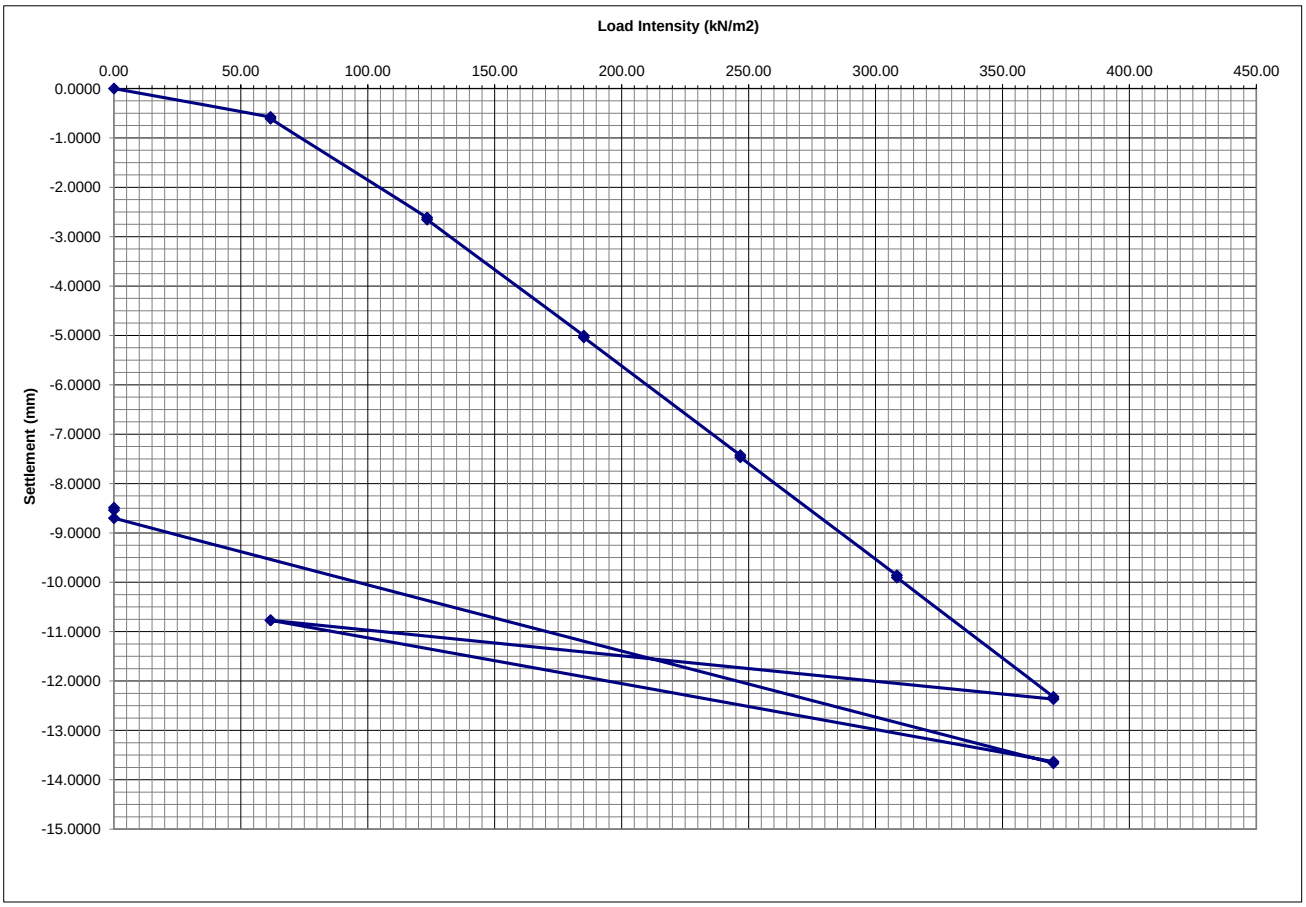
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R. Webster	M. Dee	15/09/2023	R. Walker	15/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	15/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	AB2-CBR102	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386245
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	396926
Maximum Deformation (mm):	-13.66	**Weather:**	Dry
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 6%

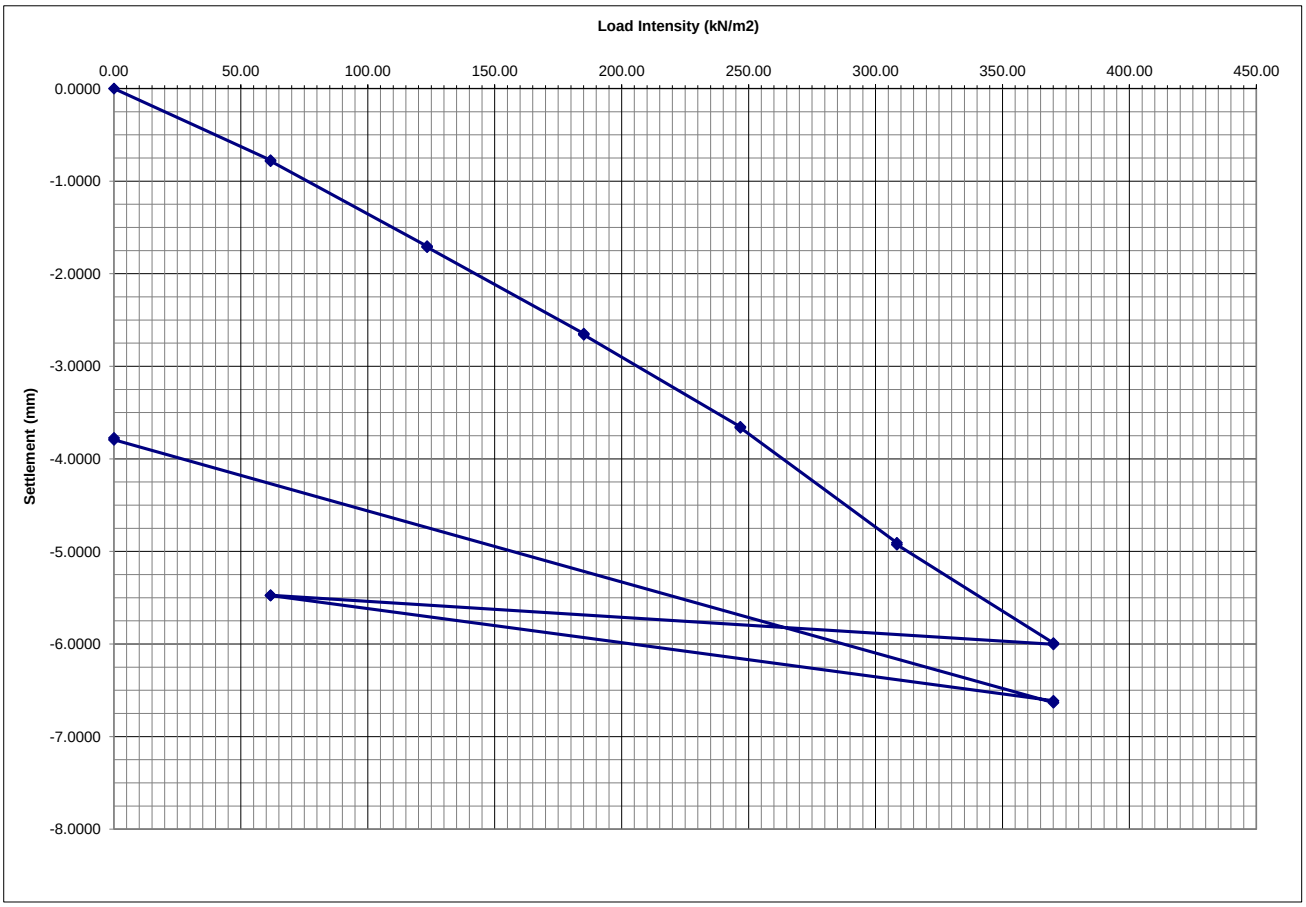
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R. Webster	M. Dee	15/09/2023	R. Walker	15/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	20/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	RoadCBR-101	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386251
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	396911
Maximum Deformation (mm):	-6.63	**Weather:**	Rain
Strata Description:	Road Formation (6F5)		



Equivalent CBR Value of 8%

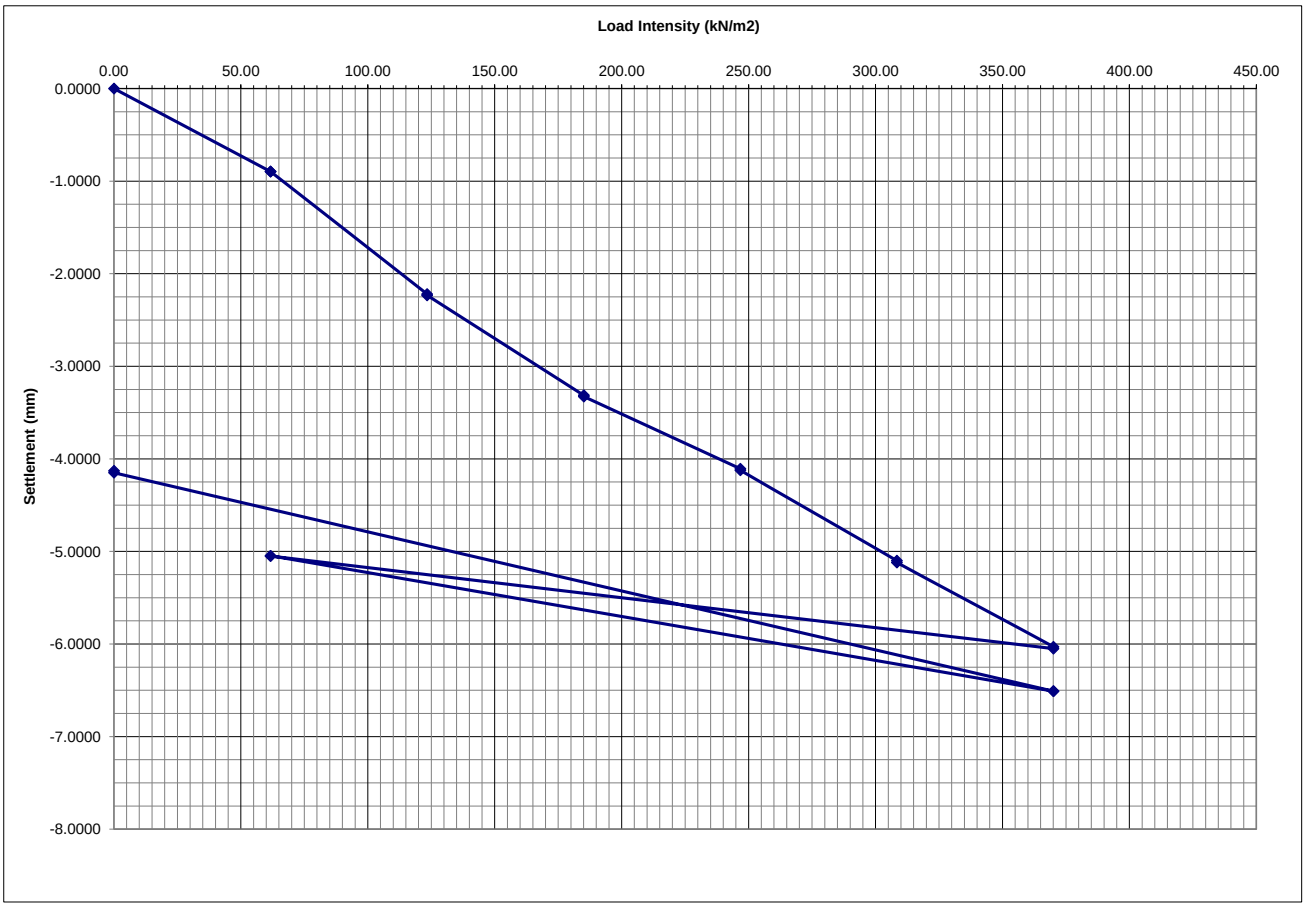
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	20/09/2023	R. Walker	22/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	20/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	RoadCBR-102	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386245
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	396926
Maximum Deformation (mm):	-6.51	**Weather:**	Dry
Strata Description:	Road Formation (6F5)		



Equivalent CBR Value of 6%

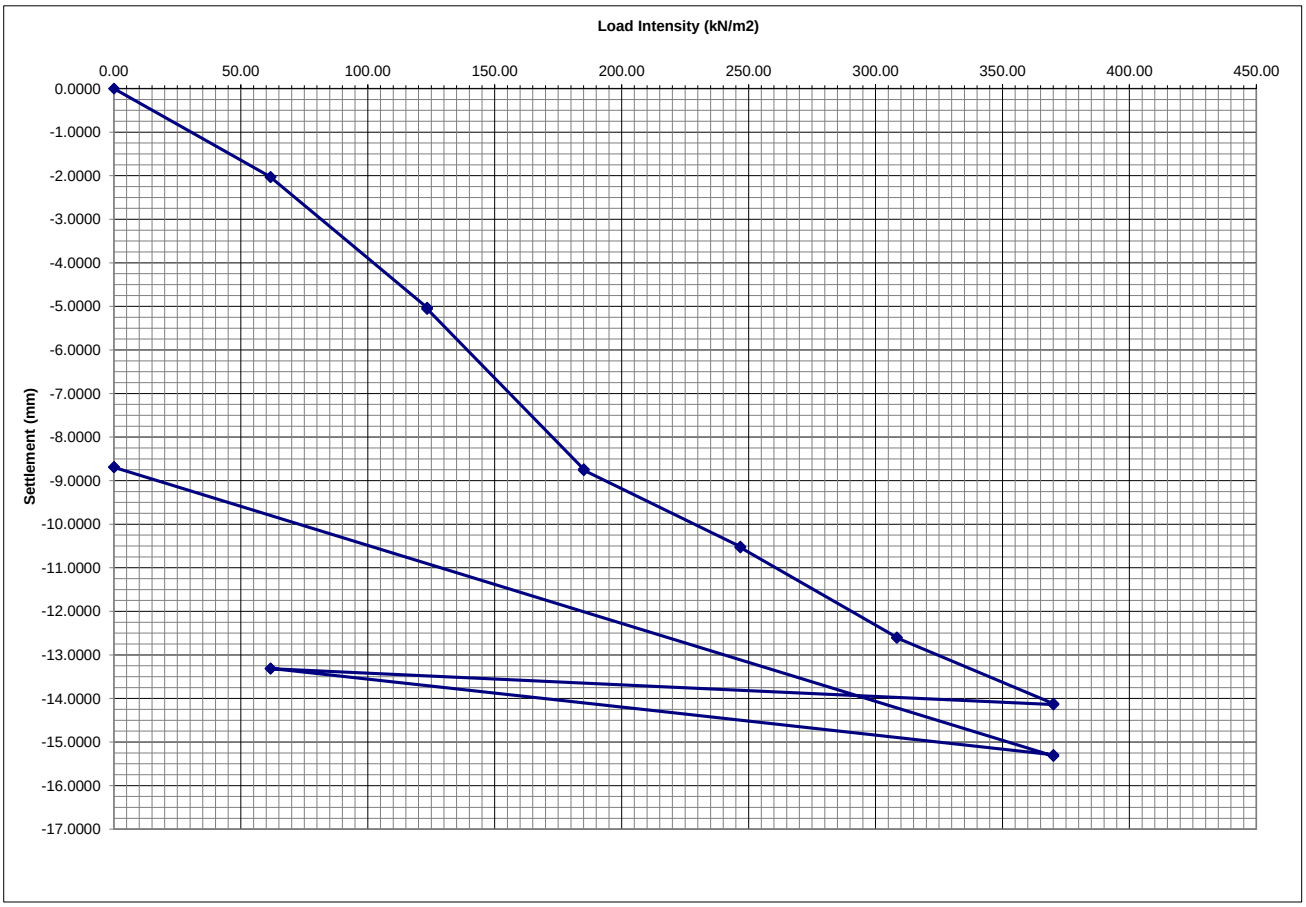
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	20/09/2023	R. Walker	22/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	20/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	RoadCBR-103	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386236
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	396947
Maximum Deformation (mm):	-15.32	**Weather:**	Dry
Strata Description:	Road Formation (6F5)		



Equivalent CBR Value of 2%

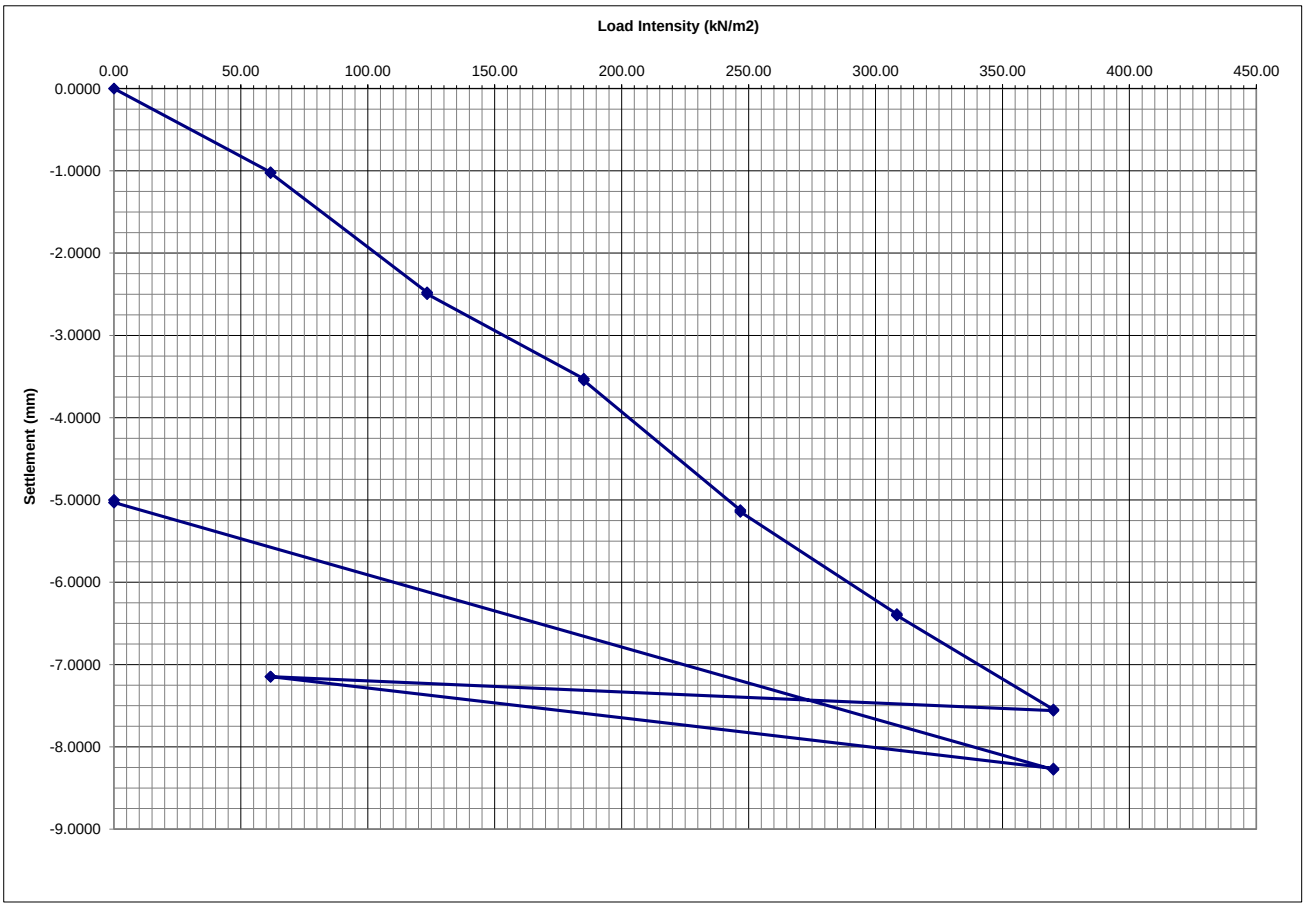
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	20/09/2023	R. Walker	22/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	31/10/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	AB3-CBR101	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	0
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	0
Maximum Deformation (mm):	-8.28	**Weather:**	Rain
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 5%

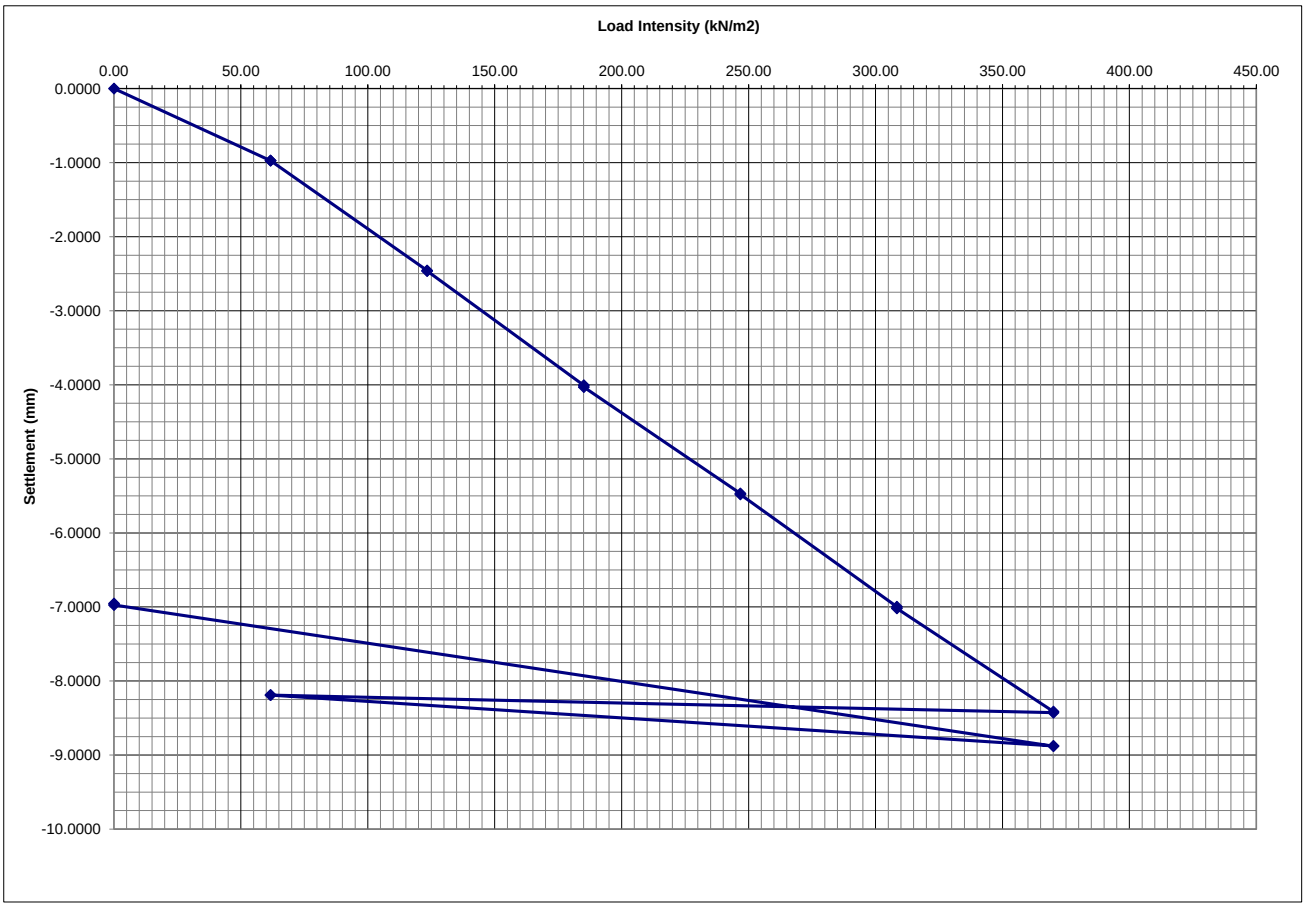
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	31/10/2023	S. Ellis	31/10/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	31/10/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	AB3-CBR102	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	0
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	0
Maximum Deformation (mm):	-8.88	**Weather:**	Rain
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 5%

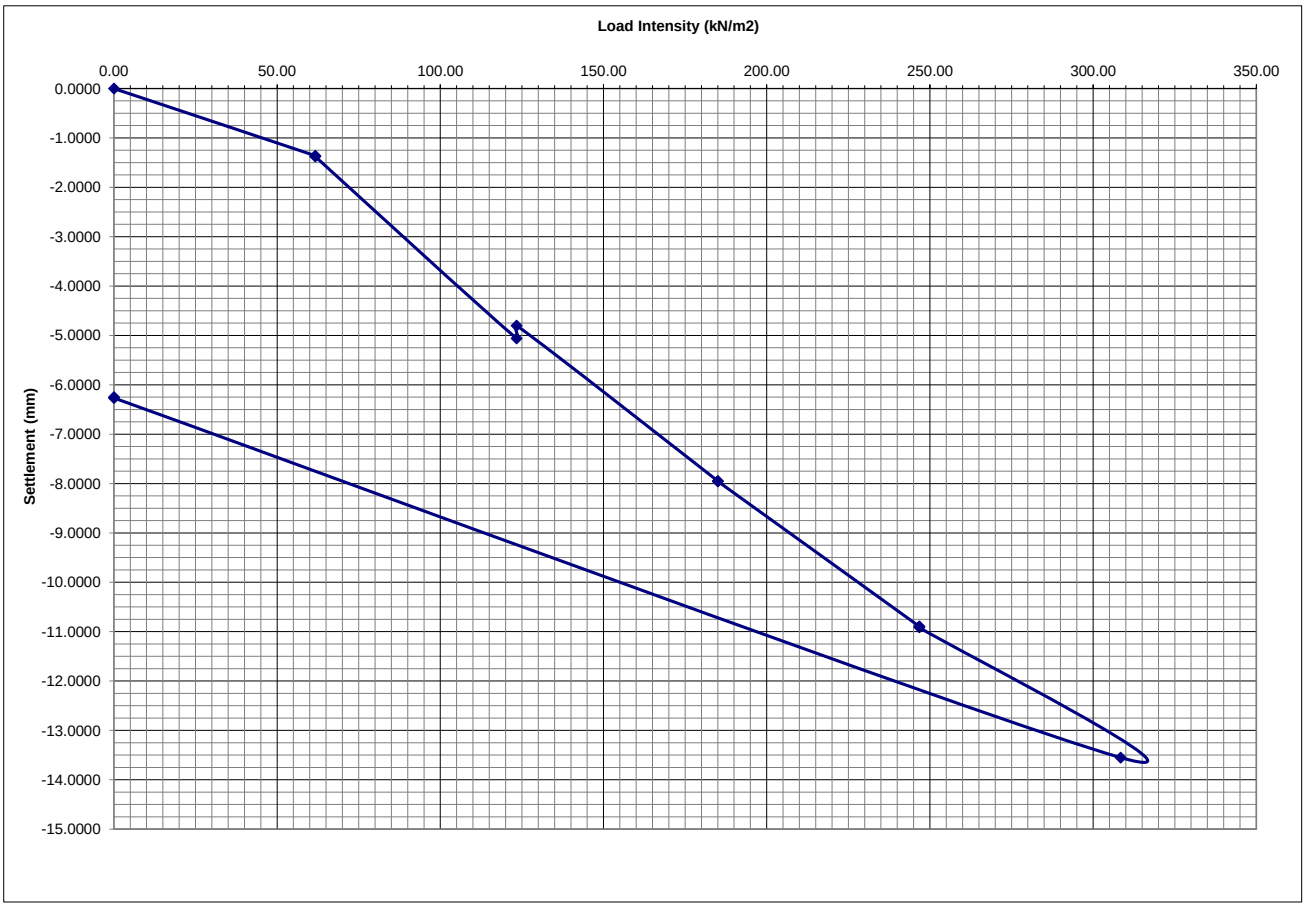
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	31/10/2023	S. Ellis	31/10/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	31/10/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	RoadCBR-104	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	0
Maximum Applied Pressure (kN/m2):	308.41	**Northing:**	0
Maximum Deformation (mm):	-13.55	**Weather:**	Rain
Strata Description:	Road Box (6F5)		



Equivalent CBR Value of 3%

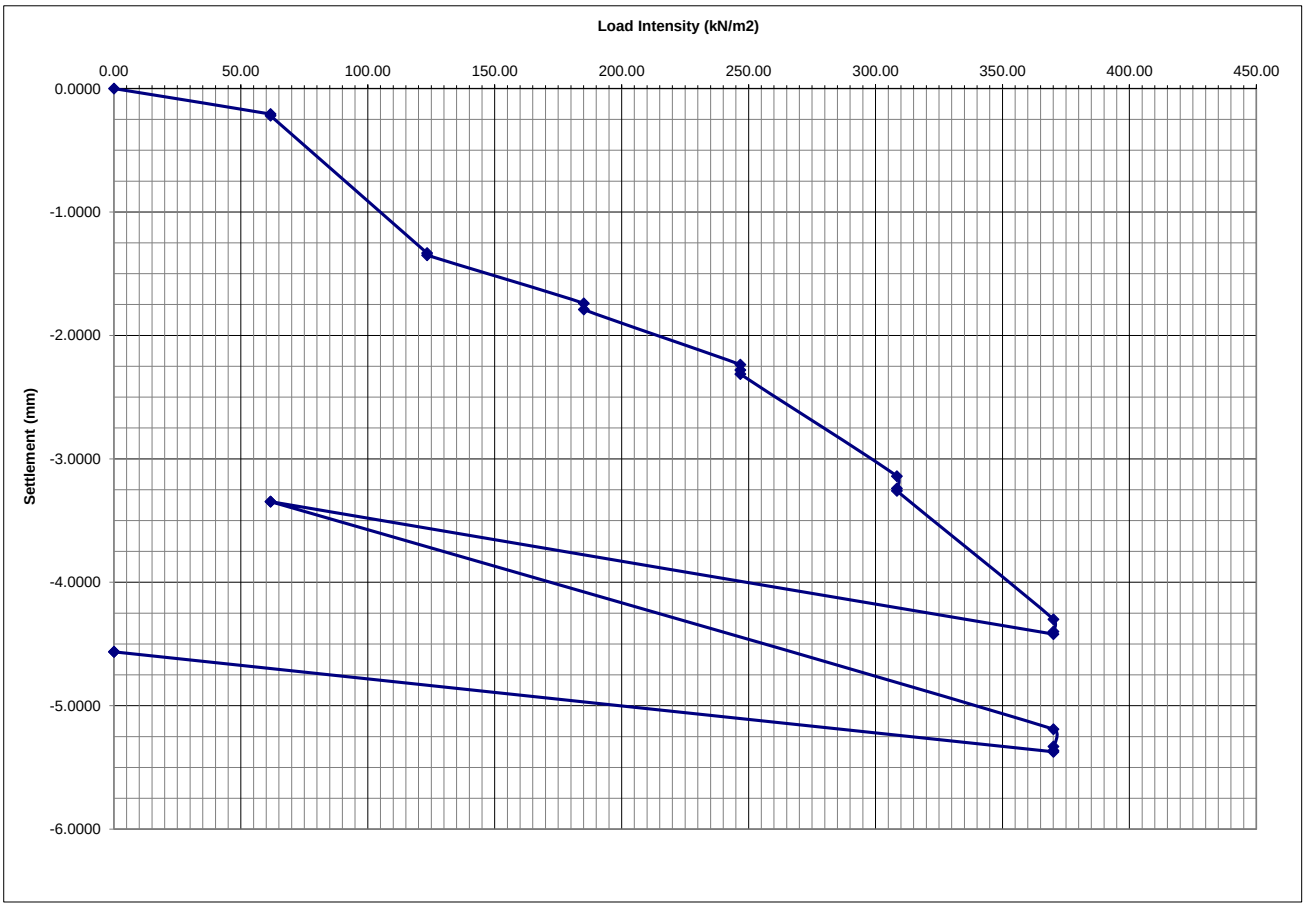
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	31/10/2023	S. Ellis	31/10/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	23/11/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	RoadCBR-005	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386173
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	397016
Maximum Deformation (mm):	-5.37	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 12%

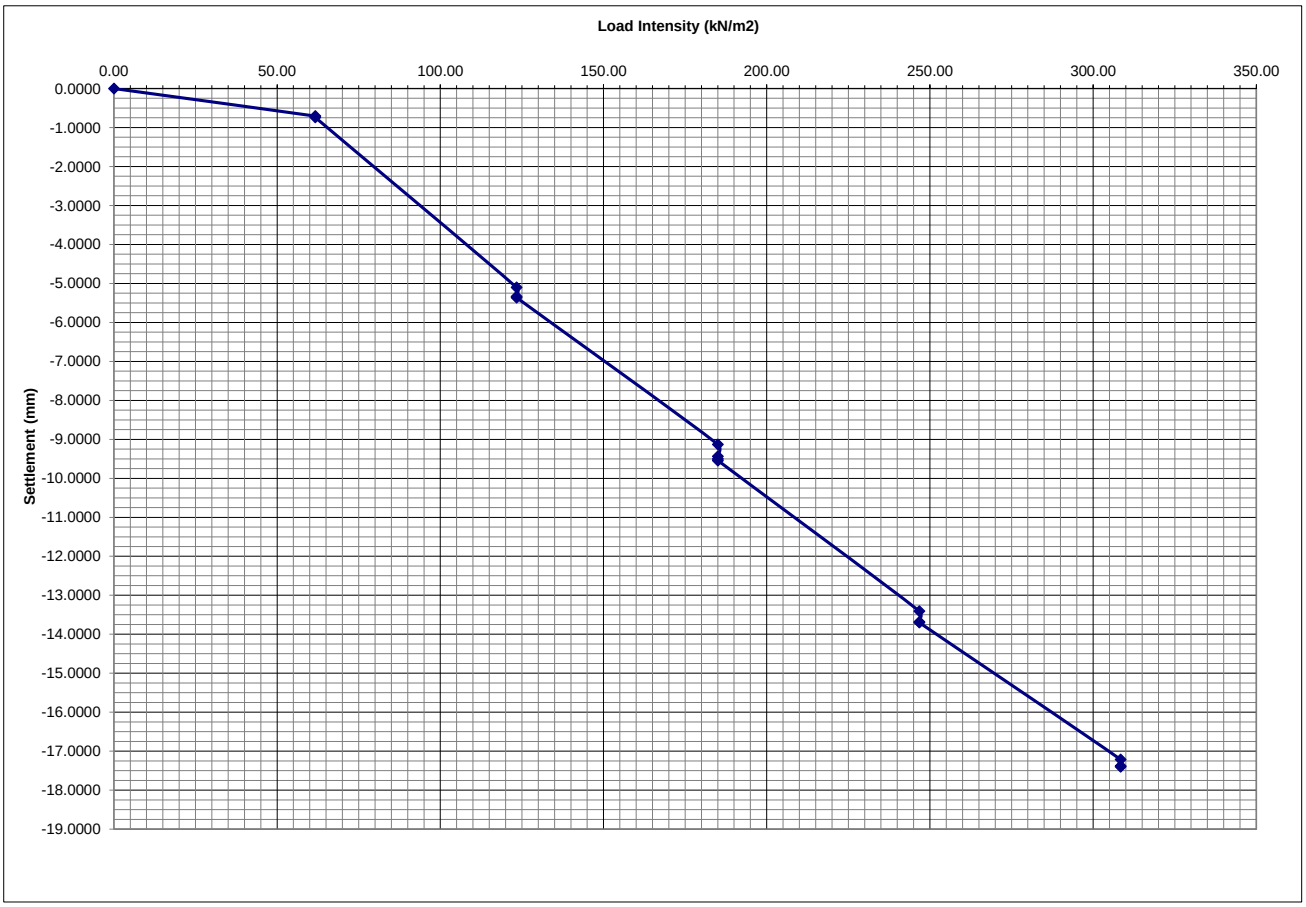
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	24/11/2023	R. Walker	24/11/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	23/11/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	RoadCBR-006	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386161
Maximum Applied Pressure (kN/m2):	308.41	**Northing:**	397028
Maximum Deformation (mm):	-17.40	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 5%

Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	24/11/2023	R. Walker	24/11/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	23/11/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	RoadCBR-007	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386155
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	397034
Maximum Deformation (mm):	-21.57	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 4%

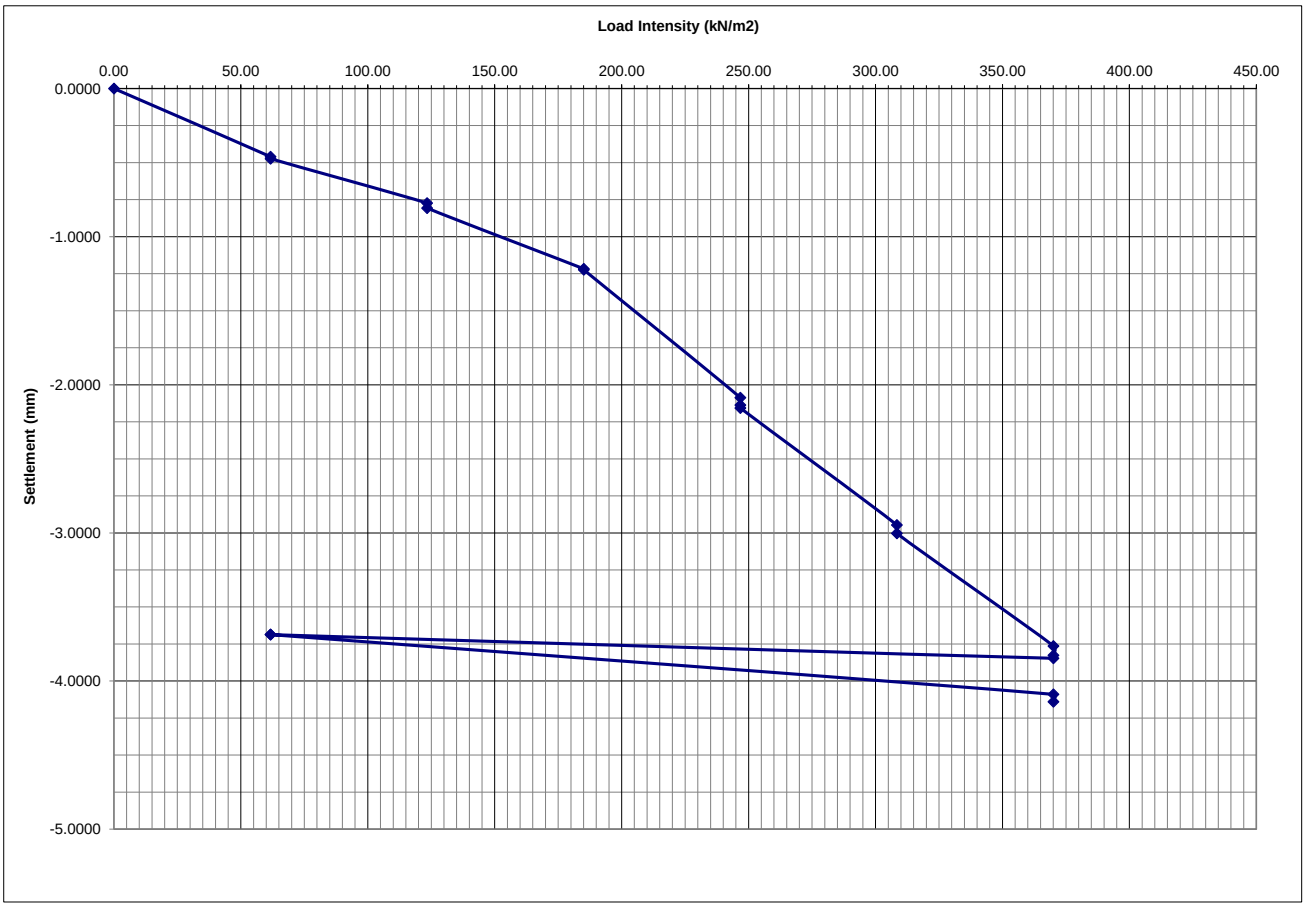
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	24/11/2023	R. Walker	24/11/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	28/11/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	RoadCBR-007 (Retest)	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386155
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	397034
Maximum Deformation (mm):	-4.14	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 26%

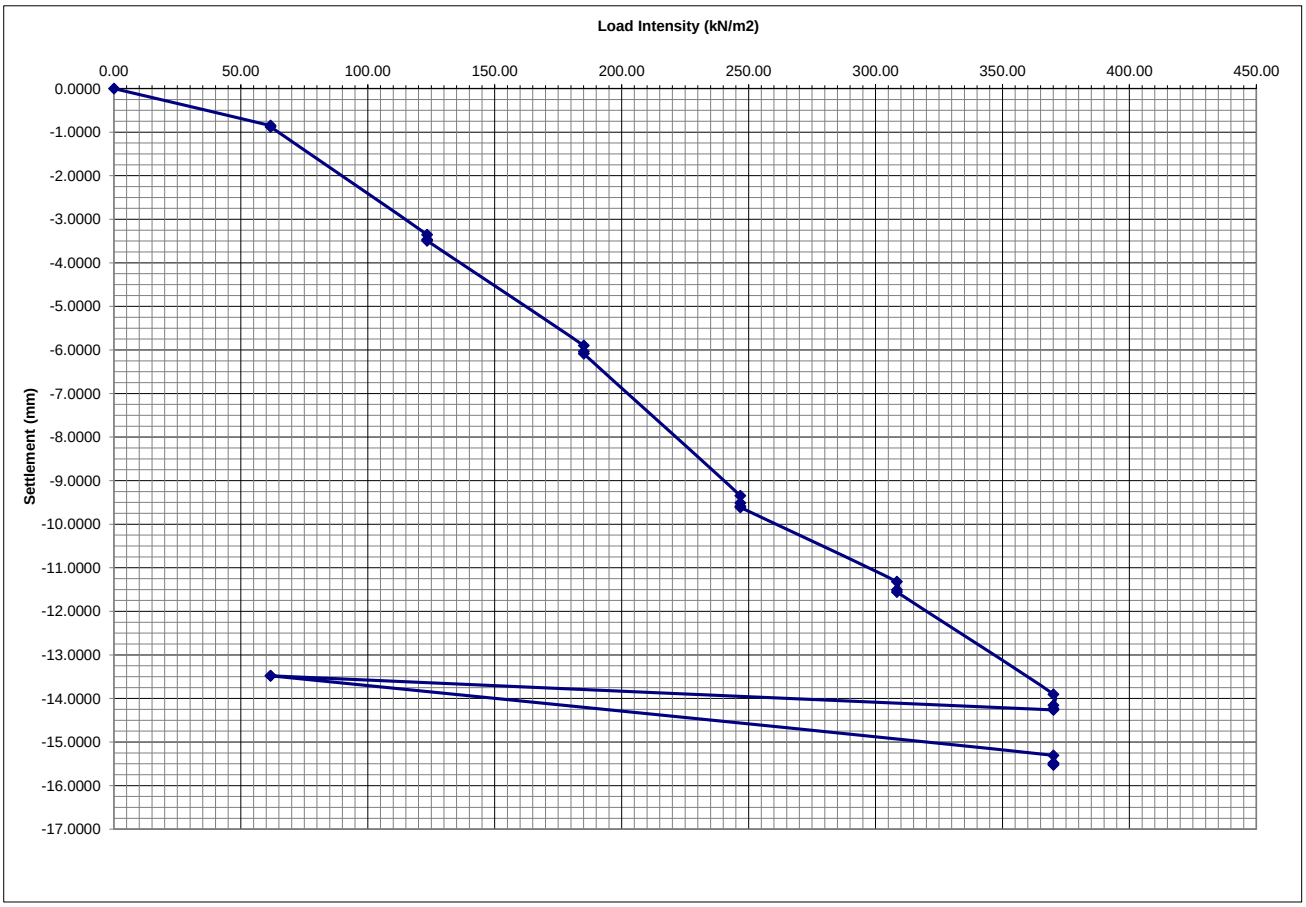
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	28/11/2023	R. Walker	28/11/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	23/11/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	Plot 134 & 135	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386170
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	397061
Maximum Deformation (mm):	-15.52	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 5%

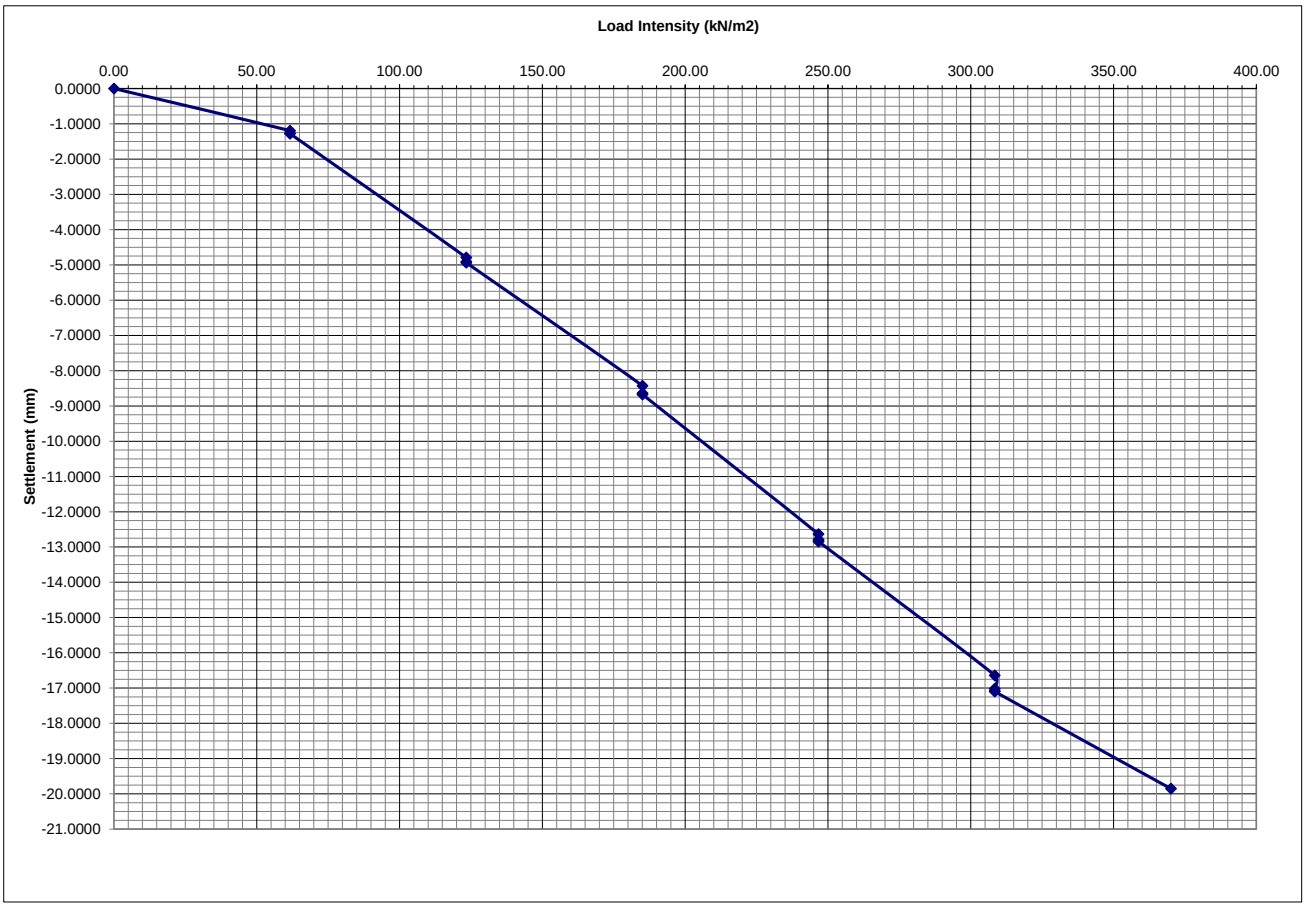
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	24/11/2023	R. Walker	24/11/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	23/11/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	Plot 137 & 138	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386161
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	397034
Maximum Deformation (mm):	-19.85	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 4%

Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	24/11/2023	R. Walker	24/11/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	28/11/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	Plot 137 & 138 Retest	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386161
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	397034
Maximum Deformation (mm):	-11.60	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 4%

Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	28/11/2023	R. Walker	28/11/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennet Street**	**Test Date:**	21/12/2023
Site Ref:	15-974	**Type of Kentledge:**	30 Tonne Excavator
Test No.:	Plot 136-138	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	600	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	208.17	**Northing:**	N/A
Maximum Deformation (mm):	-6.03	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 3%

Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	21/12/2023	R. Walker	21/12/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennet Street**	**Test Date:**	21/12/2023
Site Ref:	15-974	**Type of Kentledge:**	30 Tonne Excavator
Test No.:	Plot 139/140	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	600	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	208.17	**Northing:**	N/A
Maximum Deformation (mm):	-6.44	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 4%

Comments

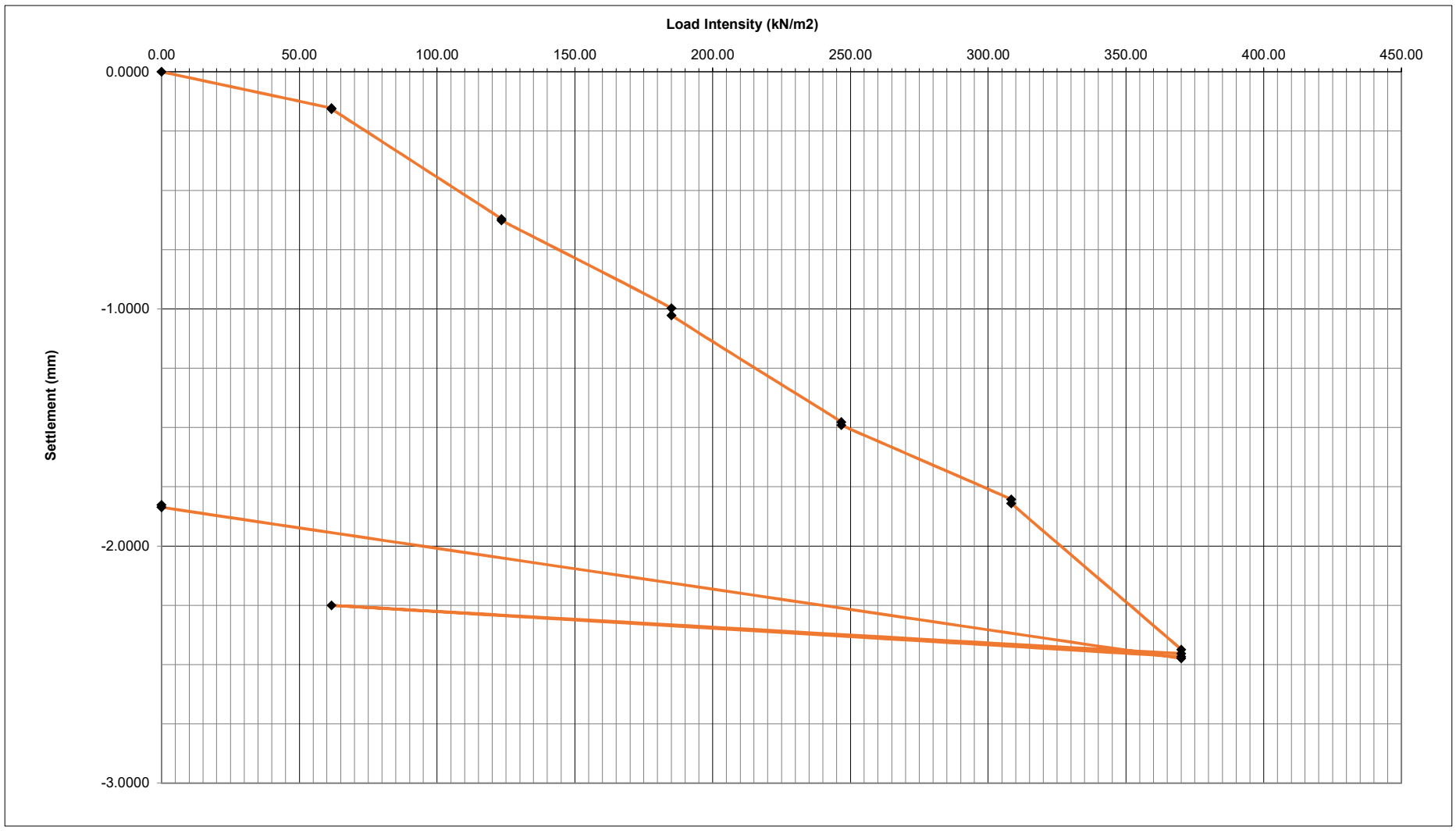
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J.James	M. Dee	21/12/2023	R. Walker	21/12/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***CBR Plot 91 / 92***	
Site Ref:	*15-974*		**Test Date:**	*20/06/2024*	
Type of Kentledge:	*13 Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-2.47*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of	**33%**
Max Deformation of	**2.47 mm**

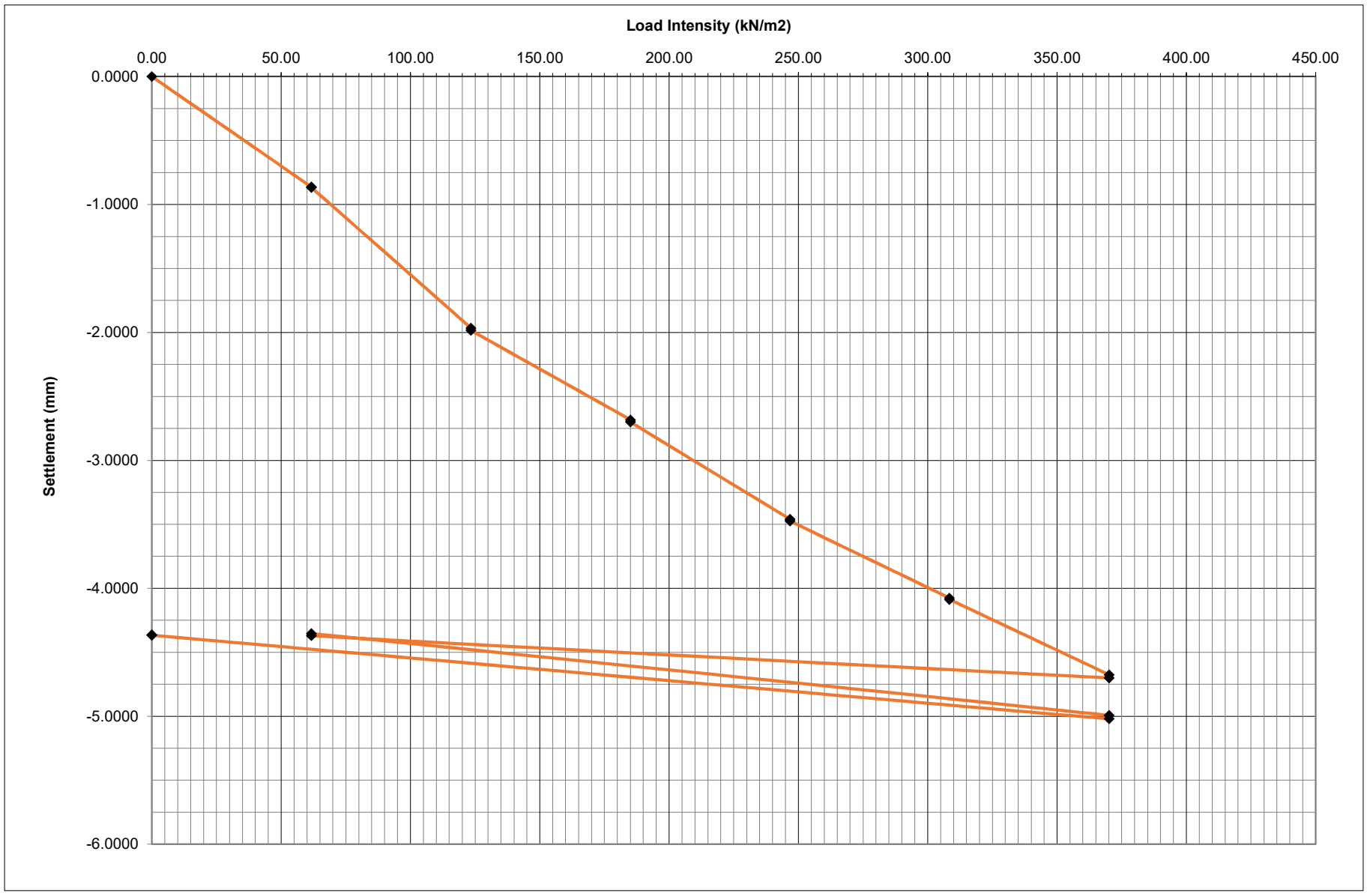
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	21/06/2024	R. Walker	24/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***CBR Plot 117 / 118***	
Site Ref:	*15-974*		**Test Date:**	*20/06/2024*	
Type of Kentledge:	*13 Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-5.02*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 6%

Max Deformation of 5.02 mm

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	21/06/2024	R. Walker	24/06/2024

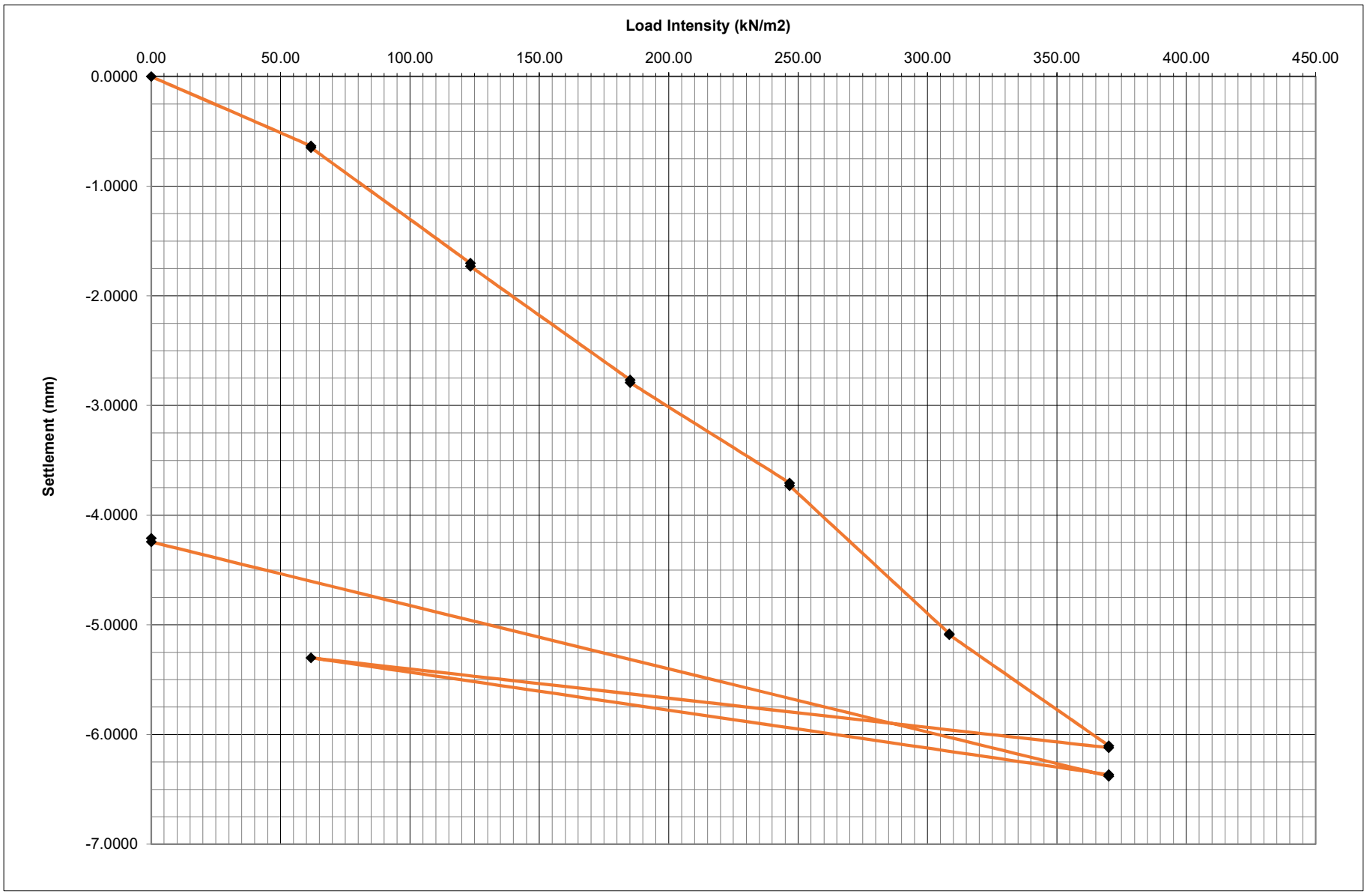
Environmental Engineering Partnership Limited trading as E3P Registered in England No: 08725262 Registered Office: Taylor Road Trafford Park Urmston Manchester M41 7JQ

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***CBR Plot 119 / 120***	
Site Ref:	*15-974*		**Test Date:**	*20/06/2024*	
Type of Kentledge:	*13 Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-6.38*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 8%

Max Deformation of 6.38 mm

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	21/06/2024	R. Walker	24/06/2024

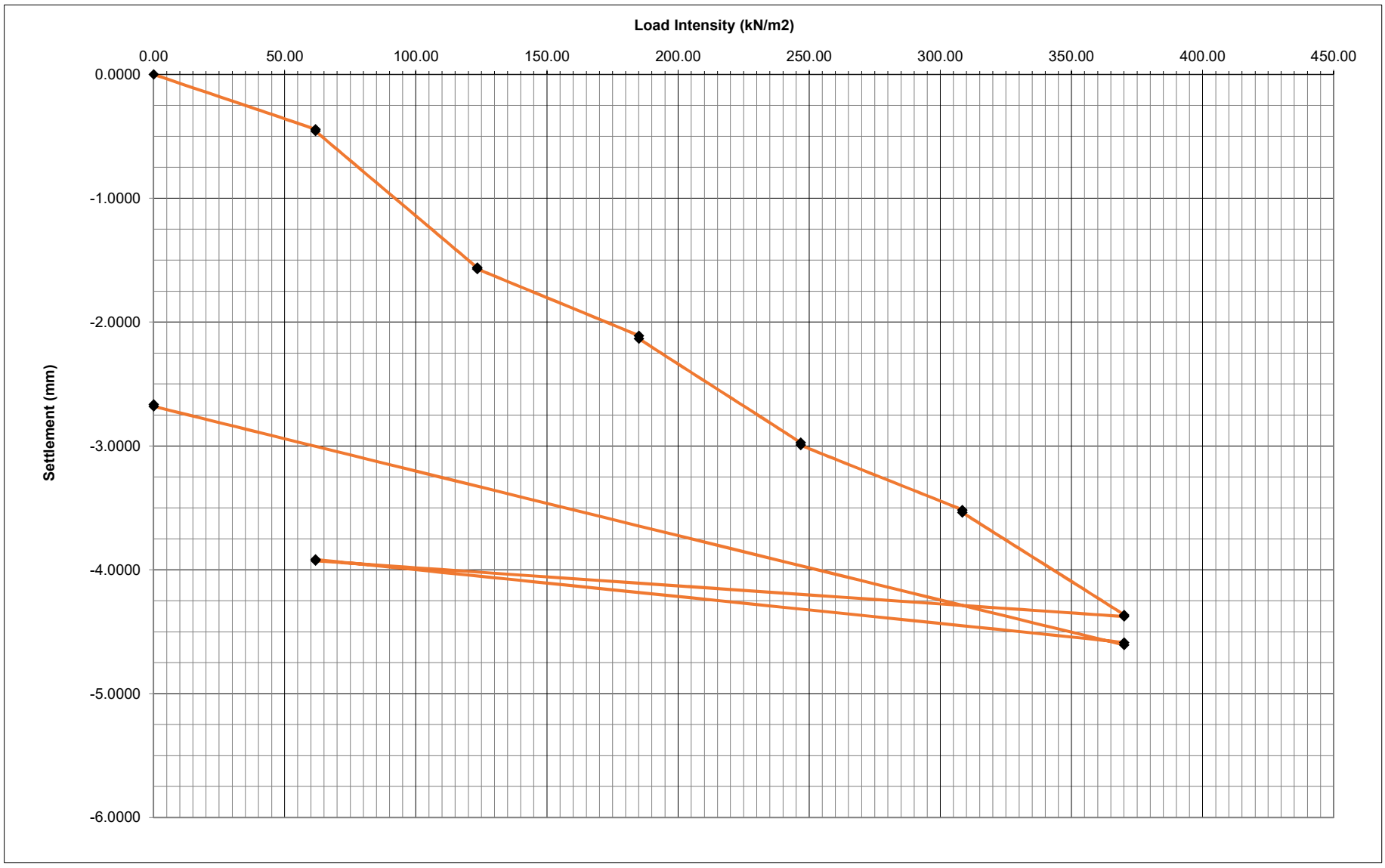
Environmental Engineering Partnership Limited trading as E3P Registered in England No: 08725262 Registered Office: Taylor Road Trafford Park Urmston Manchester M41 7JQ

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***CBR Plot 121 / 122***	
Site Ref:	*15-974*		**Test Date:**	*20/06/2024*	
Type of Kentledge:	*13 Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-4.61*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of	**10%**
Max Deformation of	**4.61 mm**

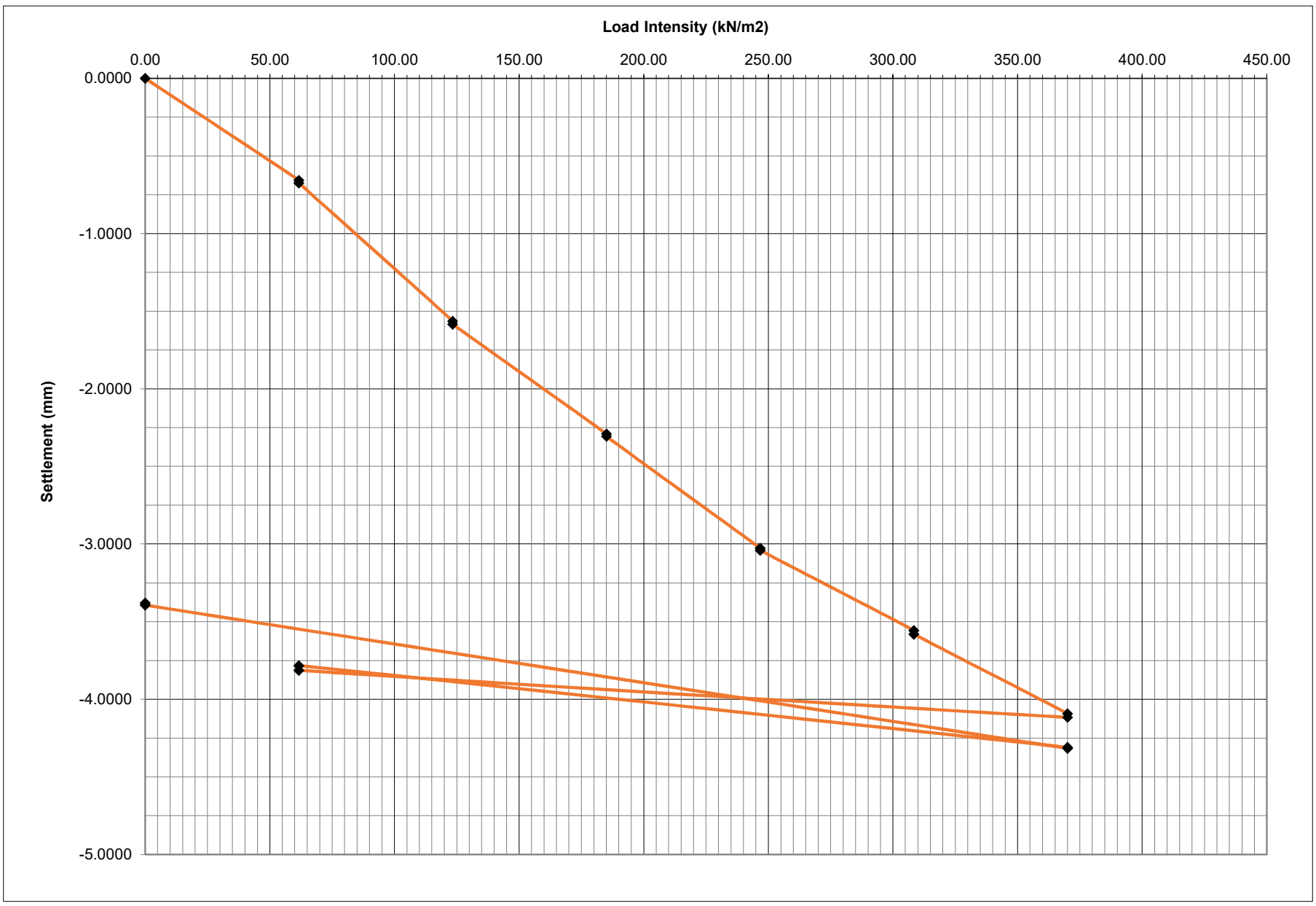
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	21/06/2024	R. Walker	24/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***CBR Plot 97 / 98***	
Site Ref:	*15-974*		**Test Date:**	*20/06/2024*	
Type of Kentledge:	*13 Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-4.32*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 9%

Max Deformation of 4.31 mm

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	21/06/2024	R. Walker	24/06/2024

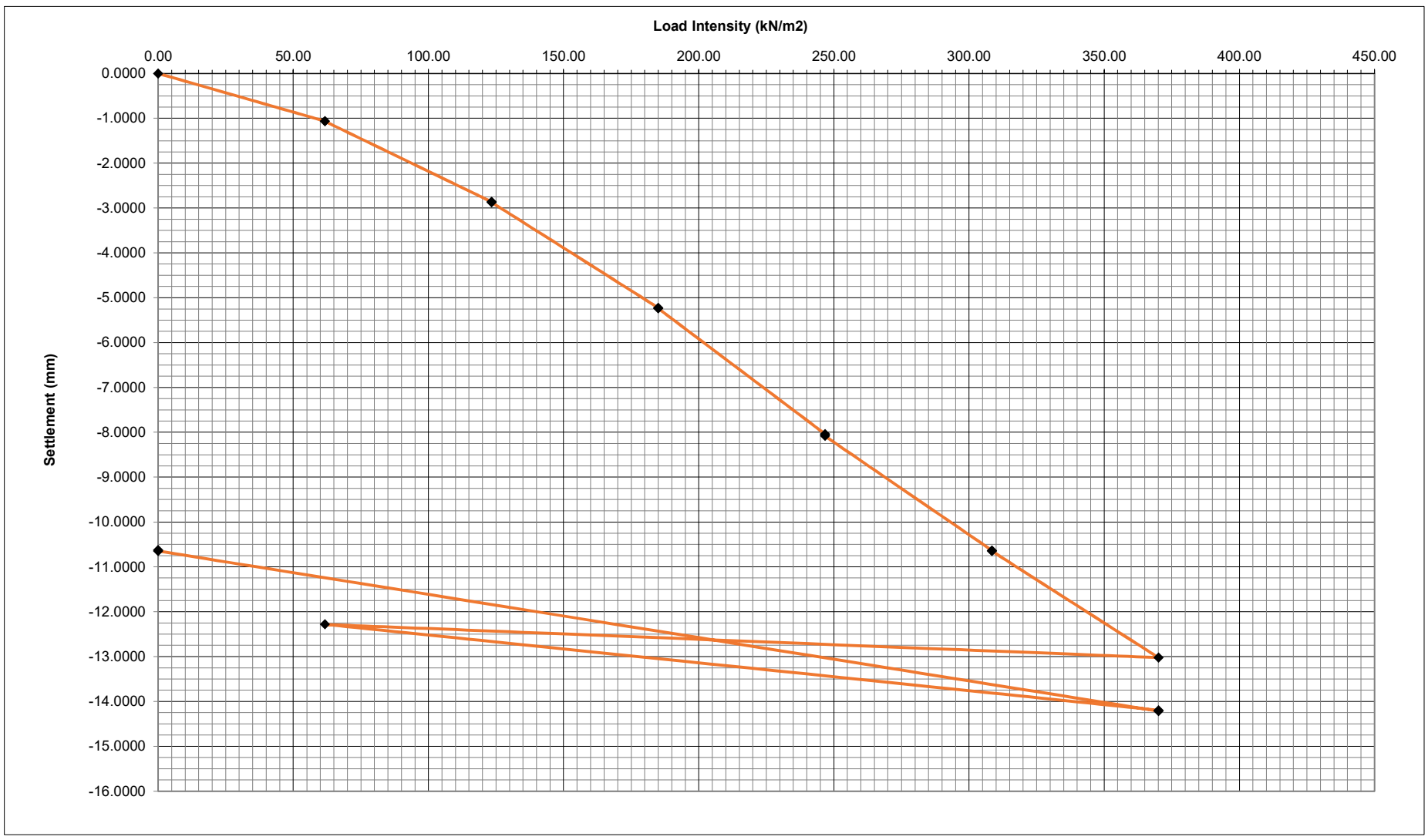
Environmental Engineering Partnership Limited trading as E3P Registered in England No: 08725262 Registered Office: Taylor Road Trafford Park Urmston Manchester M41 7JQ

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*CBR Plot 128 / 129*	
Site Ref:	*15-974*		**Test Date:**	*20/06/2024*	
Type of Kentledge:	*13 Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-14.22*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of	**5%**
Max Deformation of	**14.22 mm**

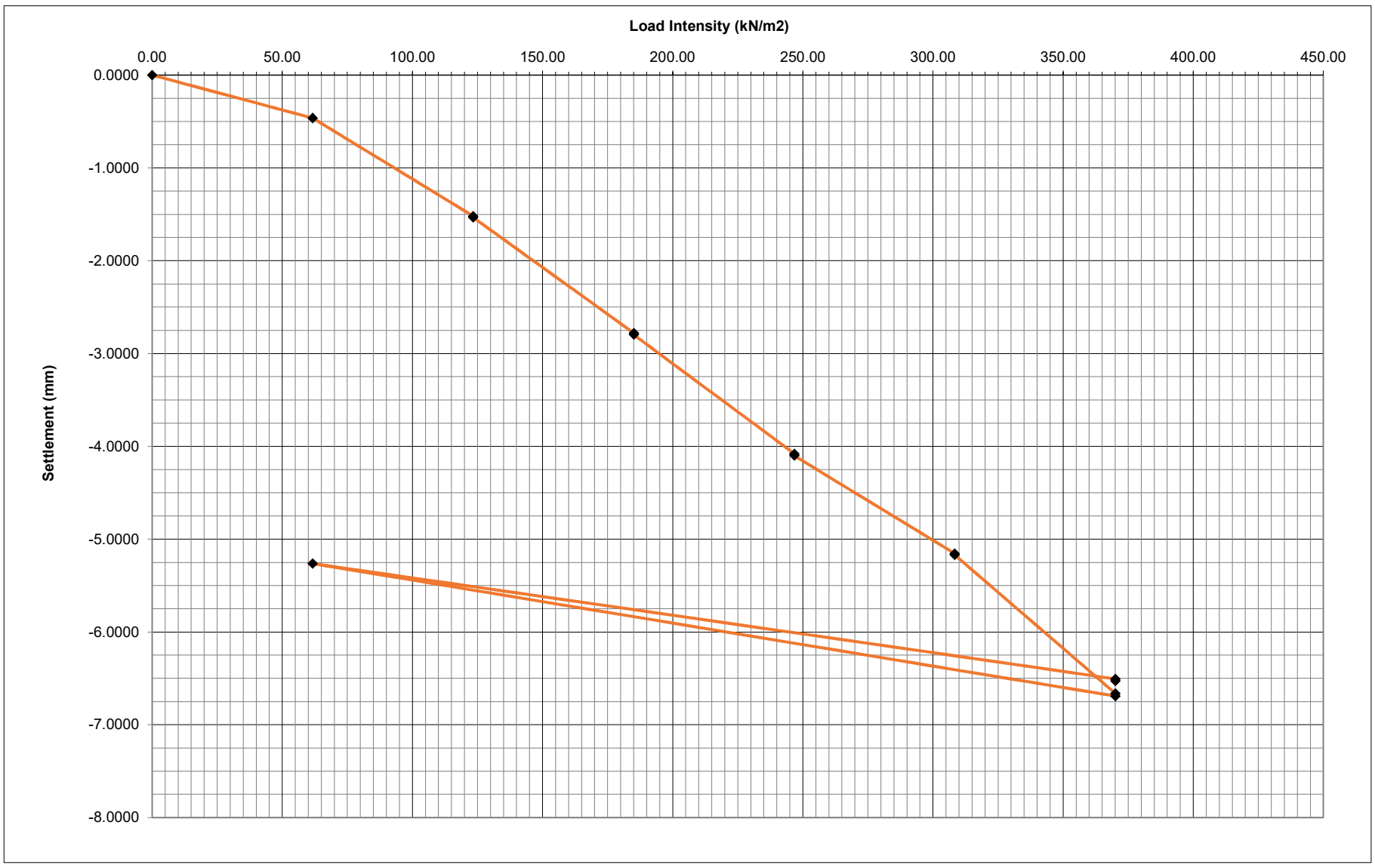
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	21/06/2024	R. Walker	24/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*CBR Plot 24 / 25*	
Site Ref:	*15-974*		**Test Date:**	*20/06/2024*	
Type of Kentledge:	*13 Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-6.69*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of	**10%**
Max Deformation of	**6.80 mm**

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	21/06/2024	R. Walker	24/06/2024

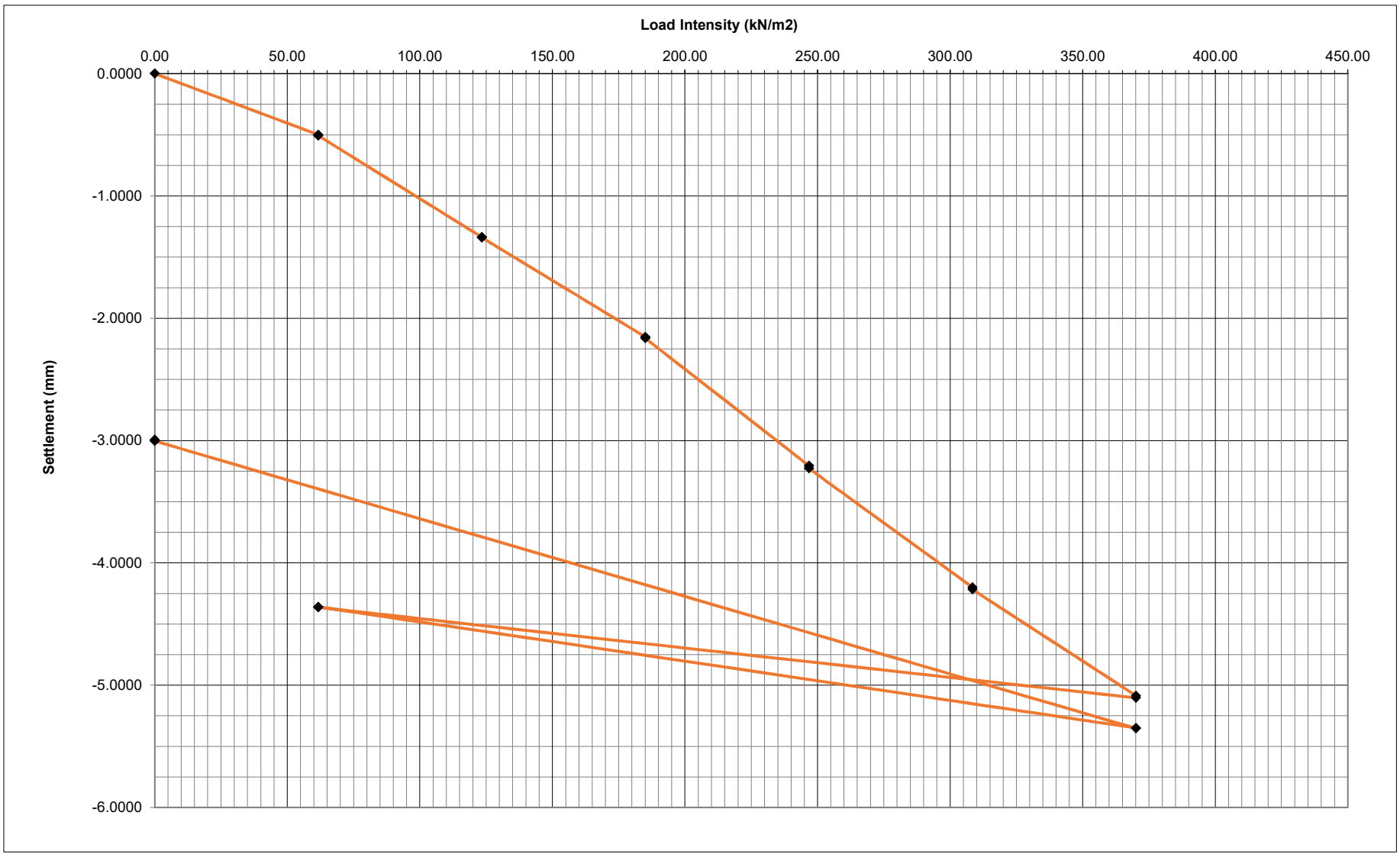
Environmental Engineering Partnership Limited trading as E3P Registered in England No: 08725262 Registered Office: Taylor Road Trafford Park Urmston Manchester M41 7JQ

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***CBR Plot 101 / 102***	
Site Ref:	*15-974*		**Test Date:**	*20/06/2024*	
Type of Kentledge:	*13 Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-5.35*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 11%

Max Deformation of 5.35 mm

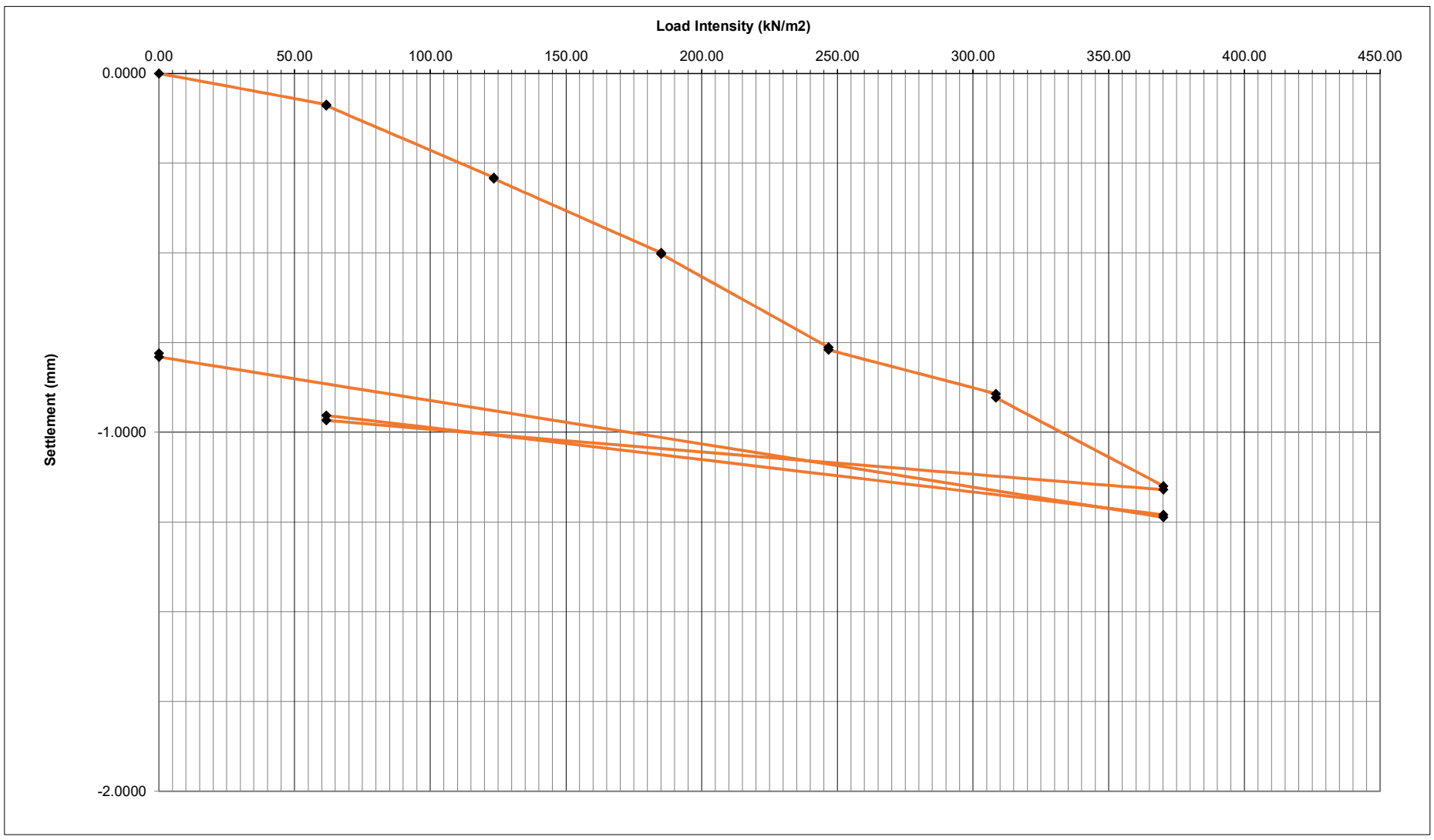
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	21/06/2024	R. Walker	24/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*CBR Plot 103 / 104*	
Site Ref:	*15-974*		**Test Date:**	*20/06/2024*	
Type of Kentledge:	*13 Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-1.24*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



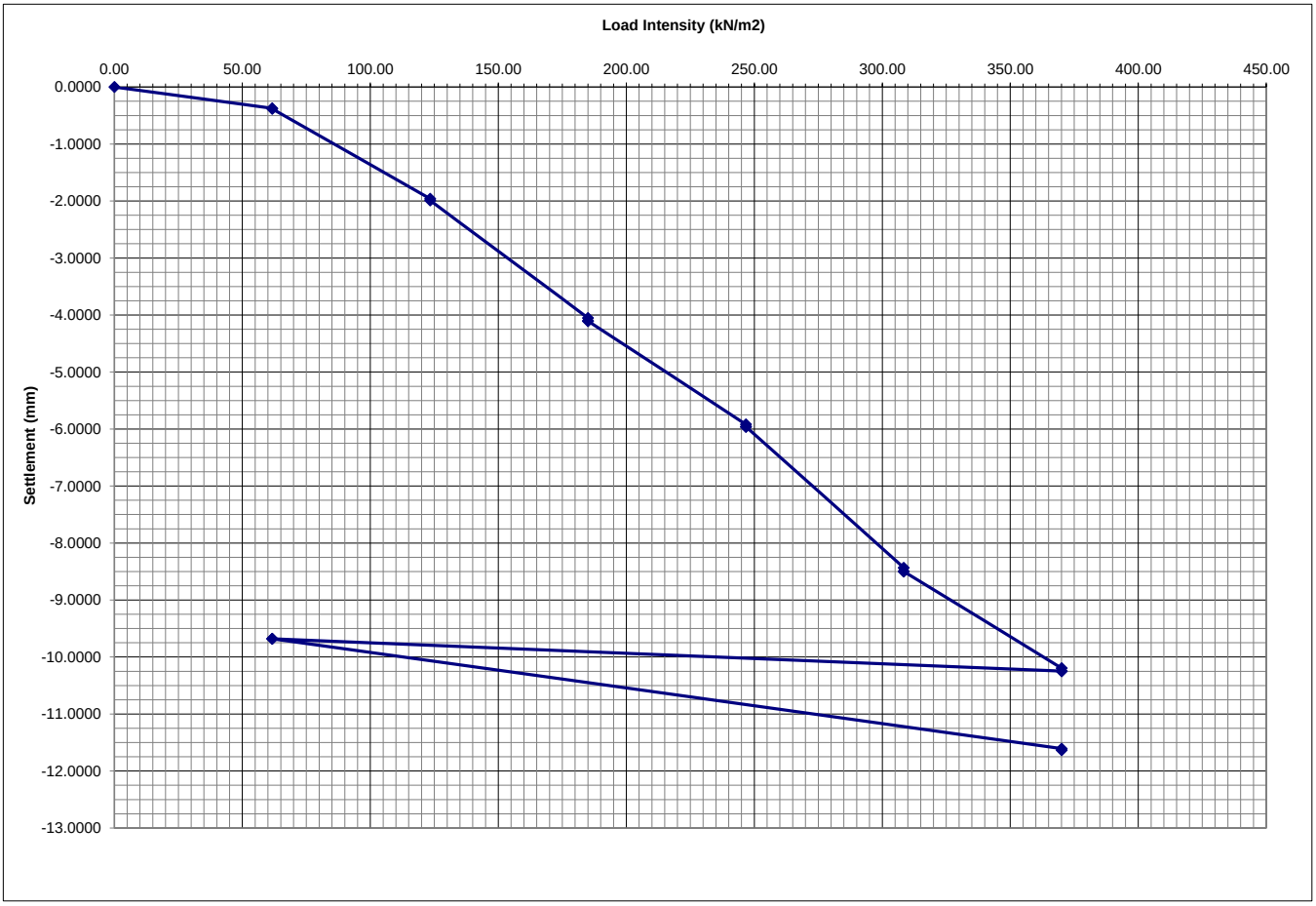
Equivalent CBR Value of	**85%**
Max Deformation of	**1.24 mm**

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	21/06/2024	R. Walker	24/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennet Street**	**Test Date:**	12/04/2024
Site Ref:	15-974	**Type of Kentledge:**	20 Tonne Excavator
Test No.:	CBR138-149 -1	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386239
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	397025
Maximum Deformation (mm):	-11.63	**Weather:**	Overcast
Strata Description:	Aggregate		



Equivalent CBR Value of 8%

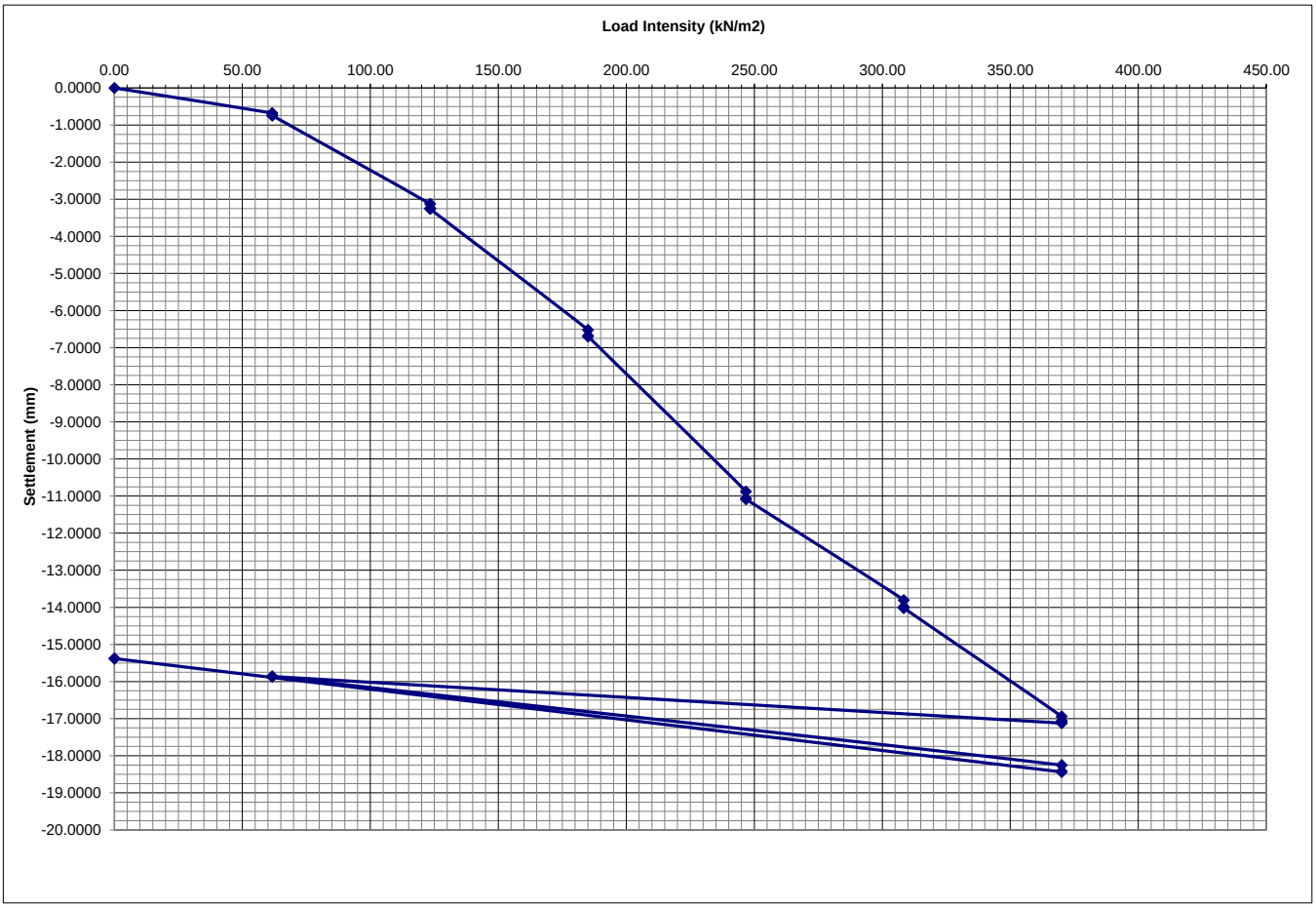
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M.Dee	12/04/2024	R. Walker	12/04/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennet Street**	**Test Date:**	12/04/2024
Site Ref:	15-974	**Type of Kentledge:**	20 Tonne Excavator
Test No.:	CBR138-149 -2	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386221
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	397025
Maximum Deformation (mm):	-18.44	**Weather:**	Overcast
Strata Description:	Aggregate		



Equivalent CBR Value of 5%

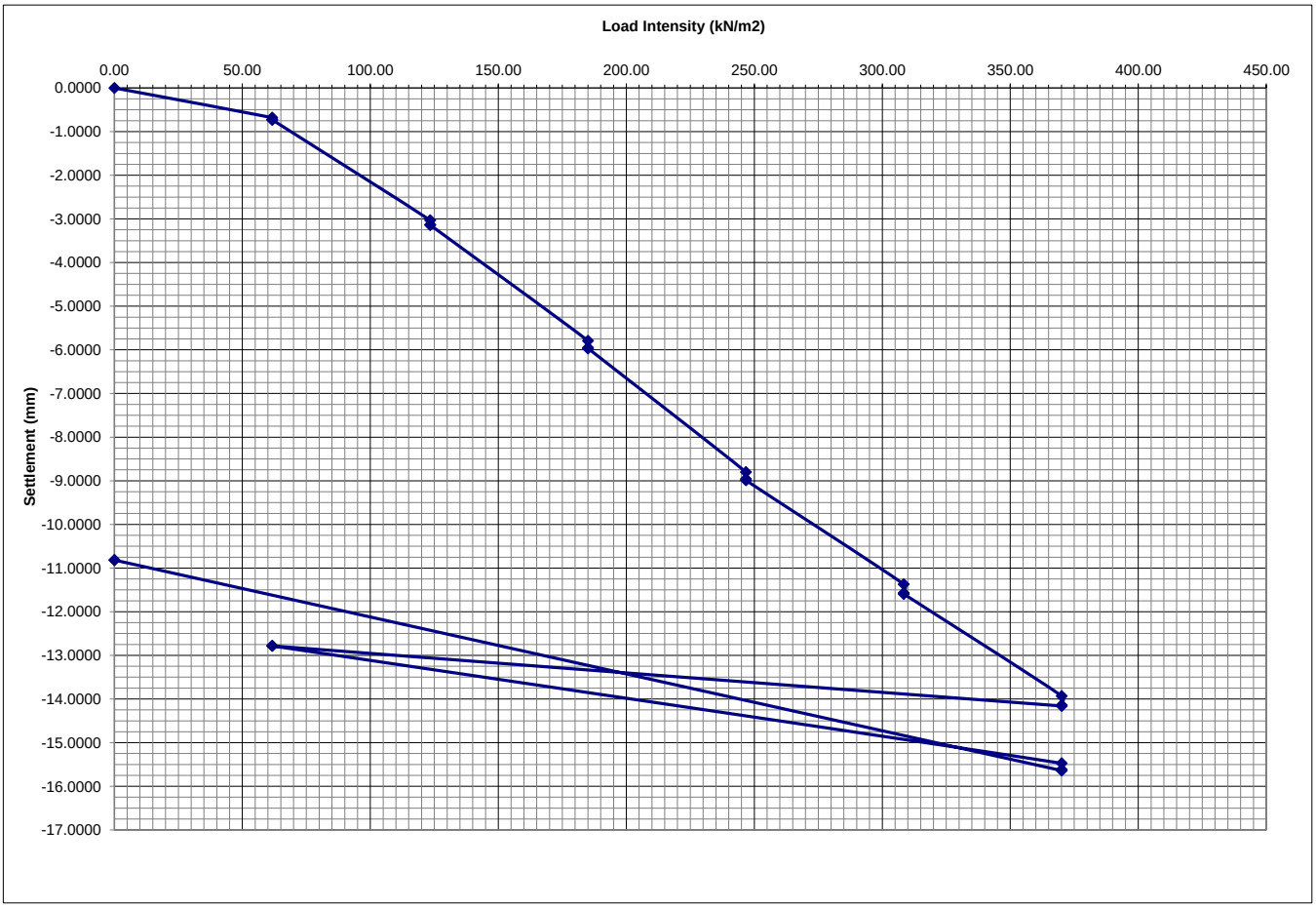
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M.Dee	12/04/2024	R. Walker	12/04/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennet Street**	**Test Date:**	12/04/2024
Site Ref:	15-974	**Type of Kentledge:**	20 Tonne Excavator
Test No.:	CBR138-149 -3	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386215
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	397022
Maximum Deformation (mm):	-15.64	**Weather:**	Overcast
Strata Description:	Aggregate		



Equivalent CBR Value of 5%

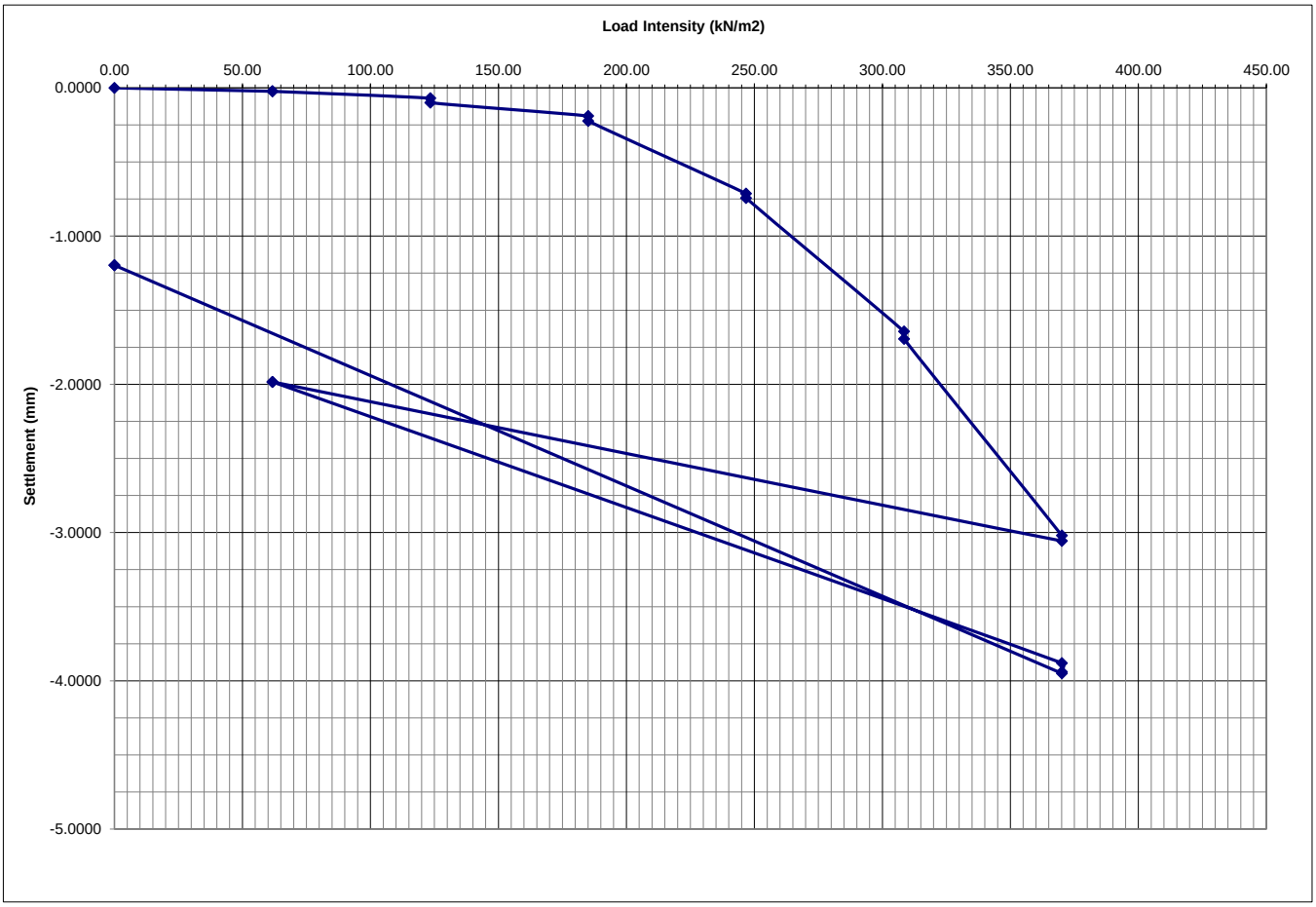
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M.Dee	12/04/2024	R. Walker	12/04/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennet Street**	**Test Date:**	12/04/2024
Site Ref:	15-974	**Type of Kentledge:**	20 Tonne Excavator
Test No.:	CBR138-149 -4	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386203
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	397022
Maximum Deformation (mm):	-3.95	**Weather:**	Overcast
Strata Description:	Aggregate		



Equivalent CBR Value of 53%

Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M.Dee	12/04/2024	R. Walker	12/04/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennet Street**	**Test Date:**	12/04/2024
Site Ref:	15-974	**Type of Kentledge:**	20 Tonne Excavator
Test No.:	CBR138-149 -5	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386188
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	397016
Maximum Deformation (mm):	-21.56	**Weather:**	Overcast
Strata Description:	Aggregate		



Equivalent CBR Value of 8%

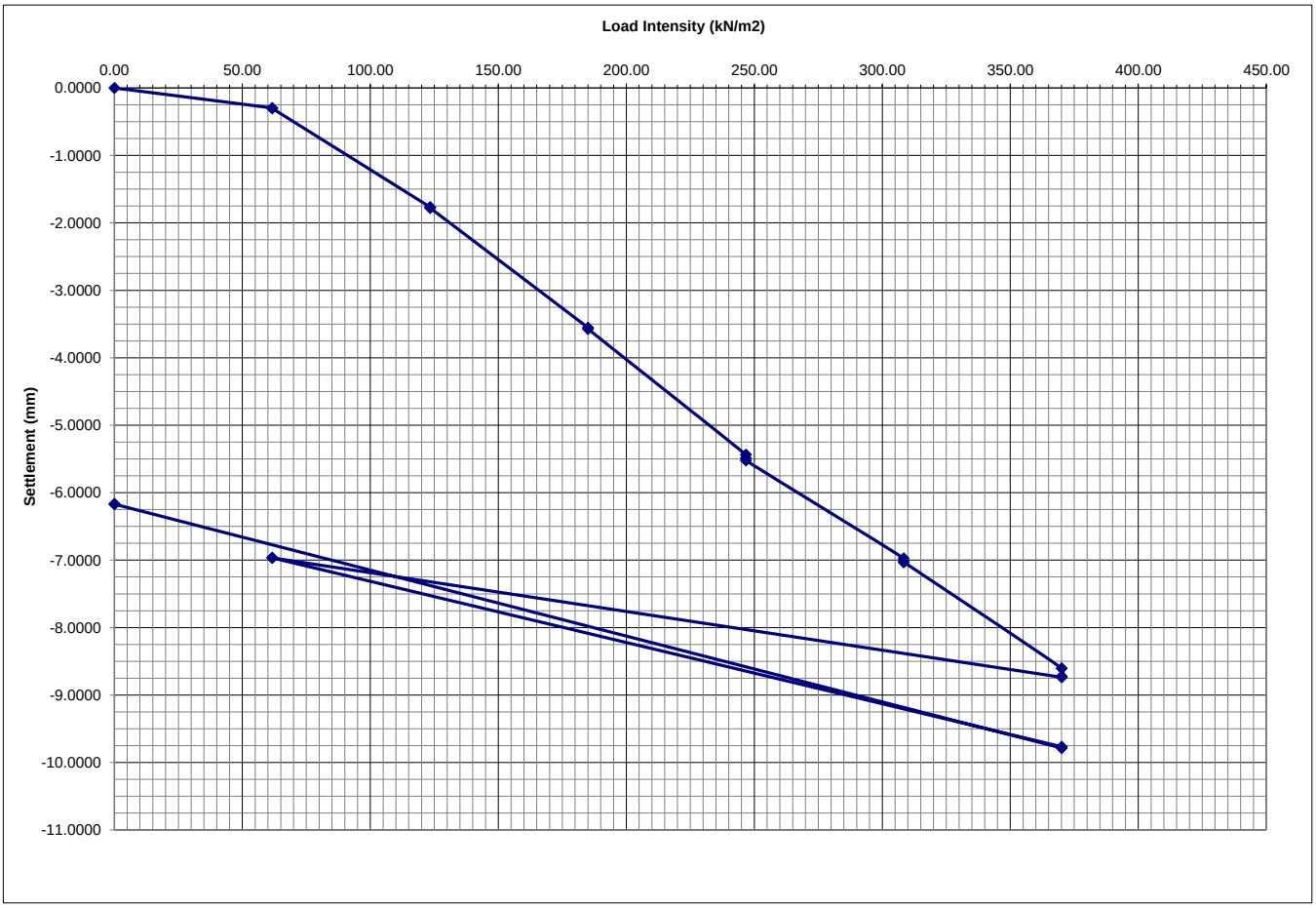
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M.Dee	12/04/2024	R. Walker	12/04/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennet Street**	**Test Date:**	12/04/2024
Site Ref:	15-974	**Type of Kentledge:**	20 Tonne Excavator
Test No.:	CBR138-149 -6	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	386185
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	397007
Maximum Deformation (mm):	-9.79	**Weather:**	Overcast
Strata Description:	Aggregate		



Equivalent CBR Value of 9%

Comments

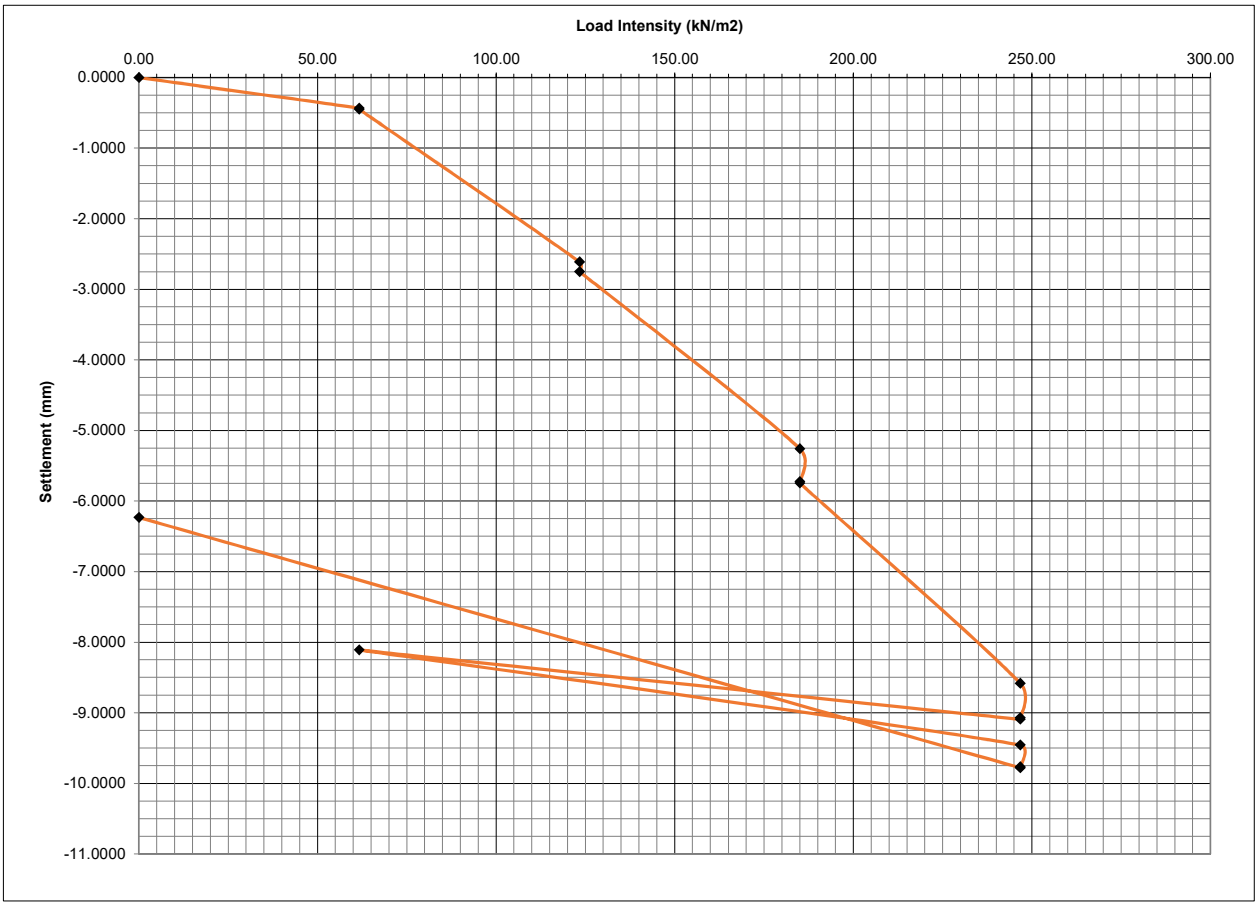
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M.Dee	12/04/2024	R. Walker	12/04/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennet Street*		**Test No.:**	*Plot 26*	
Site Ref:	*15-974*		**Test Date:**	*26/06/2024*	
Type of Kentledge:	*13 Tonne Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-9.78*	*mm*	**W3W:**	*habit.video.speech*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 7%

Max Deformation of -9.78 mm

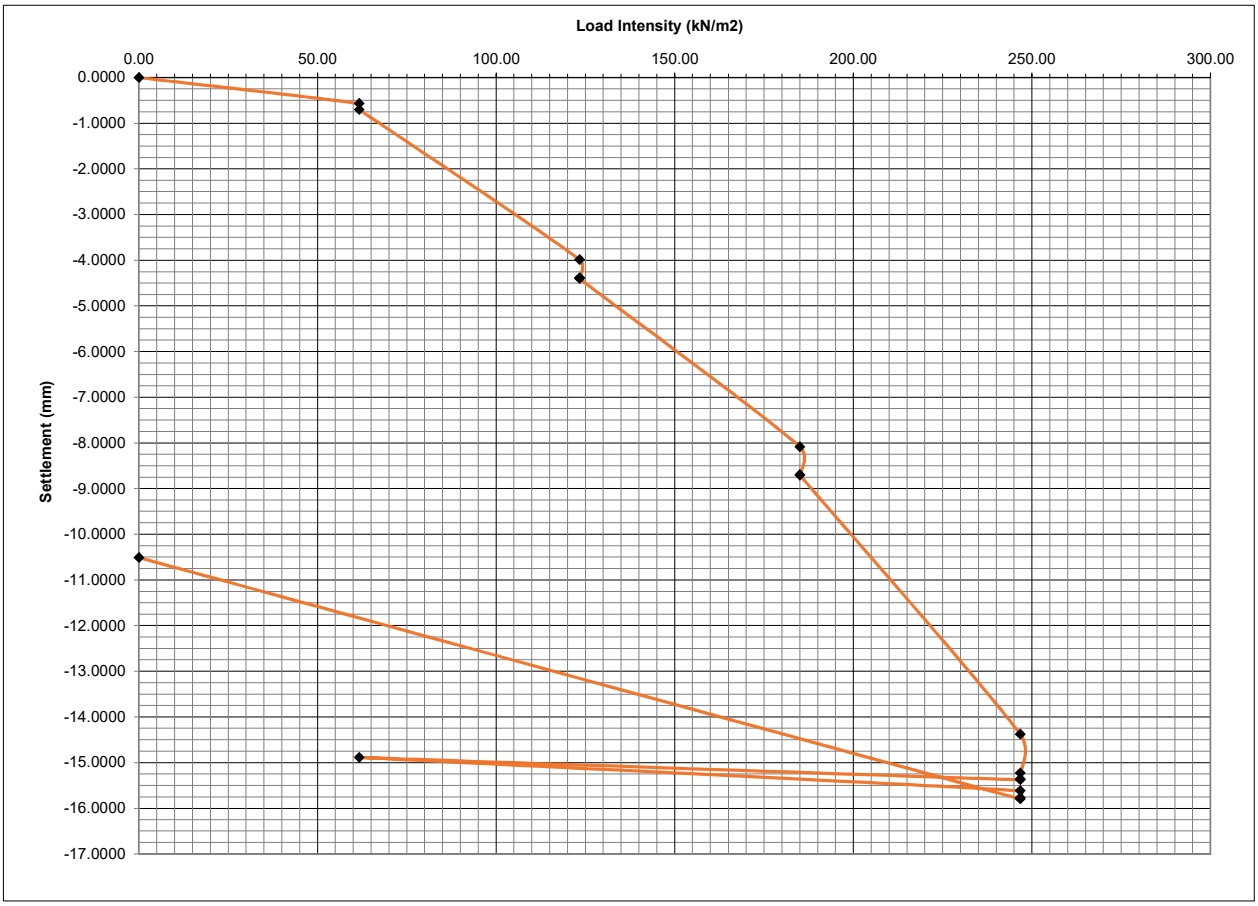
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	28/06/2024	A. Garrity	28/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennet Street*		**Test No.:**	*Plot 28*	
Site Ref:	*15-974*		**Test Date:**	*26/06/2024*	
Type of Kentledge:	*13 Tonne Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-15.80*	*mm*	**W3W:**	*//flat.senior.yoga*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 5%

Max Deformation of 15.88mm

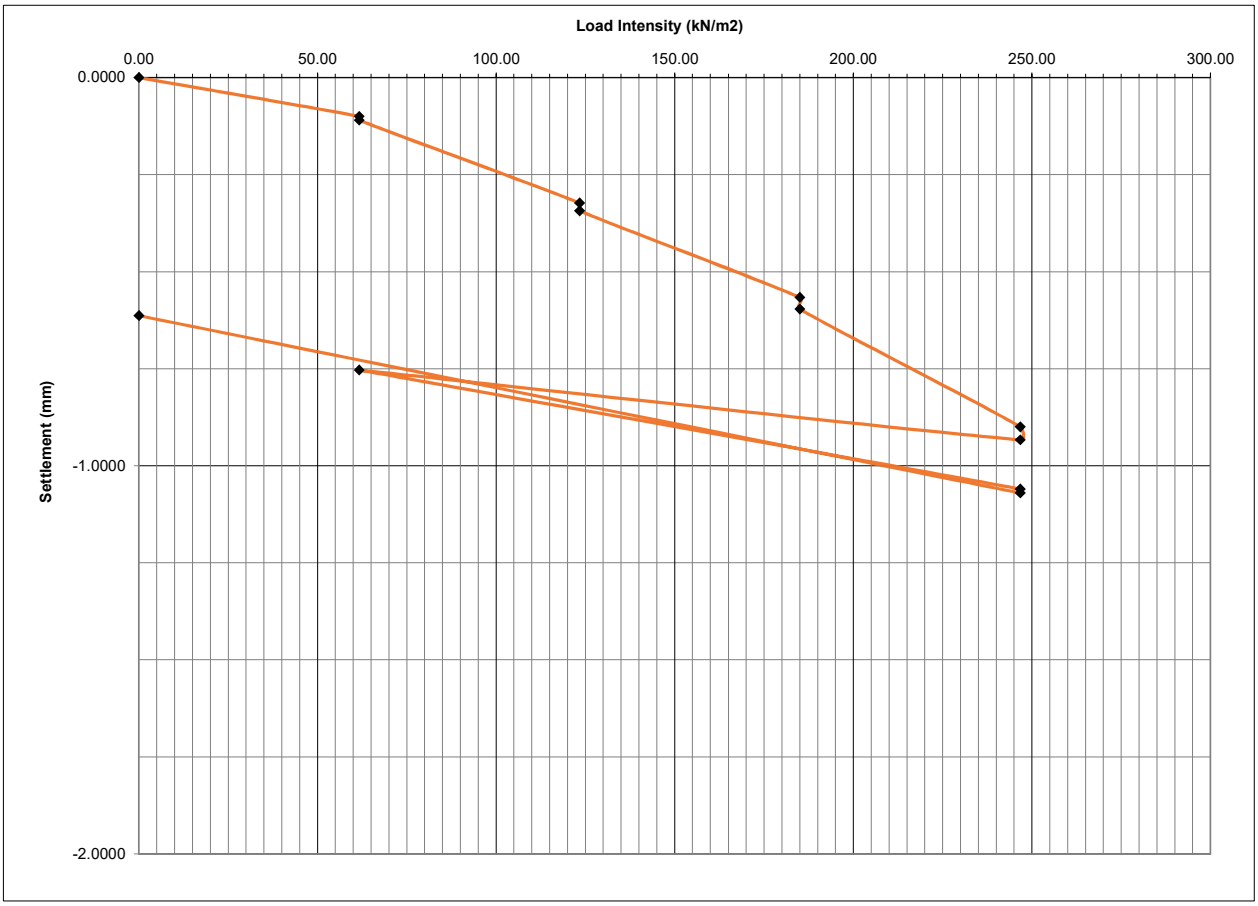
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	28/06/2024	A. Garrity	28/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennet Street*		**Test No.:**	*Plot 83 / 84*	
Site Ref:	*15-974*		**Test Date:**	*26/06/2024*	
Type of Kentledge:	*13 Tonne Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-1.07*	*mm*	**W3W:**	*//reveal.club.tries*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value in excess of 42%

Max Deformation of -1.07 mm

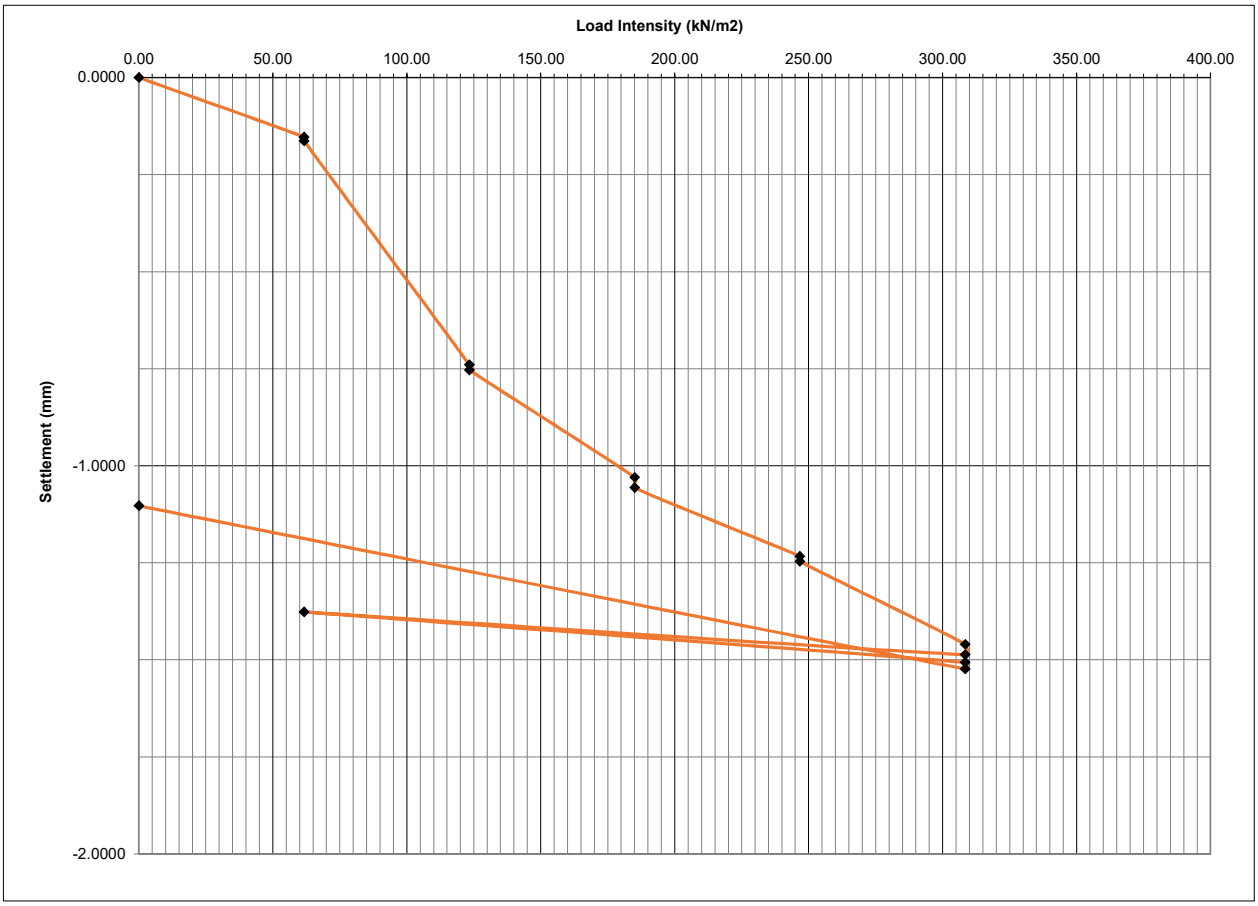
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	28/06/2024	A. Garrity	28/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennet Street*	**Test No.:**	*Plot 85 / 86*
Site Ref:	*15-974*	**Test Date:**	*26/06/2024*
Type of Kentledge:	*13 Tonne Excavator*	**Test Depth:**	*GL* *mbgl*
Plate Diameter:	*450* *mm*	**Easting:**	*0*
Max Applied Pressure:	*308.41* *kN/m2*	**Northing:**	*0*
Max Deformation:	*-1.52* *mm*	**W3W:**	*snacks.nodded.later*
Strata Description:	*Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 42%

Max Deformation of 1.52 mm

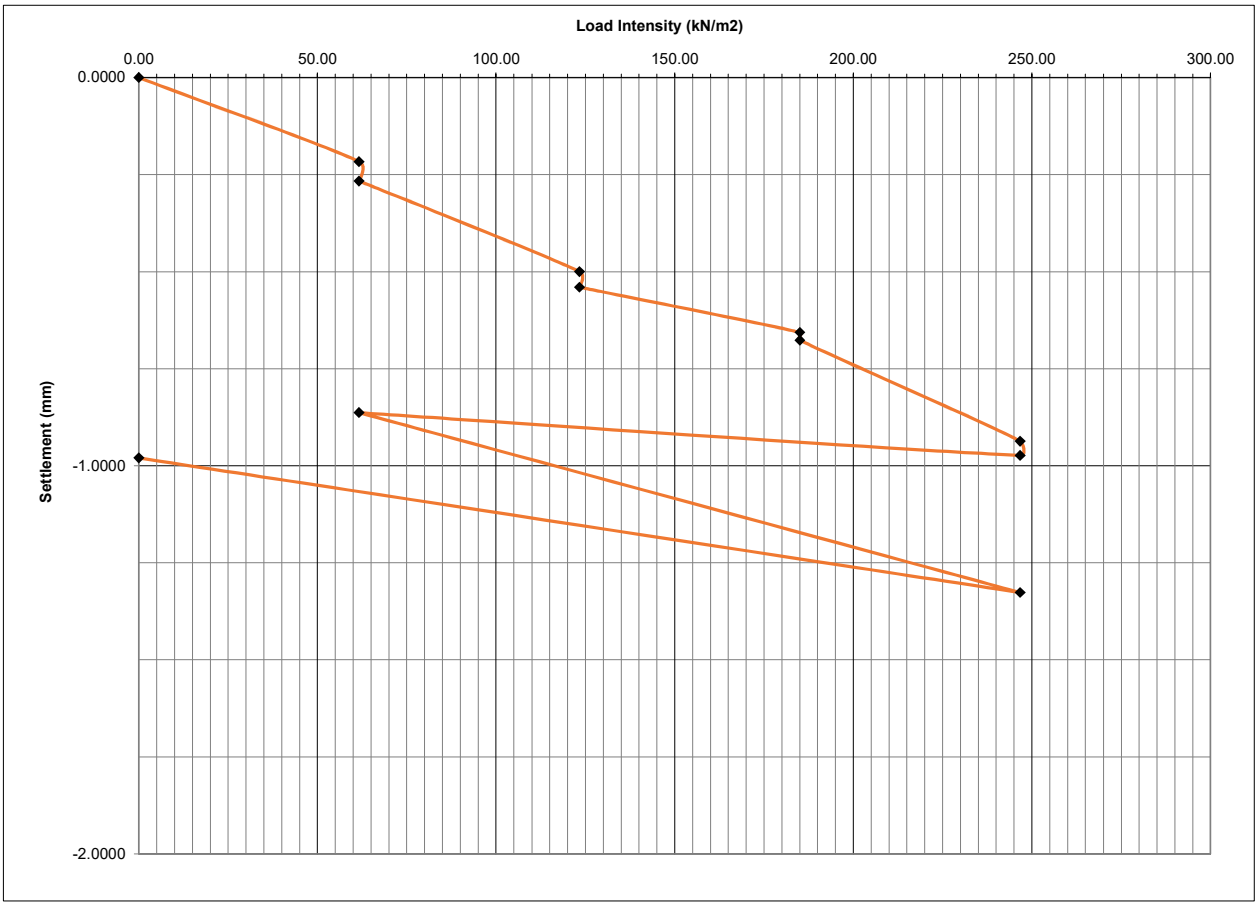
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	28/06/2024	A. Garrity	28/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennet Street*		**Test No.:**	*Plot 87 / 88*	
Site Ref:	*15-974*		**Test Date:**	*26/06/2024*	
Type of Kentledge:	*13 Tonne Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-1.33*	*mm*	**W3W:**	*/joined.stage.hills*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 42%

Max Deformation of 1.33 mm

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	28/06/2024	A. Garrity	28/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	Bennet Street	**Test No.:**	Plot 89 / 90
Site Ref:	15-974	**Test Date:**	26/06/2024
Type of Kentledge:	13 Tonne Excavator	**Test Depth:**	GL mbgl
Plate Diameter:	450 mm	**Easting:**	0
Max Applied Pressure:	308.41 kN/m2	**Northing:**	0
Max Deformation:	-3.39 mm	**W3W:**	///allows.fruit.venues
Strata Description:	Aggregate	**Weather:**	Dry

Comments:



Equivalent CBR Value of 26%

Max Deformation of 3.39 mm

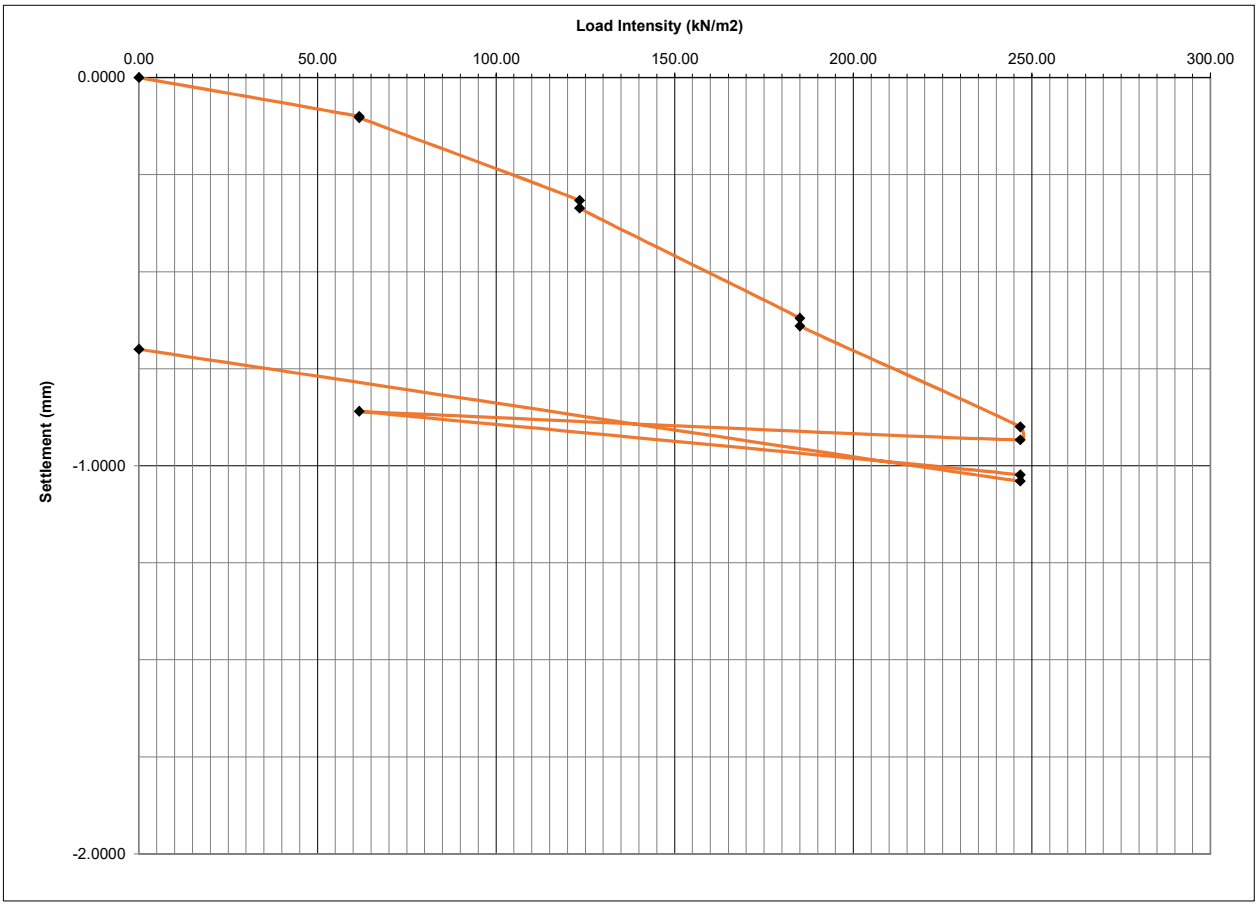
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	28/06/2024	A. Garrity	28/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennet Street*		**Test No.:**	*Plot 99 /*	
Site Ref:	*15-974*		**Test Date:**	*26/06/2024*	
Type of Kentledge:	*13 Tonne Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-1.04*	*mm*	**W3W:**	*/juices.petal.gains*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value in excess of 42%

Max Deformation of -1.04 mm

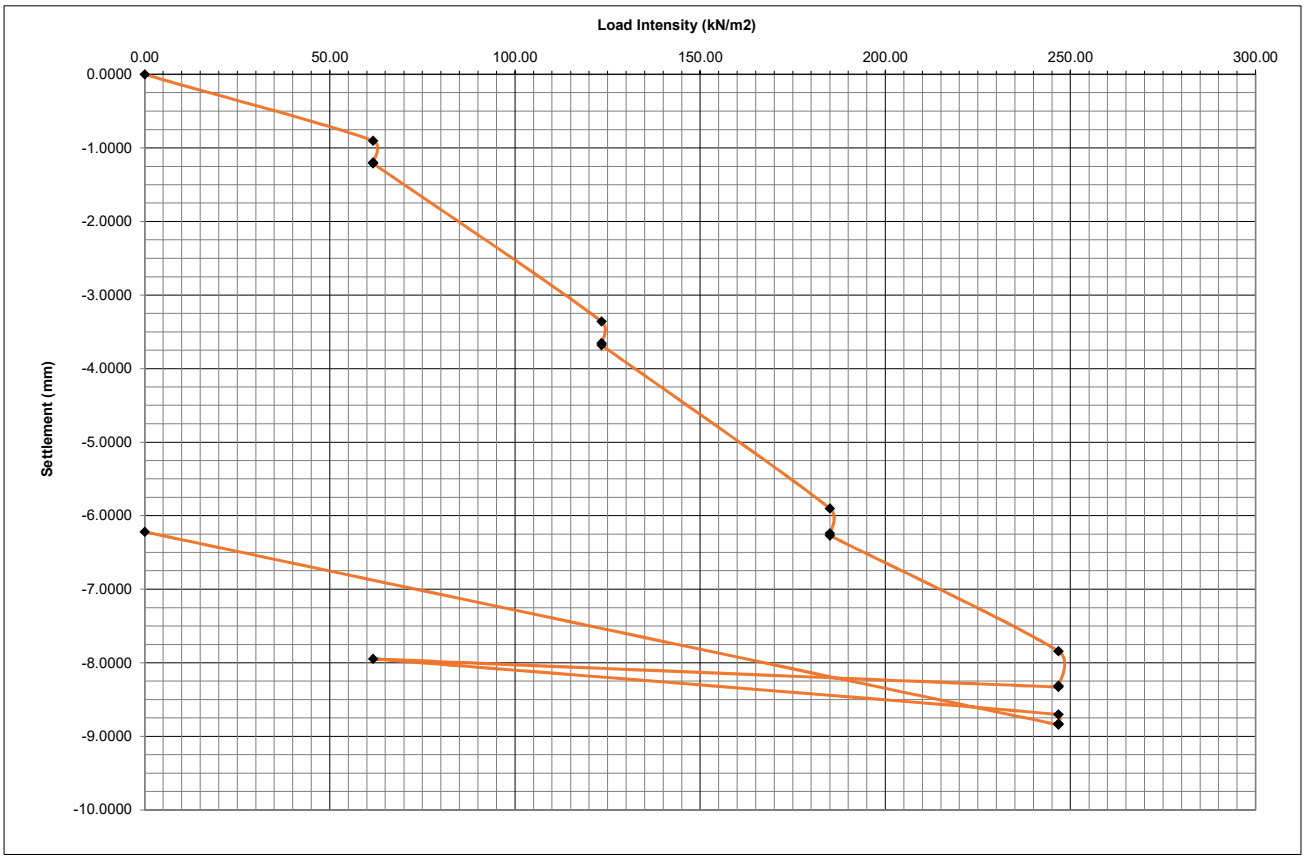
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	28/06/2024	A. Garrity	28/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennet Street*	**Test No.:**	*CBR Road 3 PL134E*
Site Ref:	*15-974*	**Test Date:**	*26/06/2024*
Type of Kentledge:	*13 Tonne Excavator*	**Test Depth:**	*GL* *mbgl*
Plate Diameter:	*450* *mm*	**Easting:**	*0*
Max Applied Pressure:	*246.73* *kN/m2*	**Northing:**	*0*
Max Deformation:	*-8.84* *mm*	**W3W:**	*///locals.royal.vanish*
Strata Description:	*Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 4%

Max Deformation of 8.84 mm

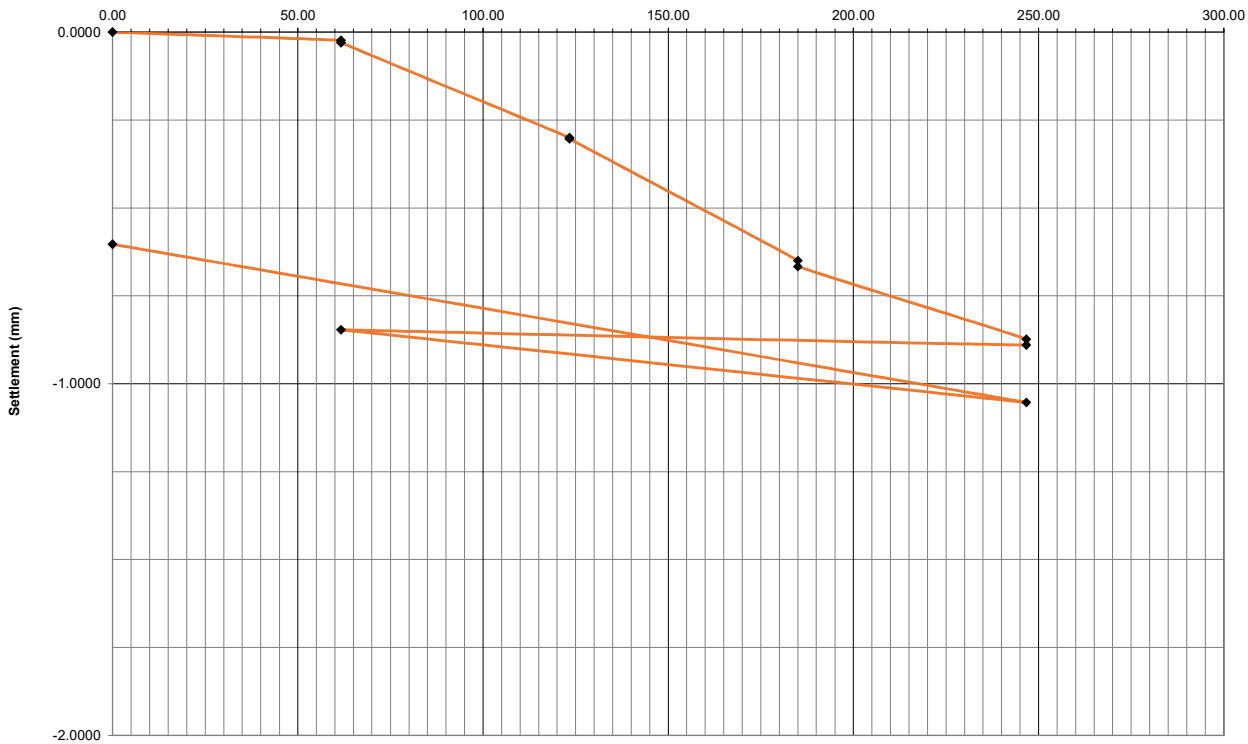
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	28/06/2024	A. Garrity	28/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennet Street*		**Test No.:**	*CBR Road 3 PL134E+ 10m*	
Site Ref:	*15-974*		**Test Date:**	*26/06/2024*	
Type of Kentledge:	*13 Tonne Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-1.05*	*mm*	**W3W:**	*///gear.soaks.single*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value in excess of 42%

Max Deformation of 1.05 mm

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	28/06/2024	A. Garrity	28/06/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Rd3Rd5 Junction*	
Site Ref:	*15-974*		**Test Date:**	*27/06/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-4.14*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 4%

Max Deformation of 4.14 mm

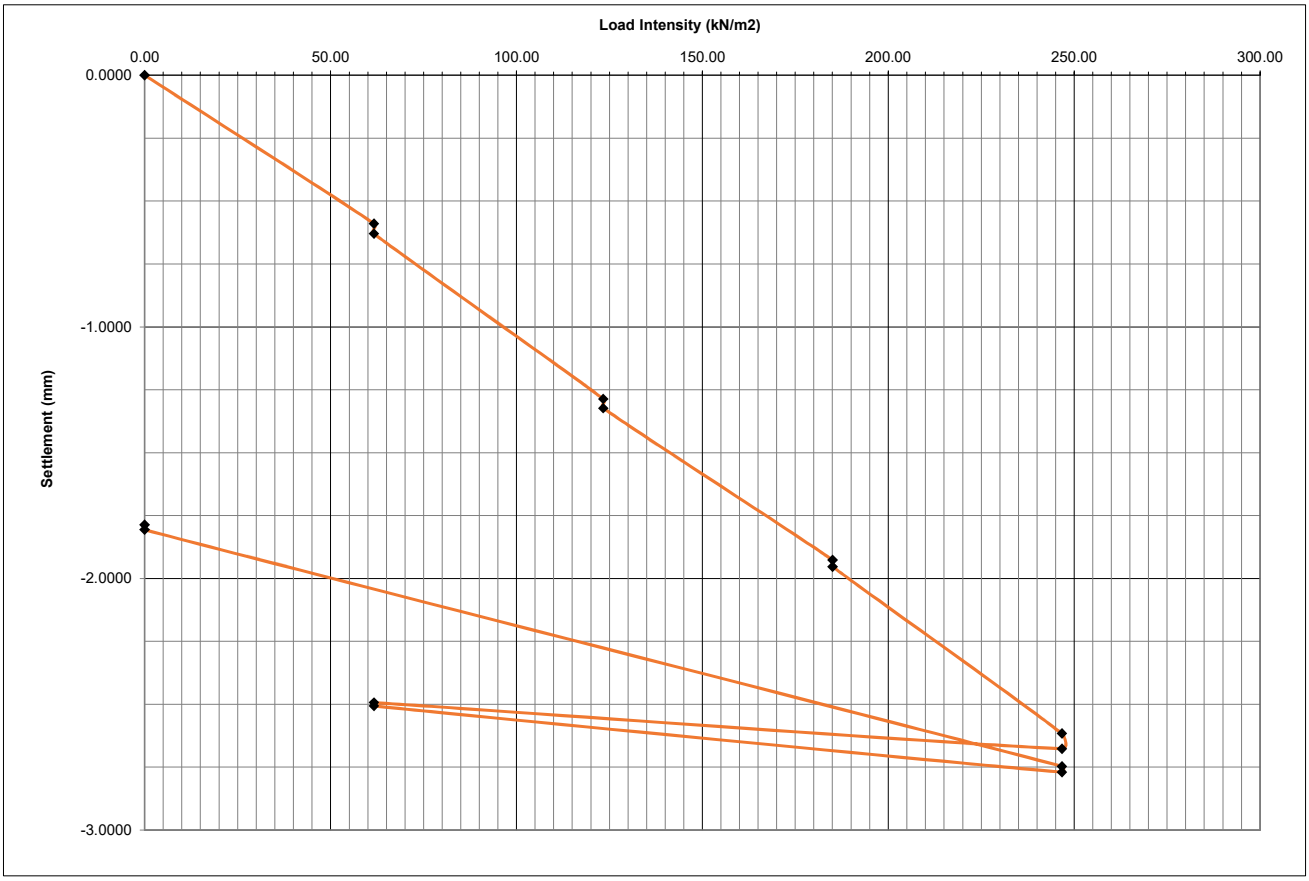
Site Engineer:	Checked By:	Date:	Approved By:	Date:
T. Walker	M. Dee	10/07/2024	A. Garrity	10/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Rd 3 PL134E+30m*	
Site Ref:	*15-974*		**Test Date:**	*27/06/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-2.77*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 12%

Max Deformation of -2.77 mm

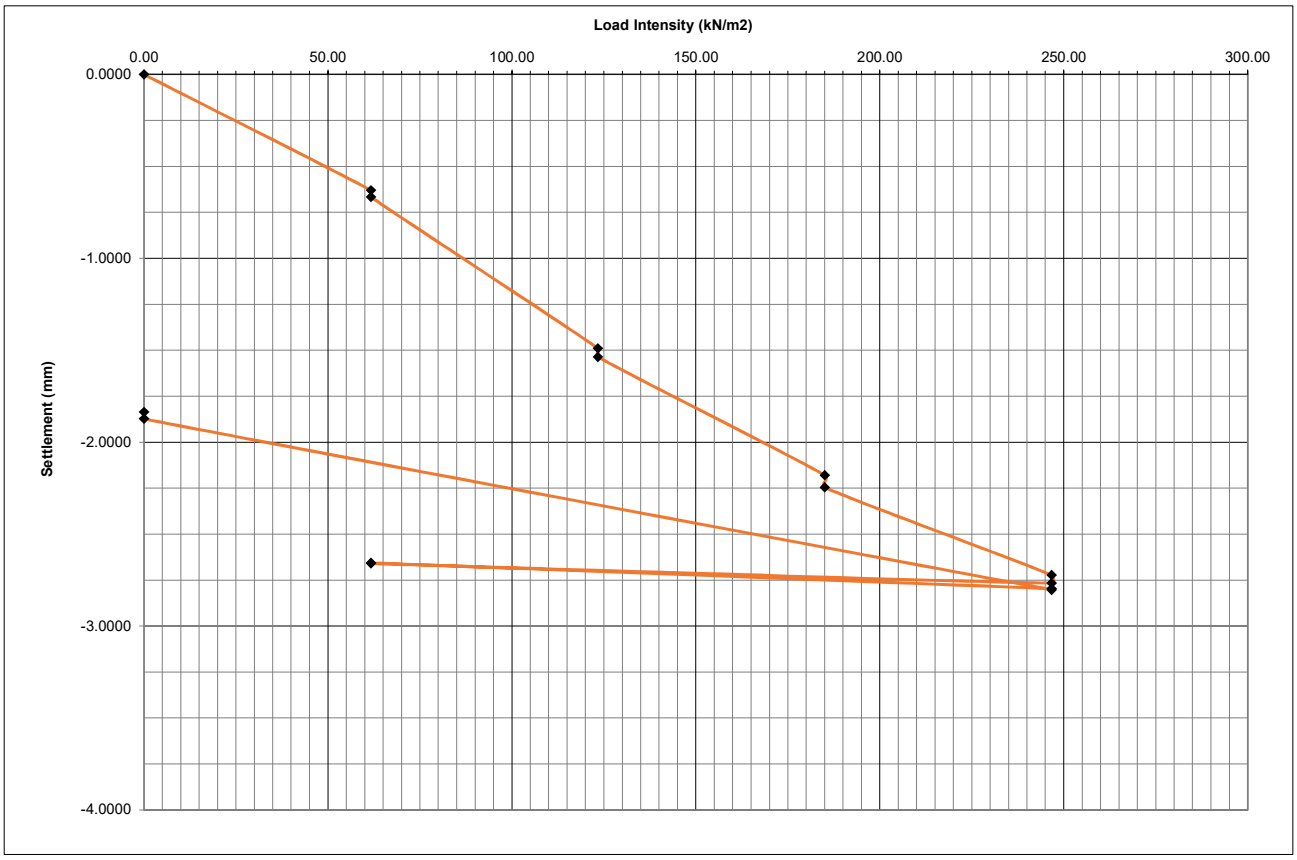
Site Engineer:	Checked By:	Date:	Approved By:	Date:
T. Walker	M. Dee	10/07/2024	A. Garrity	10/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Rd3 PL134E+20m*	
Site Ref:	*15-974*		**Test Date:**	*27/06/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-2.80*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 10%

Max Deformation of 2.80 mm

Site Engineer:	Checked By:	Date:	Approved By:	Date:
T. Walker	M. Dee	10/07/2024	A. Garrity	10/07/2024

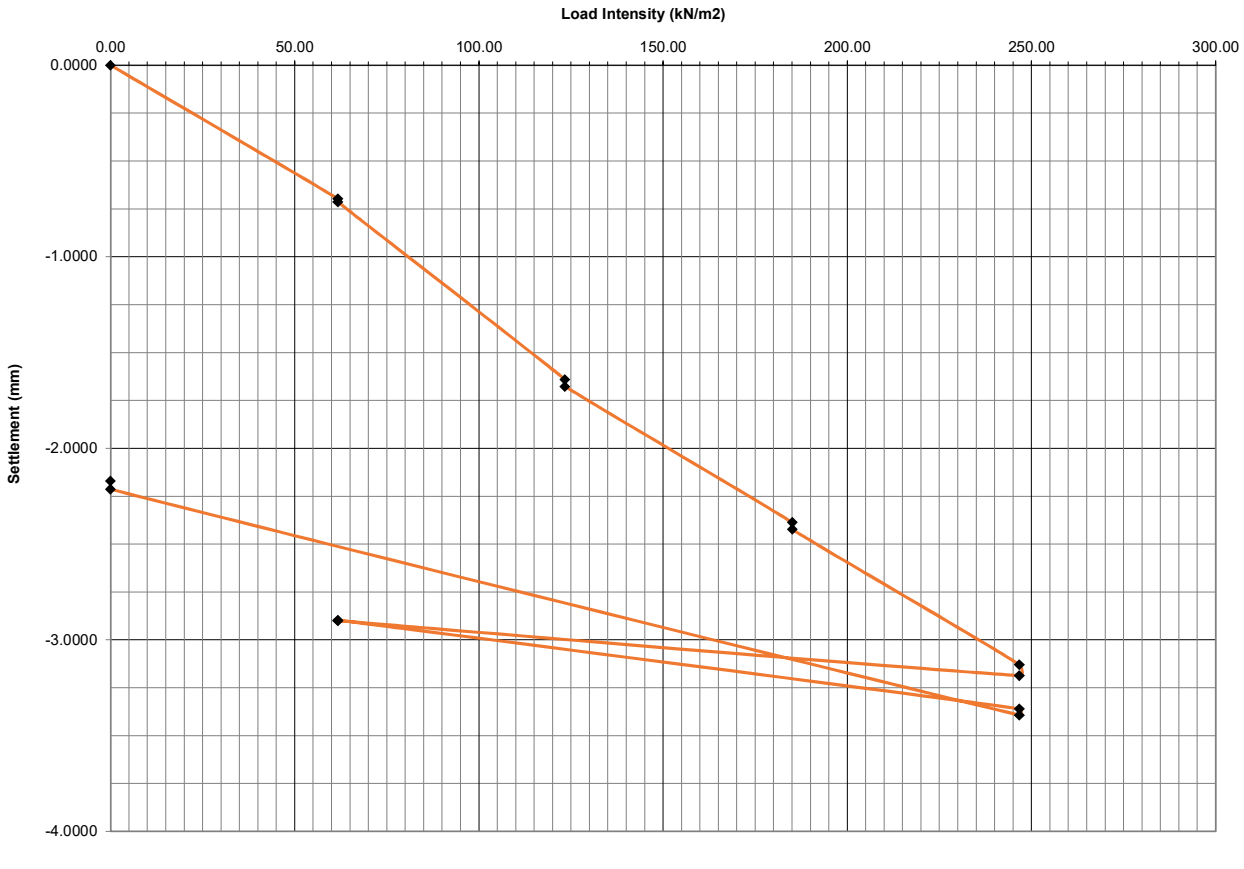
Environmental Engineering Partnership Limited trading as E3P Registered in England No: 08725262 Registered Office: Taylor Road Trafford Park Urmston Manchester M41 7JQ

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Rd5 +40m*	
Site Ref:	*15-974*		**Test Date:**	*27/06/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-3.39*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 8%

Max Deformation of 3.39 mm

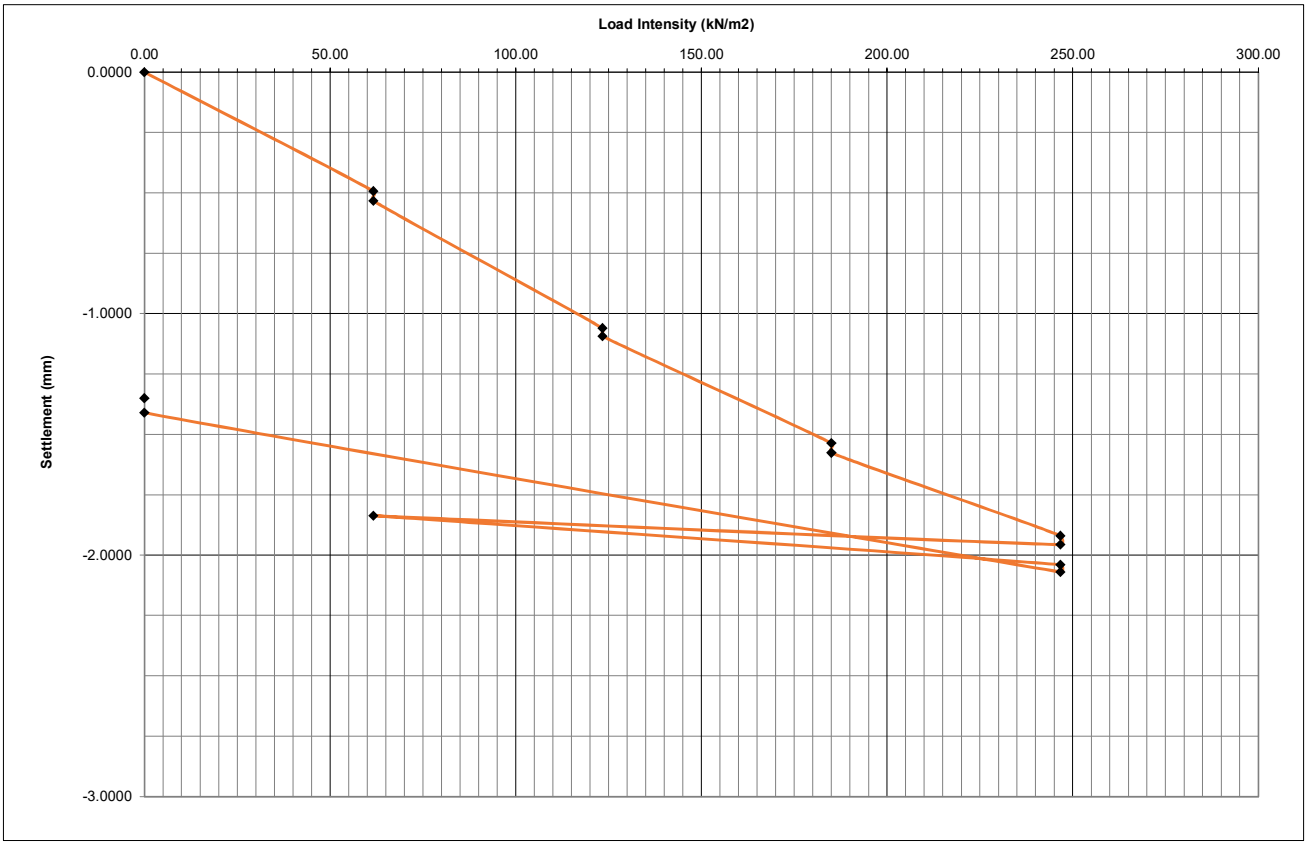
Site Engineer:	Checked By:	Date:	Approved By:	Date:
T. Walker	M. Dee	10/07/2024	A. Garrity	10/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Rd5 +30m*	
Site Ref:	*15-974*		**Test Date:**	*27/06/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-2.07*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 17%

Max Deformation of -2.07 mm

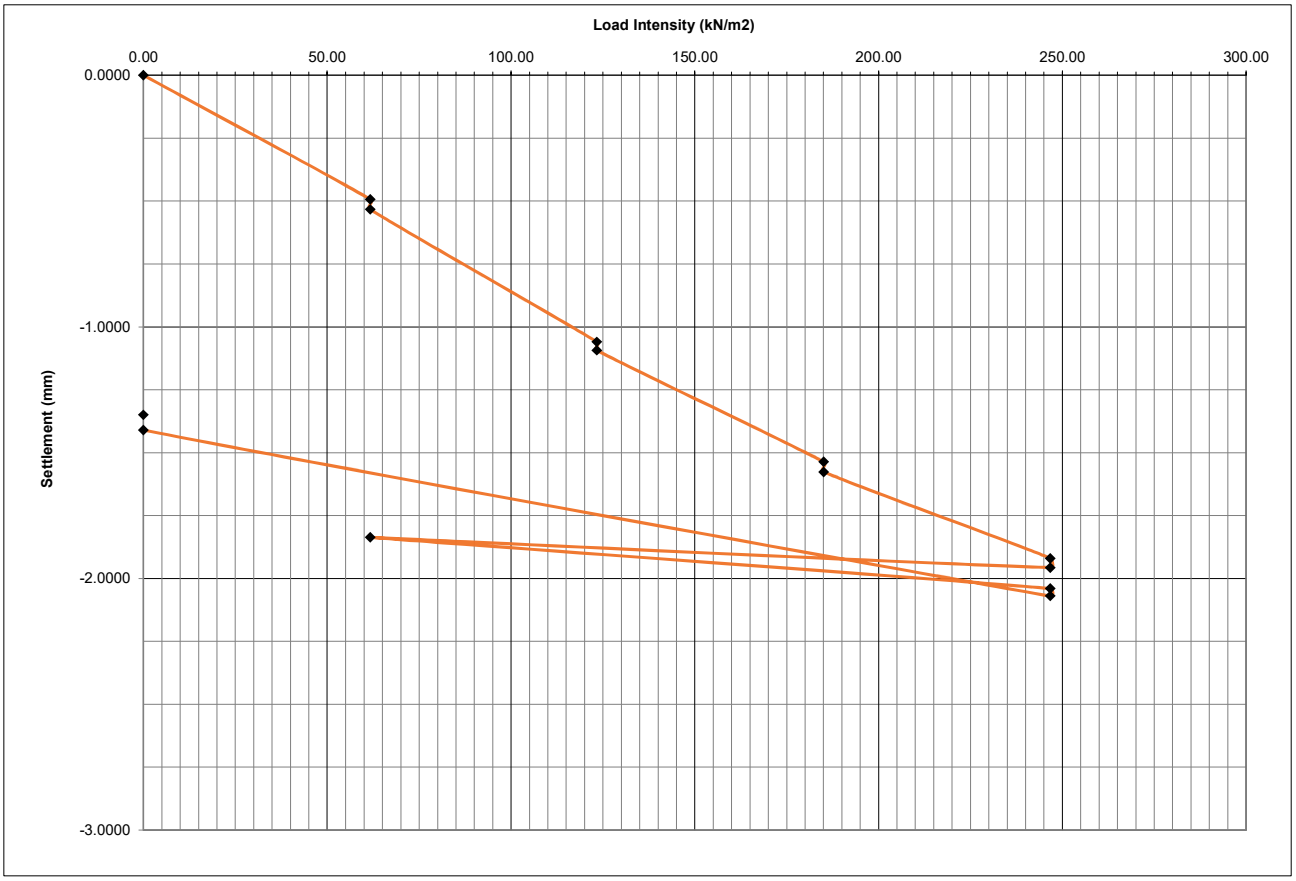
Site Engineer:	Checked By:	Date:	Approved By:	Date:
T. Walker	M. Dee	10/07/2024	A. Garrity	10/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Rd5 +20m*	
Site Ref:	*15-974*		**Test Date:**	*27/06/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-2.07*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 17%

Max Deformation of -2.07 mm

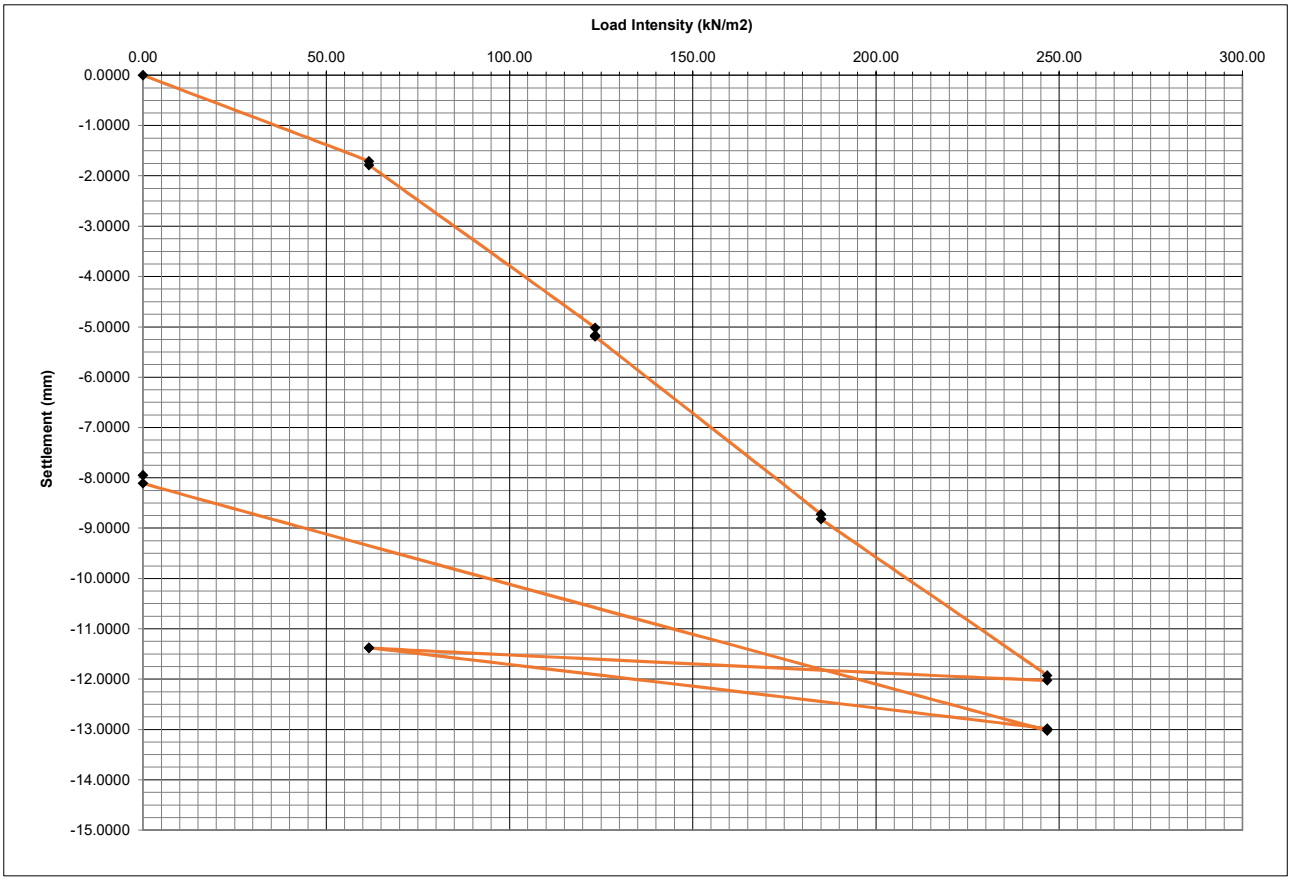
Site Engineer:	Checked By:	Date:	Approved By:	Date:
T. Walker	M. Dee	10/07/2024	A. Garrity	10/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Rd5 +10m*	
Site Ref:	*15-974*		**Test Date:**	*27/06/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*246.73*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-13.02*	*mm*	**W3W:**	*0*	
Strata Description:	*Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 2%

Max Deformation of 13.02 mm

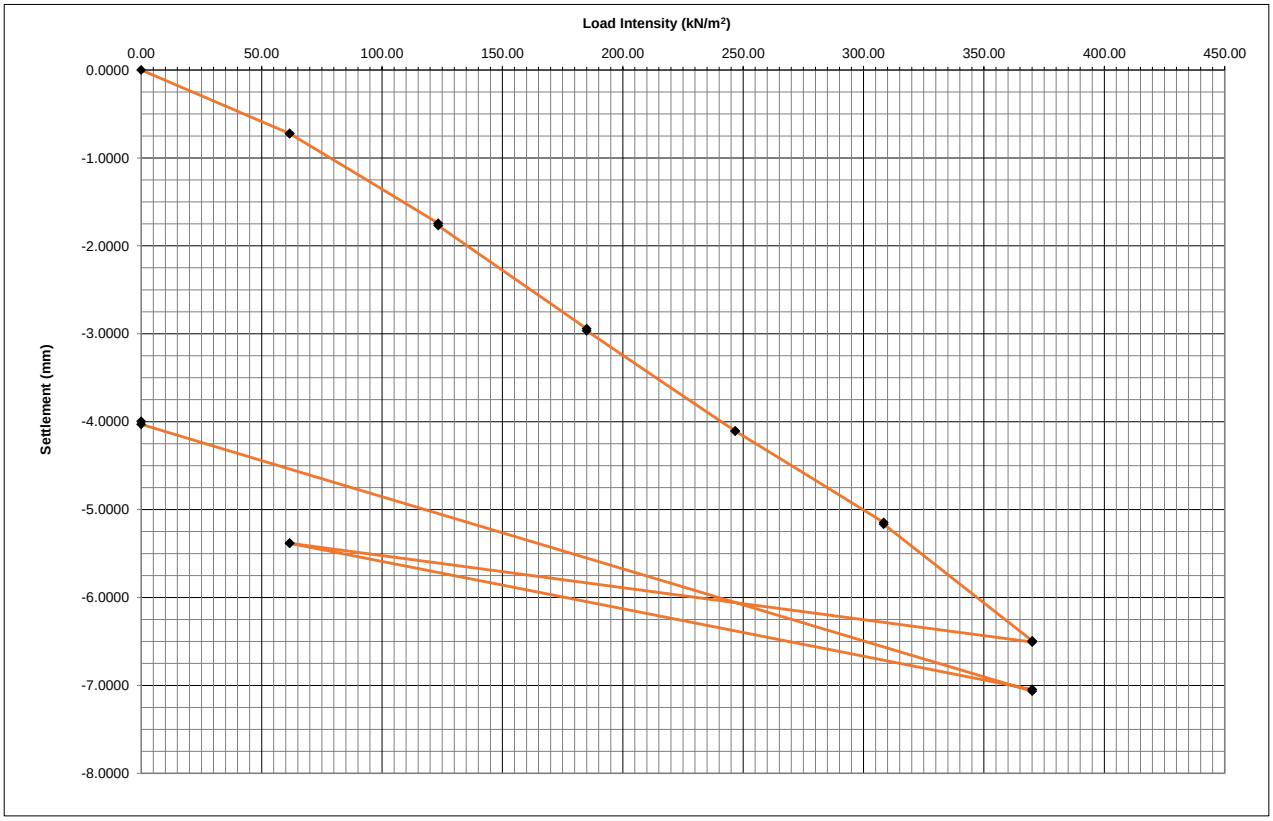
Site Engineer:	Checked By:	Date:	Approved By:	Date:
T. Walker	M. Dee	10/07/2024	A. Garrity	10/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Plot 80*	
Site Ref:	*15-974*		**Test Date:**	*16/07/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*m bgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m²*	**Northing:**	*0*	
Max Deformation:	*-7.07*	*mm*	**W3W:**	*0*	
Strata Description:	*Recycled Aggregatte*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 8%

Max Deformation of 7.07 mm

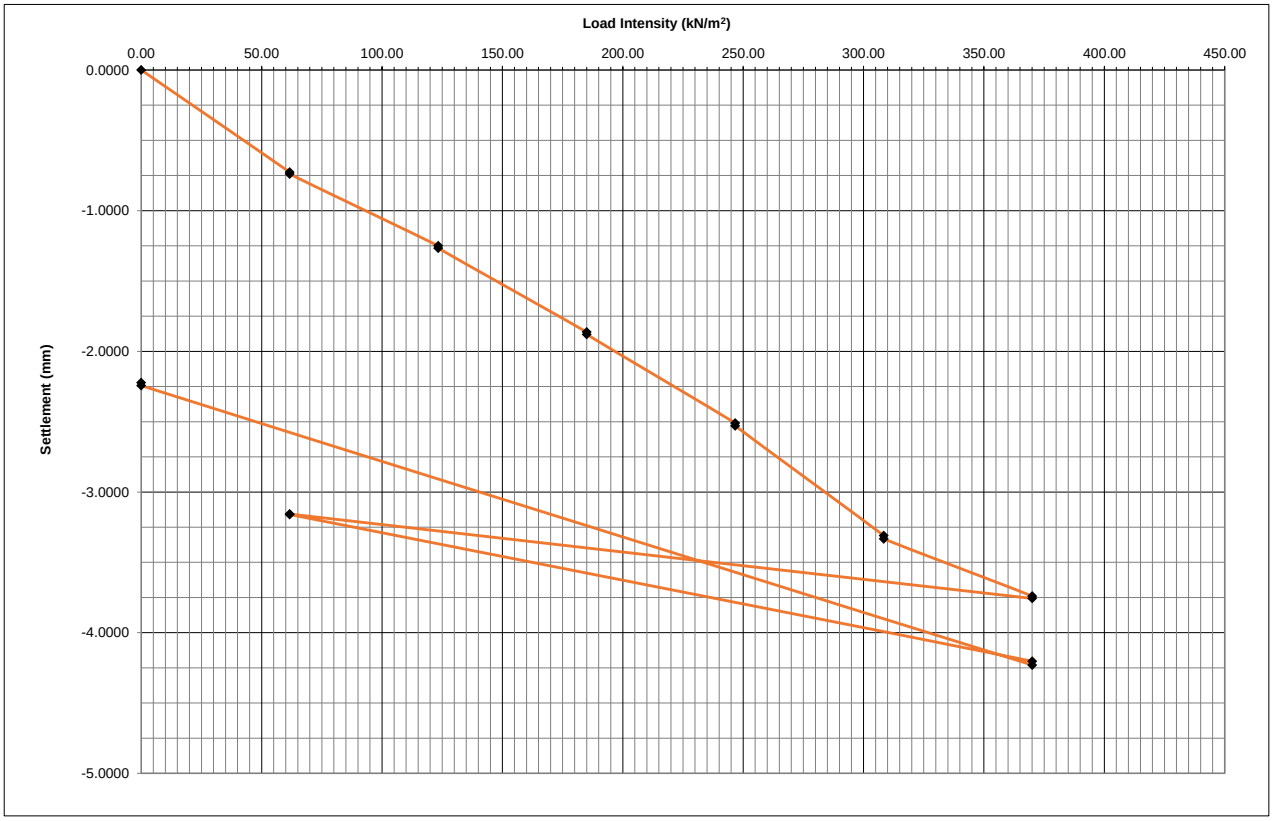
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	17/07/2024	A. Garrity	17/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Plot 82*	
Site Ref:	*15-974*		**Test Date:**	*16/07/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m²*	**Northing:**	*0*	
Max Deformation:	*-4.23*	*mm*	**W3W:**	*0*	
Strata Description:	*Recycled Aggregatte*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 13%

Max Deformation of 1.74 mm

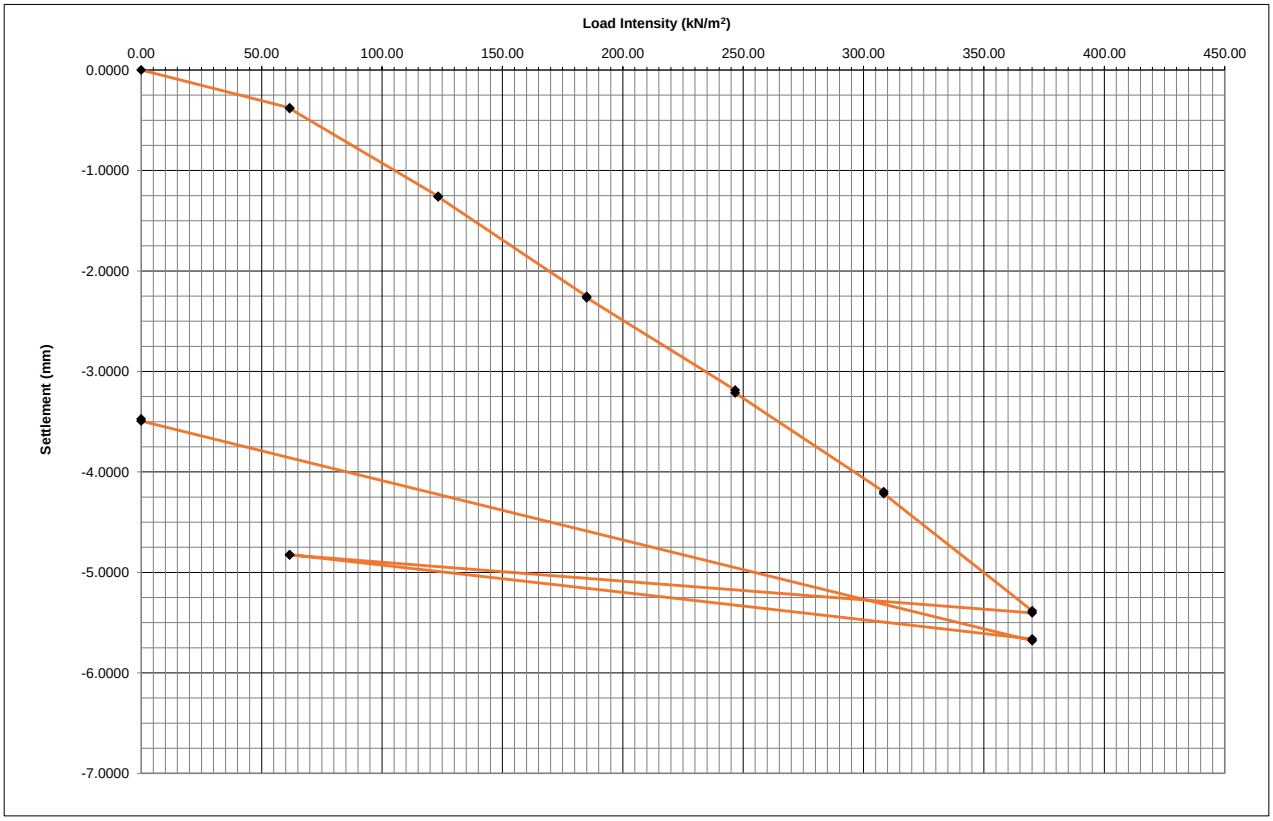
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	17/07/2024	A. Garrity	17/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Plot 93/94*	
Site Ref:	*15-974*		**Test Date:**	*16/07/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m²*	**Northing:**	*0*	
Max Deformation:	*-5.68*	*mm*	**W3W:**	*0*	
Strata Description:	*Recycled Aggregatte*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 12%

Max Deformation of 5.68 mm

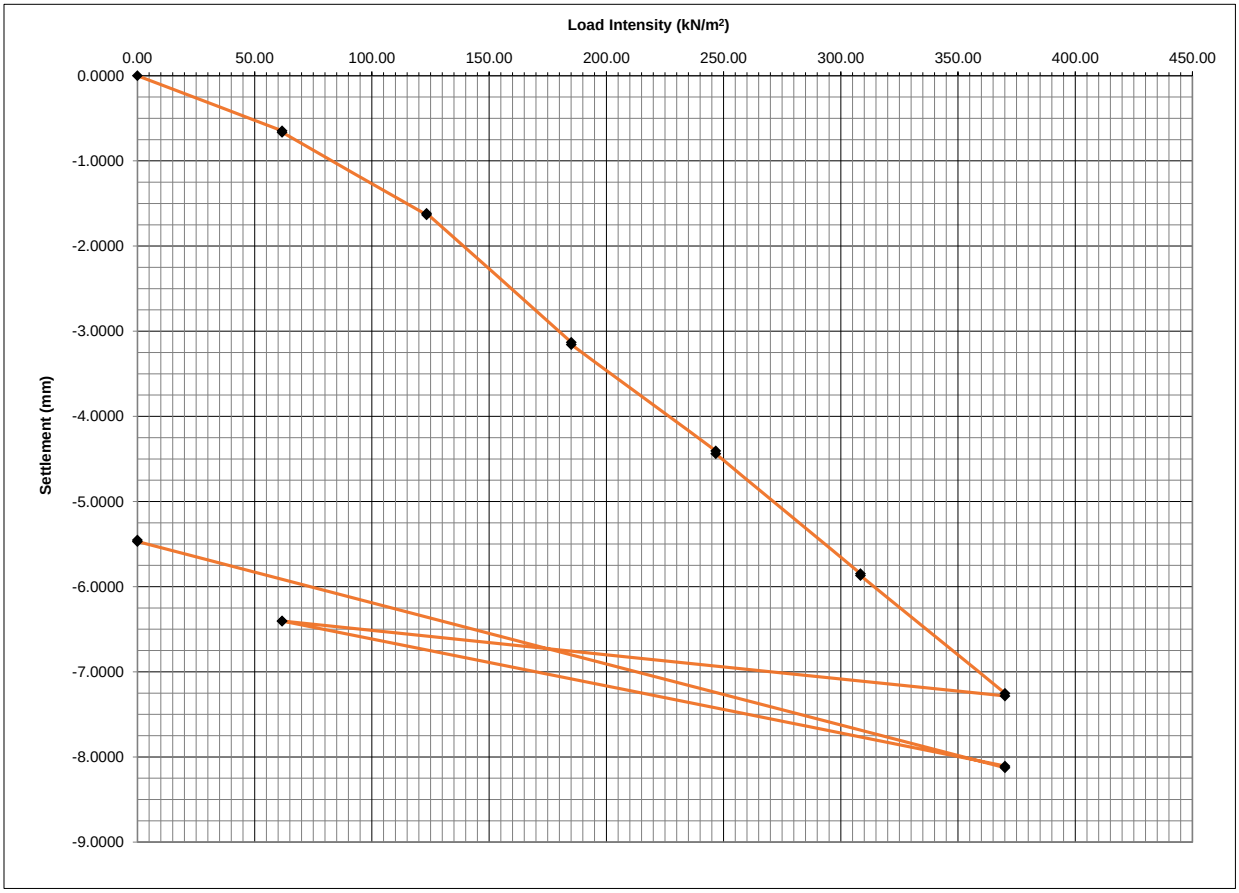
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	17/07/2024	A. Garrity	17/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Plot 95-96*	
Site Ref:	*15-974*		**Test Date:**	*16/07/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m²*	**Northing:**	*0*	
Max Deformation:	*-8.13*	*mm*	**W3W:**	*0*	
Strata Description:	*Recycled Aggregatte*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 9%

Max Deformation of 8.13 mm

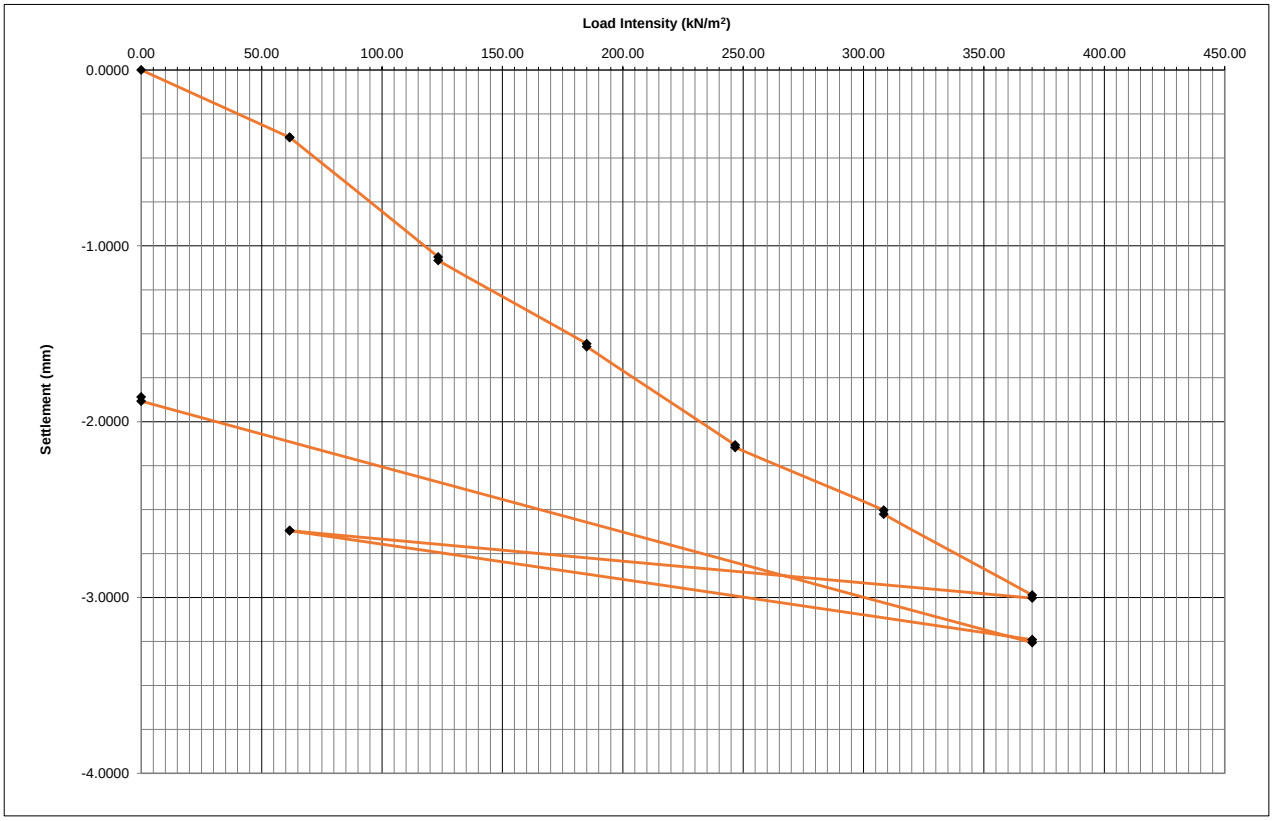
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	17/07/2024	A. Garrity	17/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Rd5 +50m*	
Site Ref:	*15-974*		**Test Date:**	*16/07/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m²*	**Northing:**	*0*	
Max Deformation:	*-3.26*	*mm*	**W3W:**	*0*	
Strata Description:	*Recycled Aggregatte*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 17%

Max Deformation of 3.26 mm

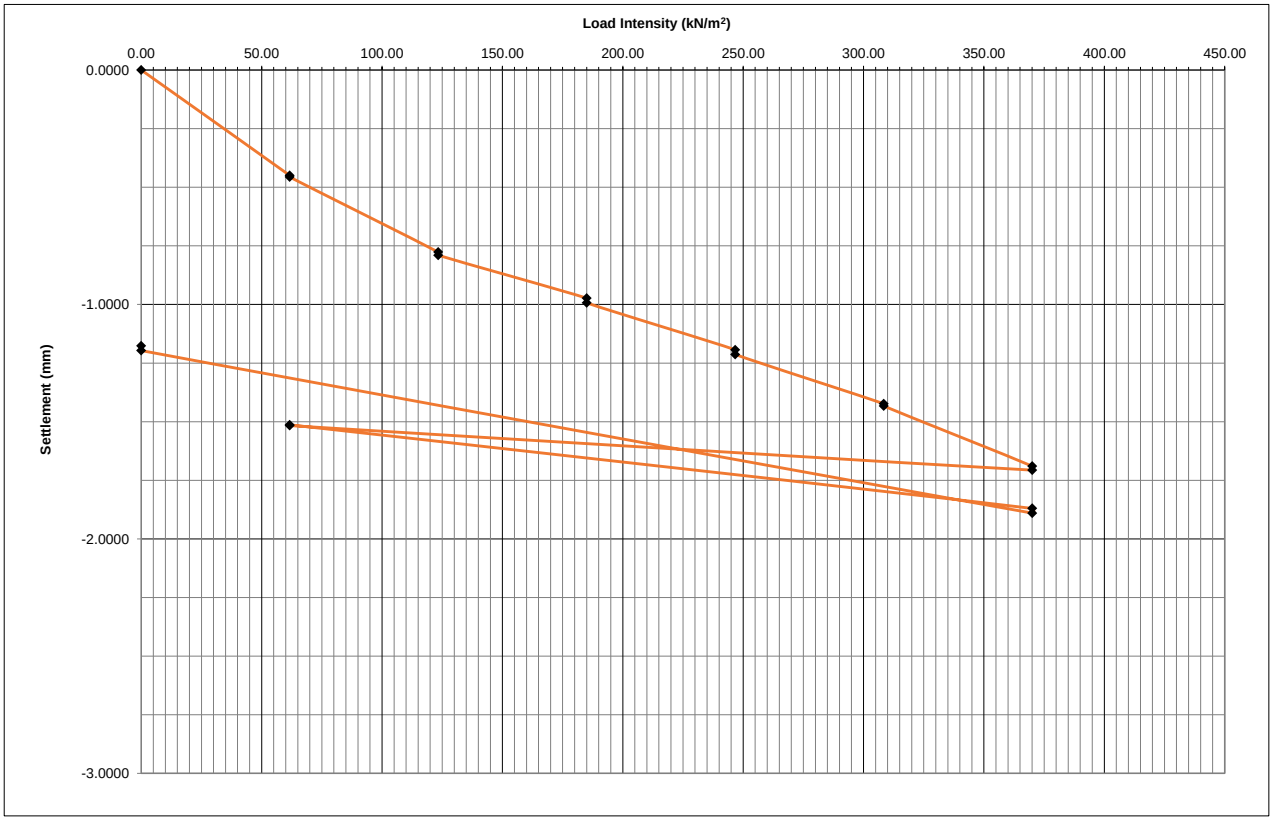
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	17/07/2024	A. Garrity	17/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Rd5 +60m*	
Site Ref:	*15-974*		**Test Date:**	*16/07/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m²*	**Northing:**	*0*	
Max Deformation:	*-1.89*	*mm*	**W3W:**	*0*	
Strata Description:	*Recycled Aggregatte*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 45%

Max Deformation of 1.89 mm

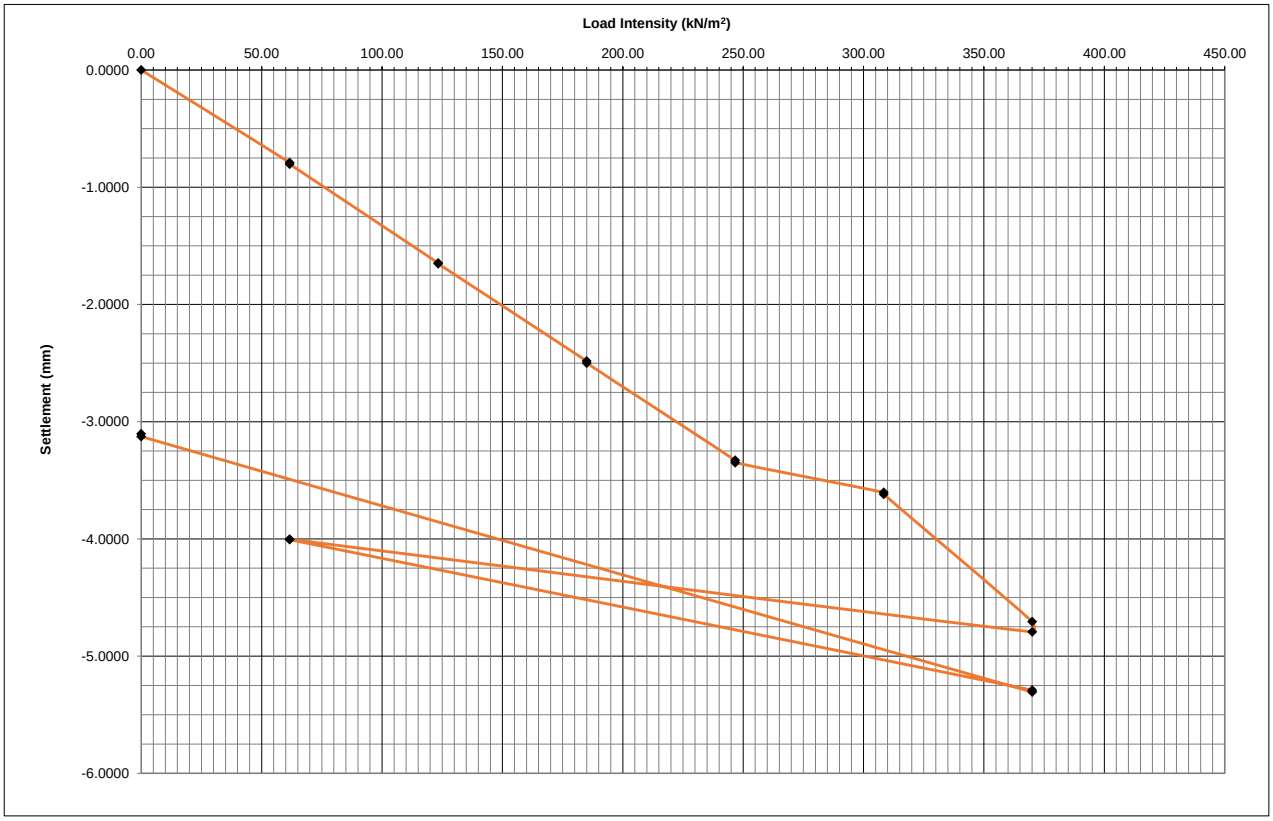
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	17/07/2024	A. Garrity	17/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Rd5 +70m*	
Site Ref:	*15-974*		**Test Date:**	*16/07/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m²*	**Northing:**	*0*	
Max Deformation:	*-5.31*	*mm*	**W3W:**	*0*	
Strata Description:	*Recycled Aggregatte*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 8%

Max Deformation of 5.31 mm

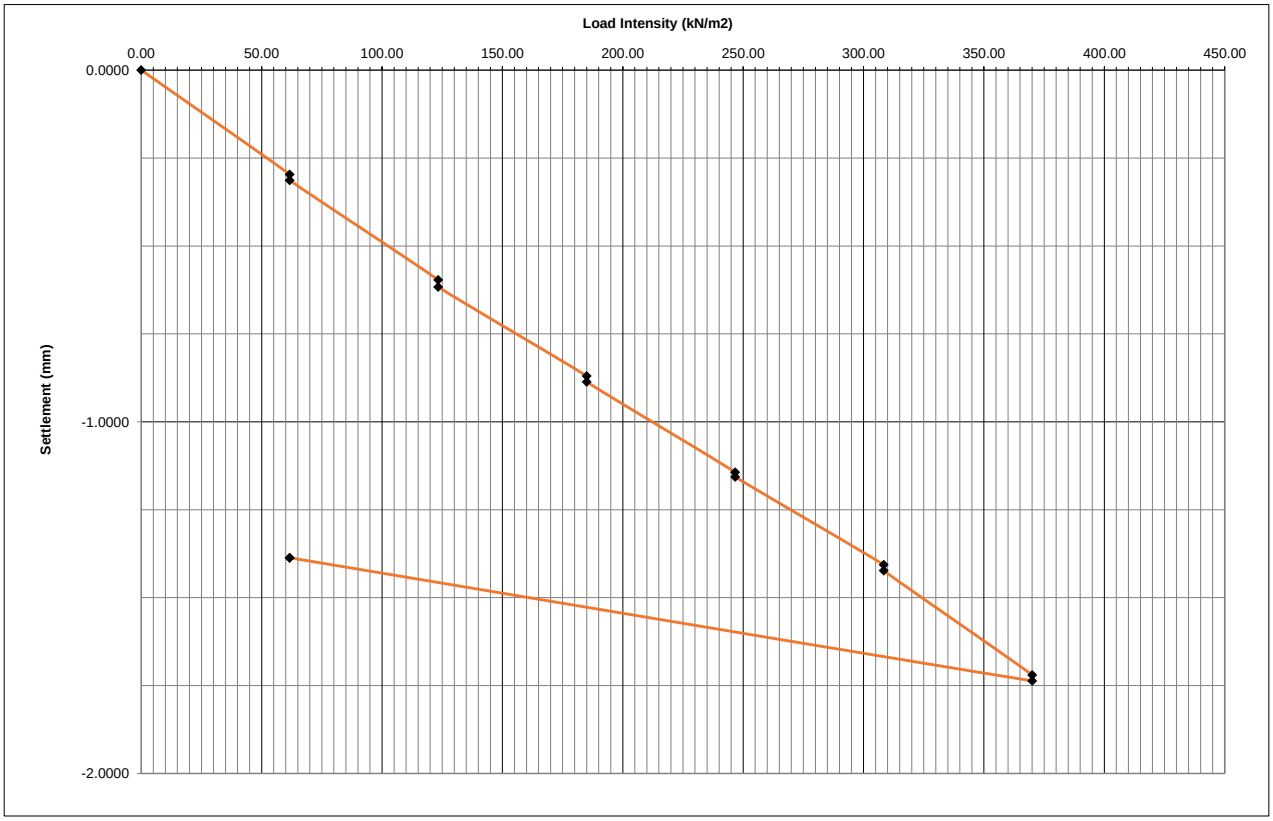
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	17/07/2024	A. Garrity	17/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Rd3Rd5 Junction Re-Test*	
Site Ref:	*15-974*		**Test Date:**	*16/07/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-1.74*	*mm*	**W3W:**	*0*	
Strata Description:	*6F2*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 49%

Max Deformation of 1.74 mm

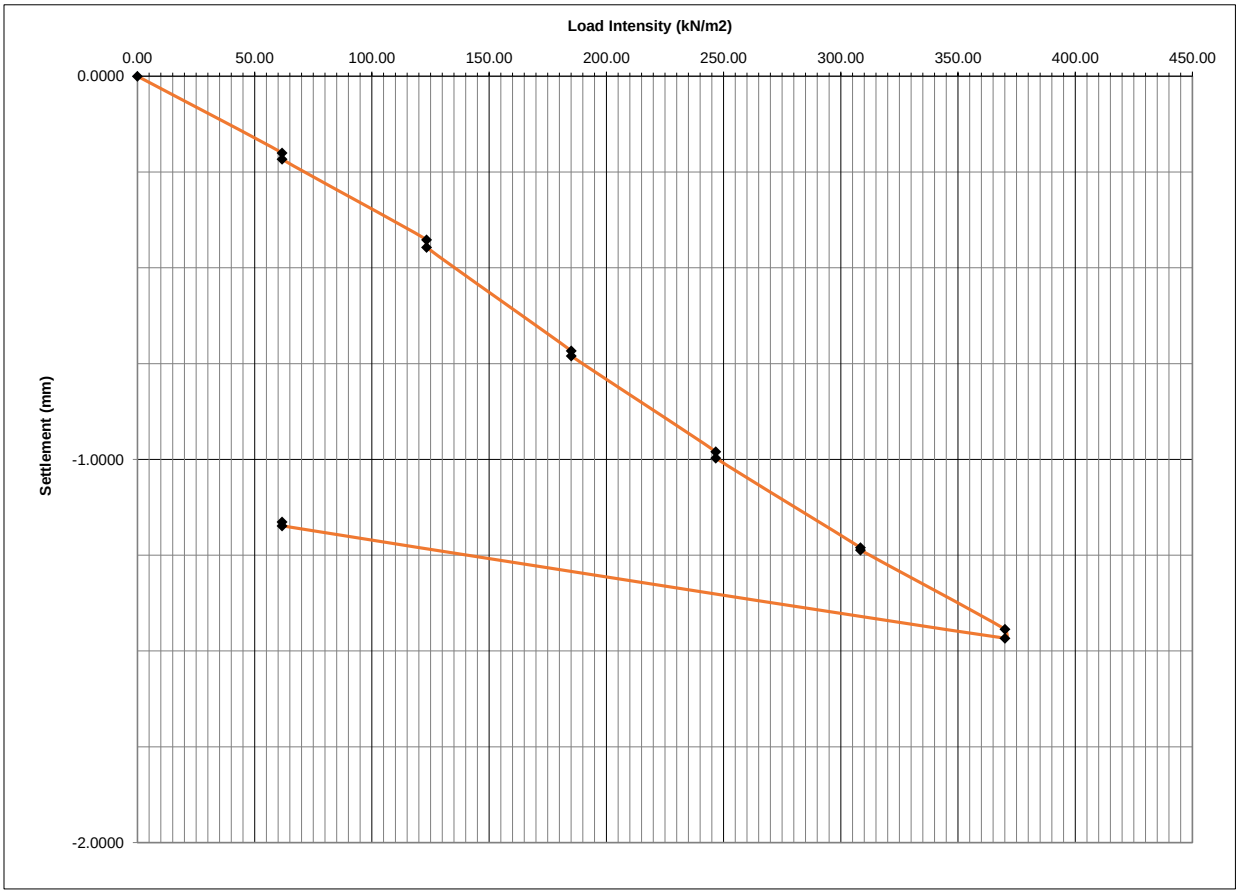
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	17/07/2024	A. Garrity	17/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Rd5 +10m*	
Site Ref:	*15-974*		**Test Date:**	*16/07/2024*	
Type of Kentledge:	*20Tonne Roller*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*0*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*0*	
Max Deformation:	*-1.52*	*mm*	**W3W:**	*0*	
Strata Description:	*6F2*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 63%

Max Deformation of 1.52 mm

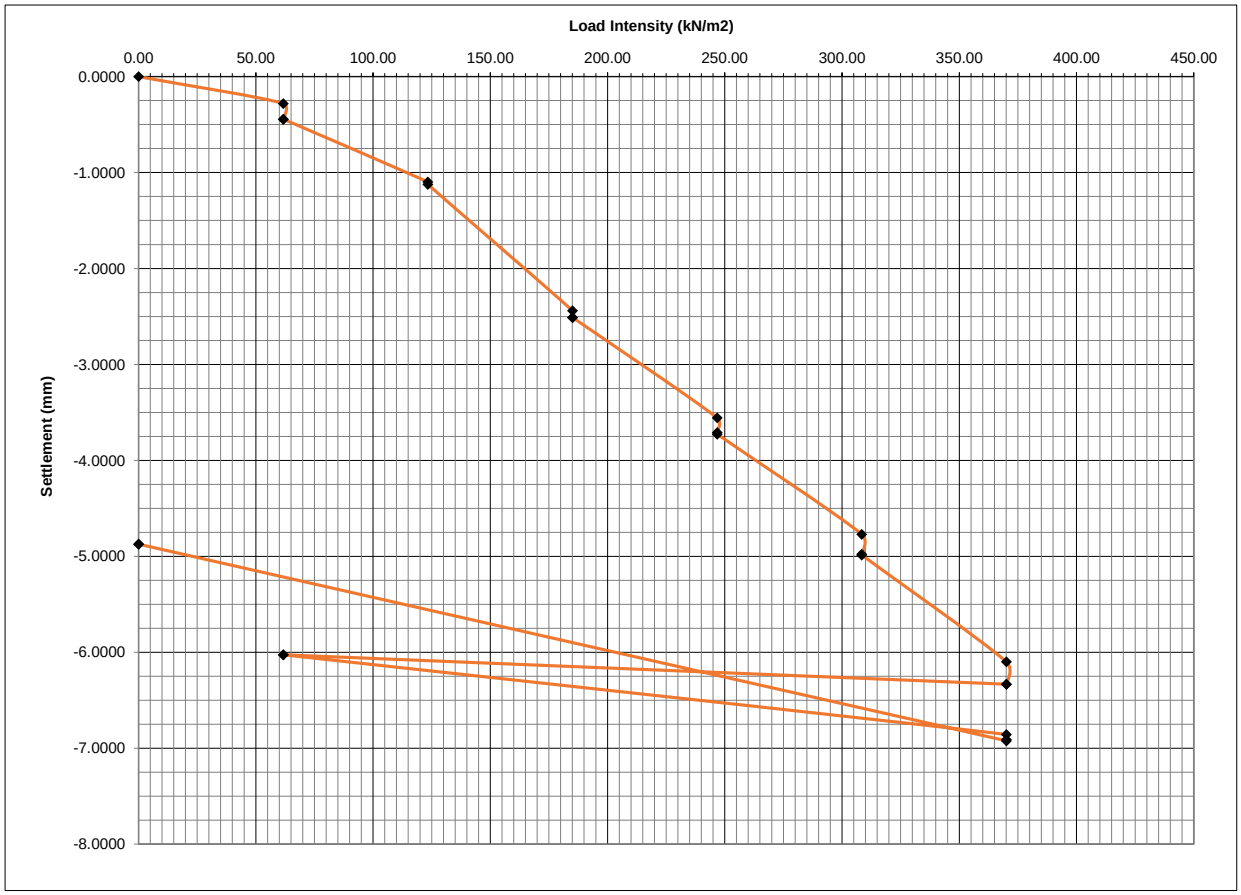
Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	M. Dee	17/07/2024	A. Garrity	17/07/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 49/50***	
Site Ref:	*15-974*		**Test Date:**	*20/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386282*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397090*	
Max Deformation:	*-6.92*	*mm*	**W3W:**	*///snow.skip.woods*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 14%

Max Deformation of -6.92 mm

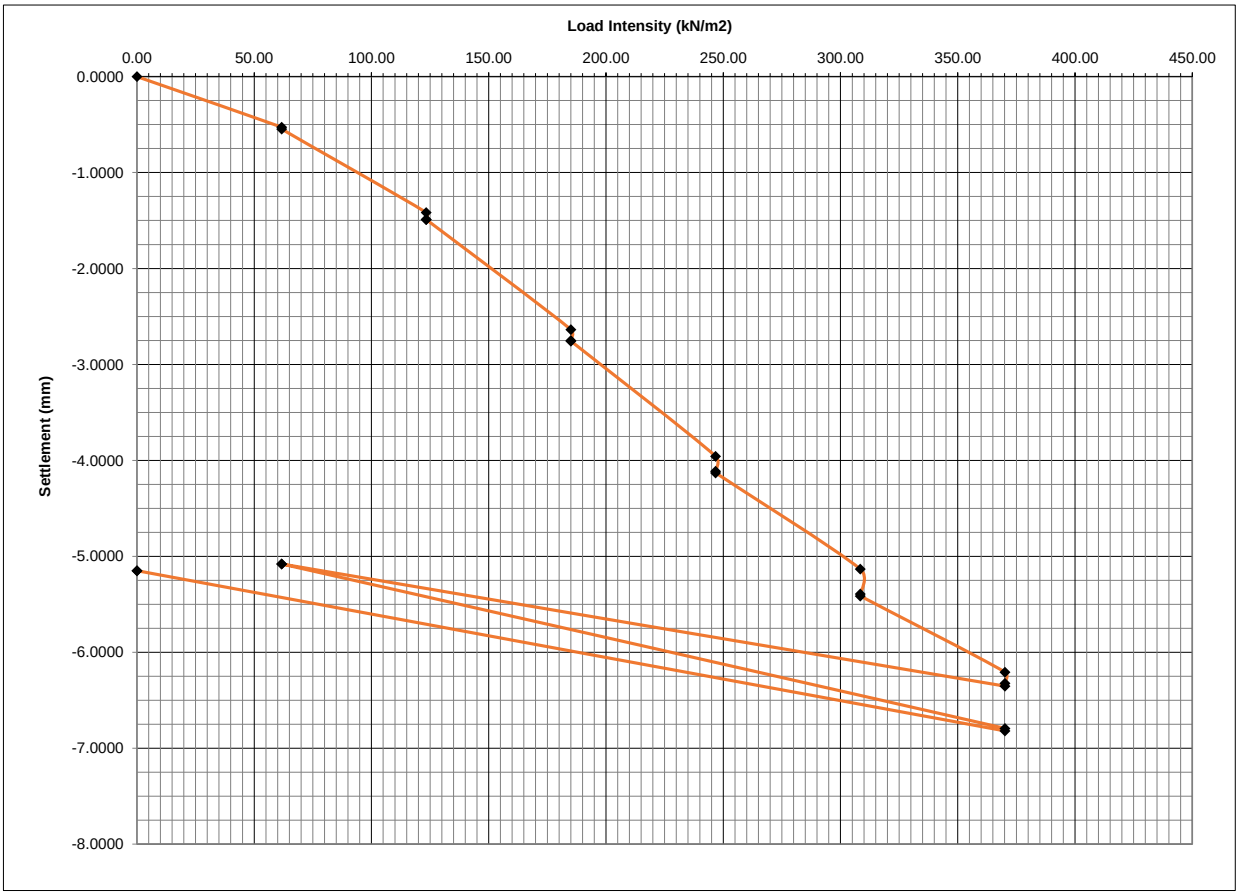
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 51***	
Site Ref:	*15-974*		**Test Date:**	*20/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386282*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397099*	
Max Deformation:	*-6.82*	*mm*	**W3W:**	*///beam.froth.cowboy*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 11%

Max Deformation of -6.82 mm

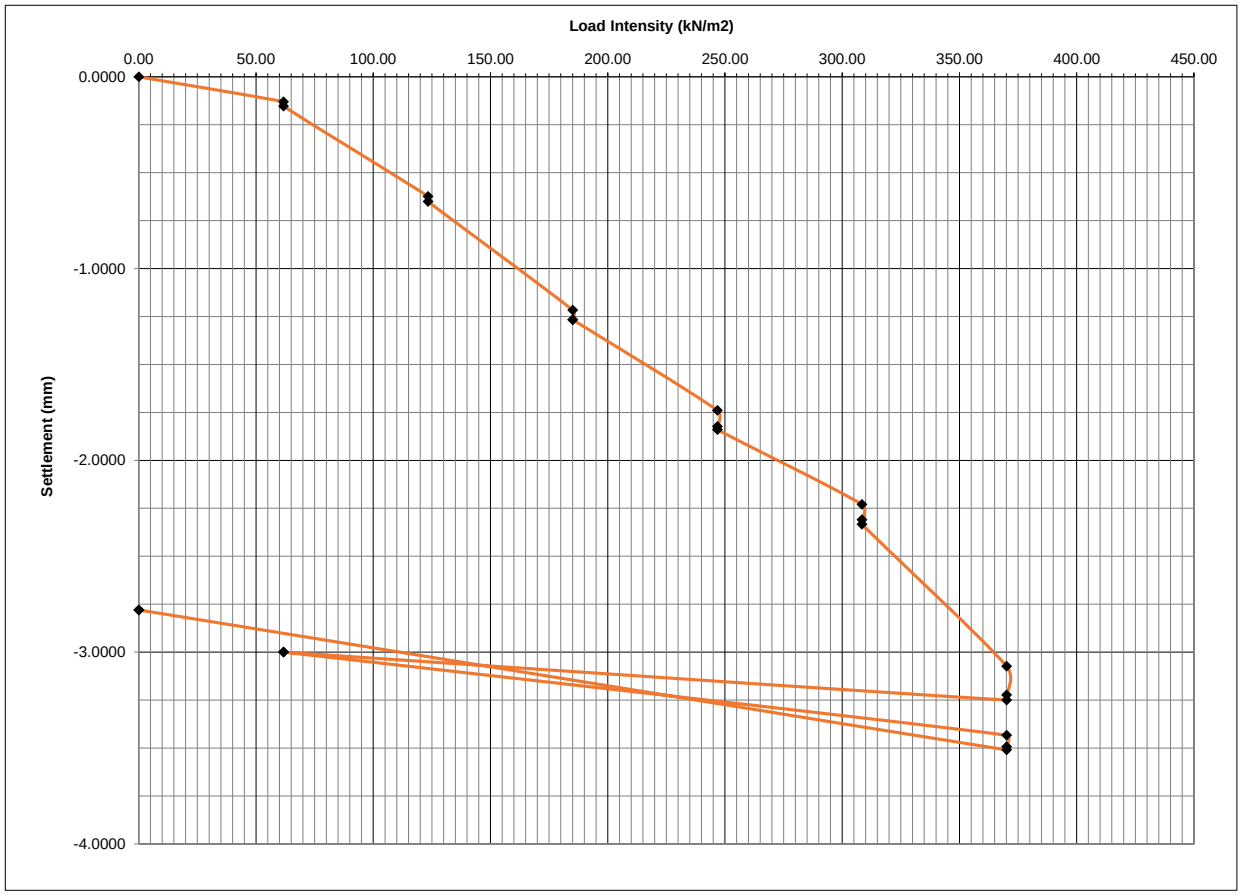
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 53***	
Site Ref:	*15-974*		**Test Date:**	*20/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386279*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397111*	
Max Deformation:	*-3.51*	*mm*	**W3W:**	*///hello.memo.label*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 26%

Max Deformation of -3.51 mm

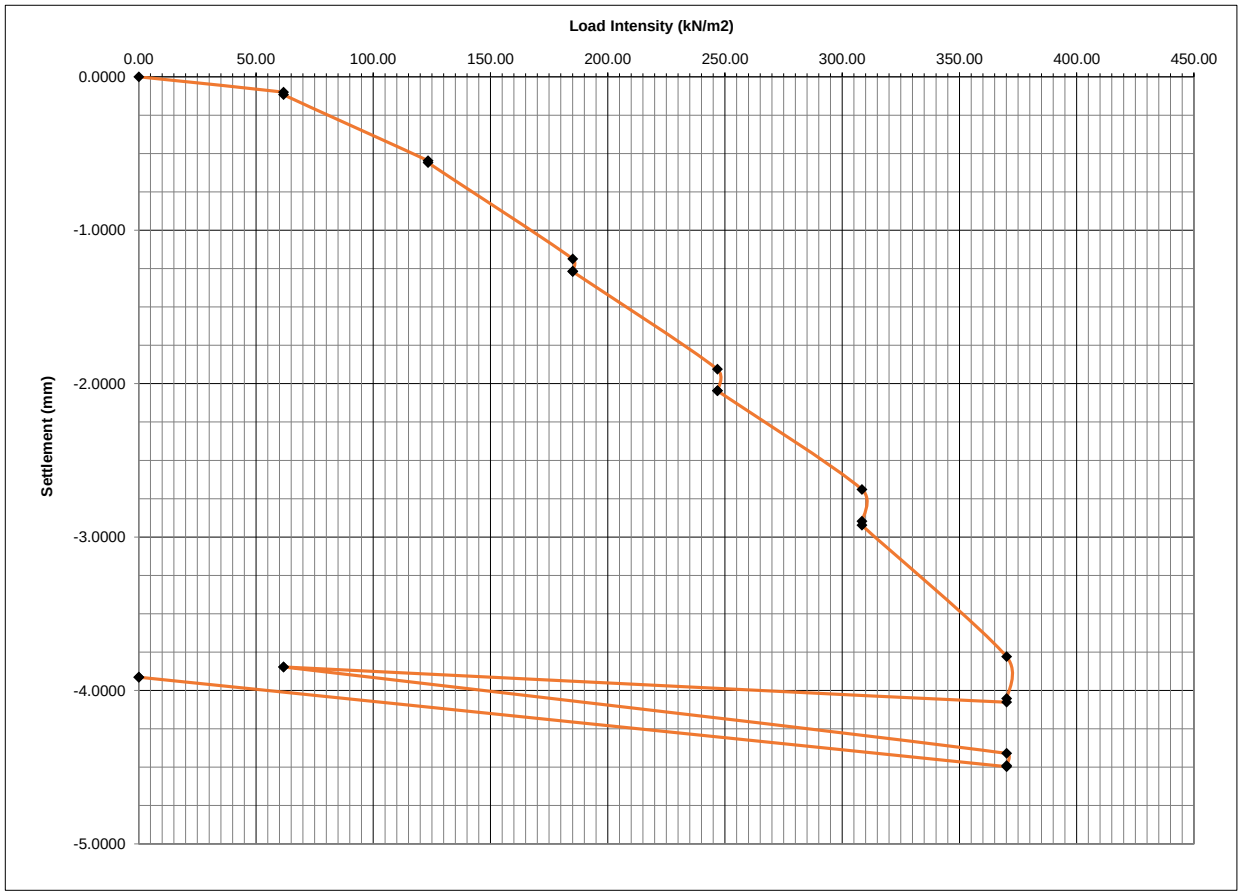
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 54-55***	
Site Ref:	*15-974*		**Test Date:**	*20/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386282*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397117*	
Max Deformation:	*-4.50*	*mm*	**W3W:**	*///loss.store.hardly*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 26%

Max Deformation of -4.50 mm

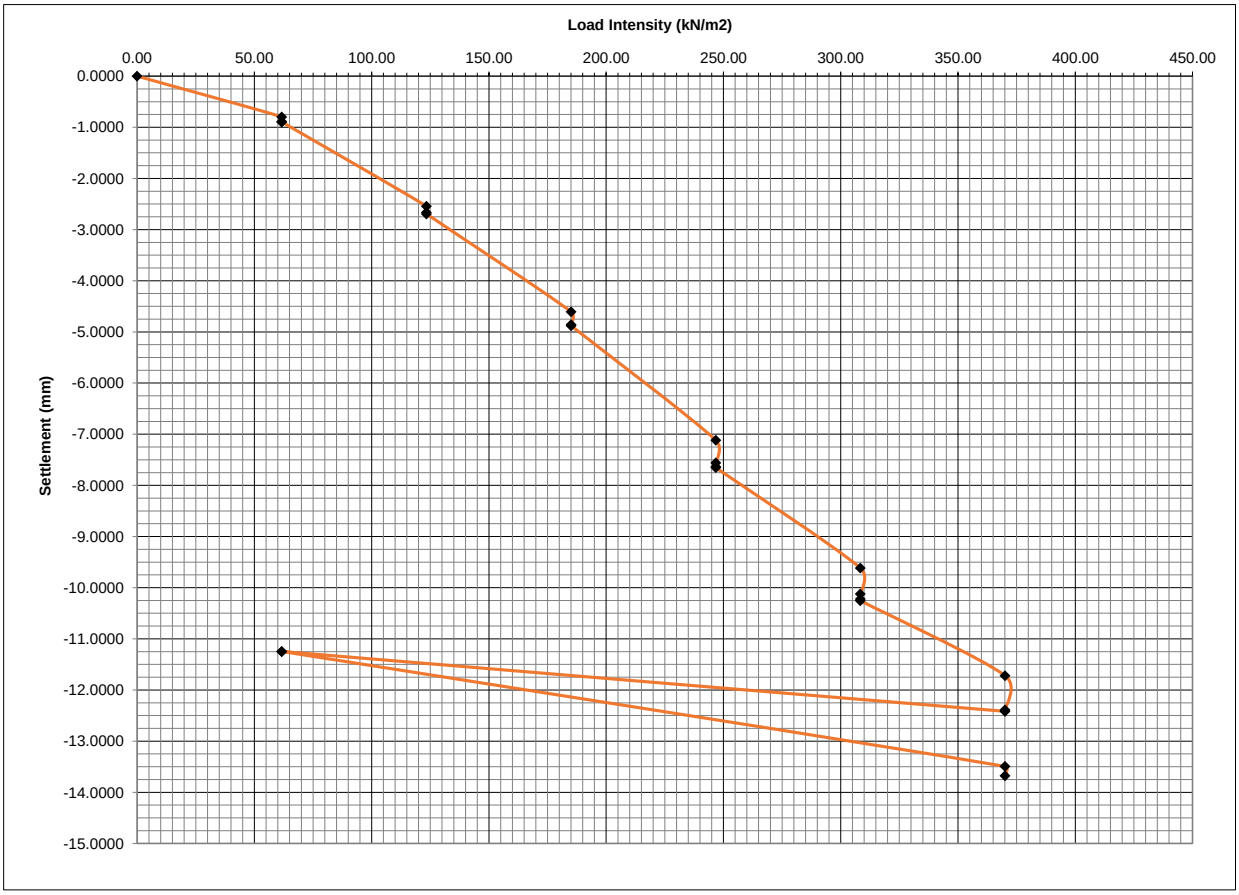
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Plot 56/57*	
Site Ref:	*15-974*		**Test Date:**	*20/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386285*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397120*	
Max Deformation:	*-13.68*	*mm*	**W3W:**	*///heads.bump y.belly*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 5%

Max Deformation of -13.68 mm

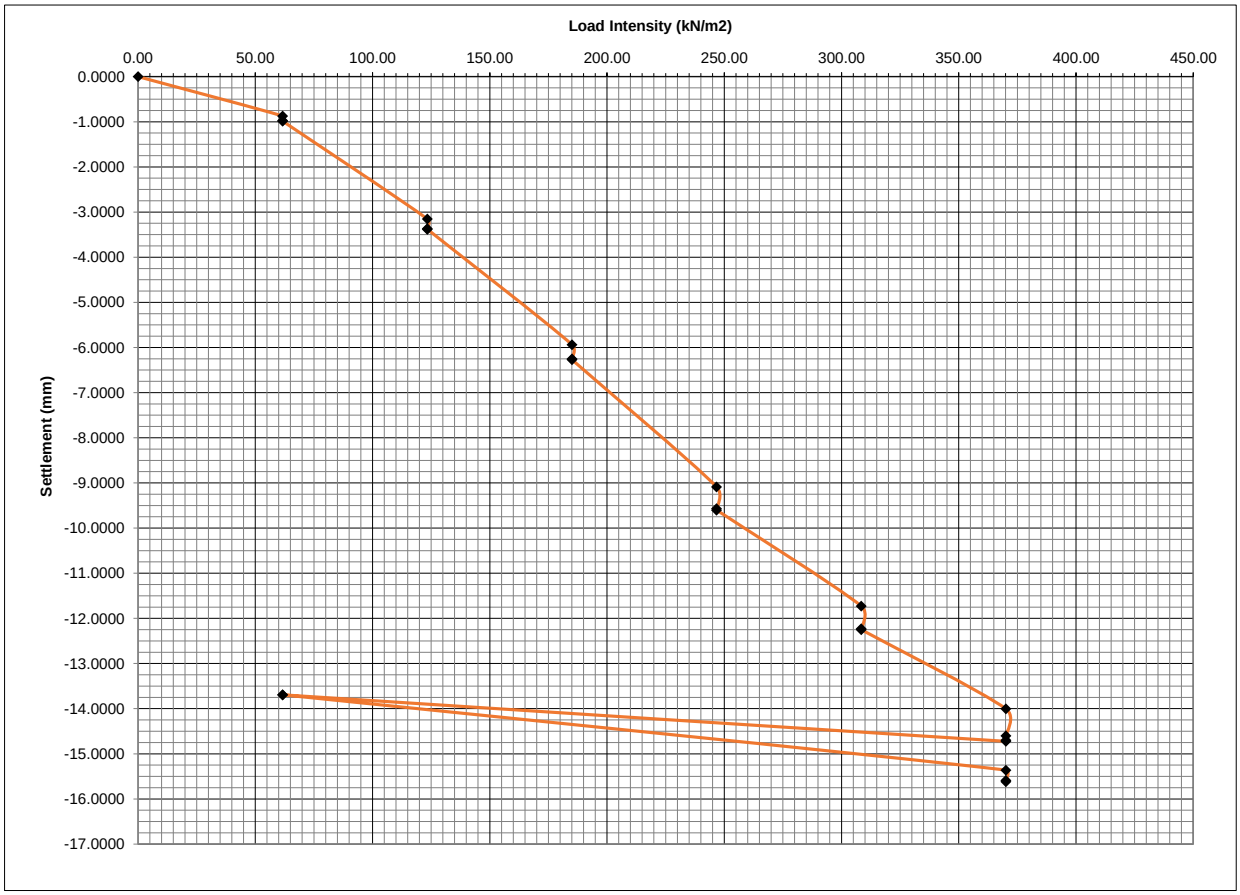
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Plot 58-59***
Site Ref:	*15-974*	**Test Date:**	*20/09/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL mbgl*
Plate Diameter:	*450 mm*	**Easting:**	*386282*
Max Applied Pressure:	*370.09 kN/m2*	**Northing:**	*397144*
Max Deformation:	*-15.62 mm*	**W3W:**	*///blues.indoor .delay*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 5%

Max Deformation of -15.62 mm

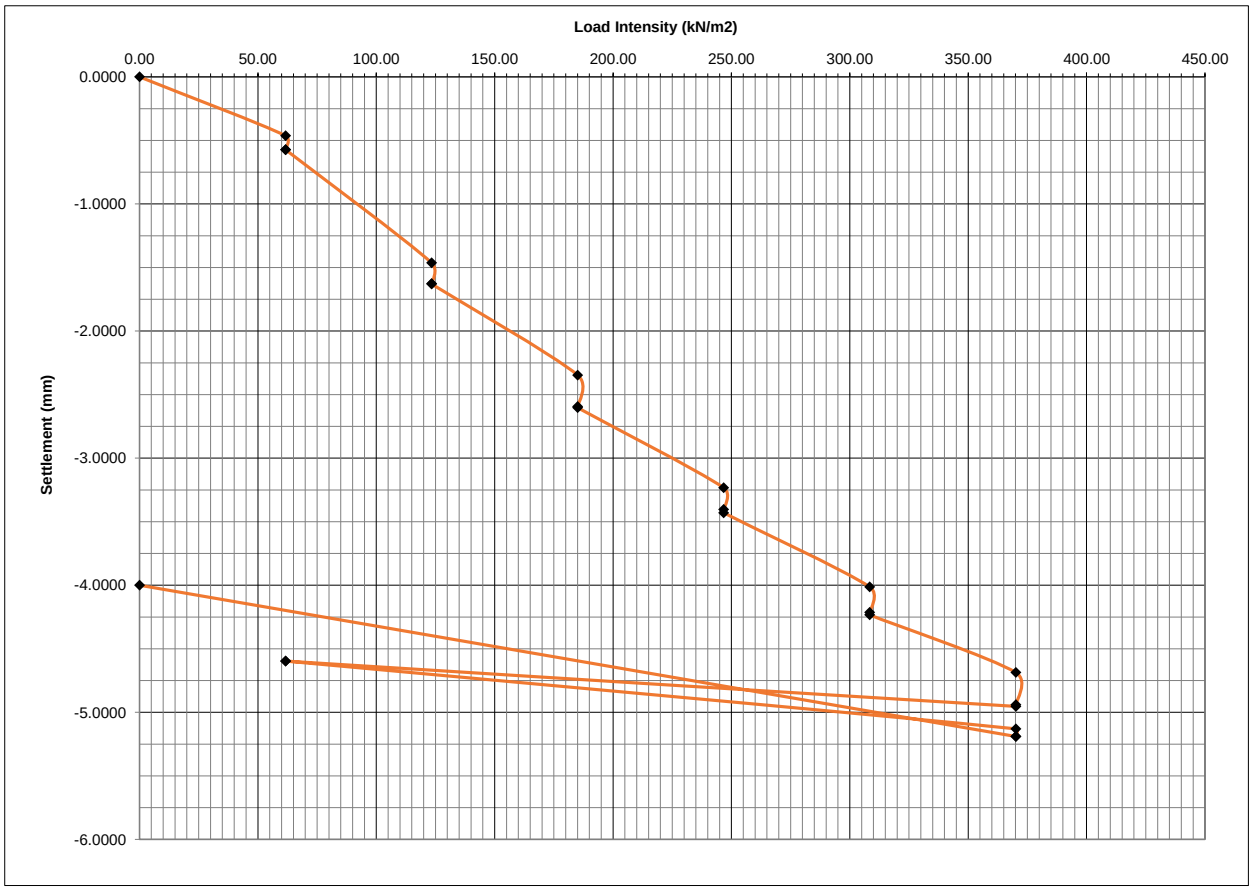
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 71***	
Site Ref:	*15-974*		**Test Date:**	*20/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386222*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397079*	
Max Deformation:	*-5.19*	*mm*	**W3W:**	*///moth.punks.employ*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 10%

Max Deformation of -5.19 mm

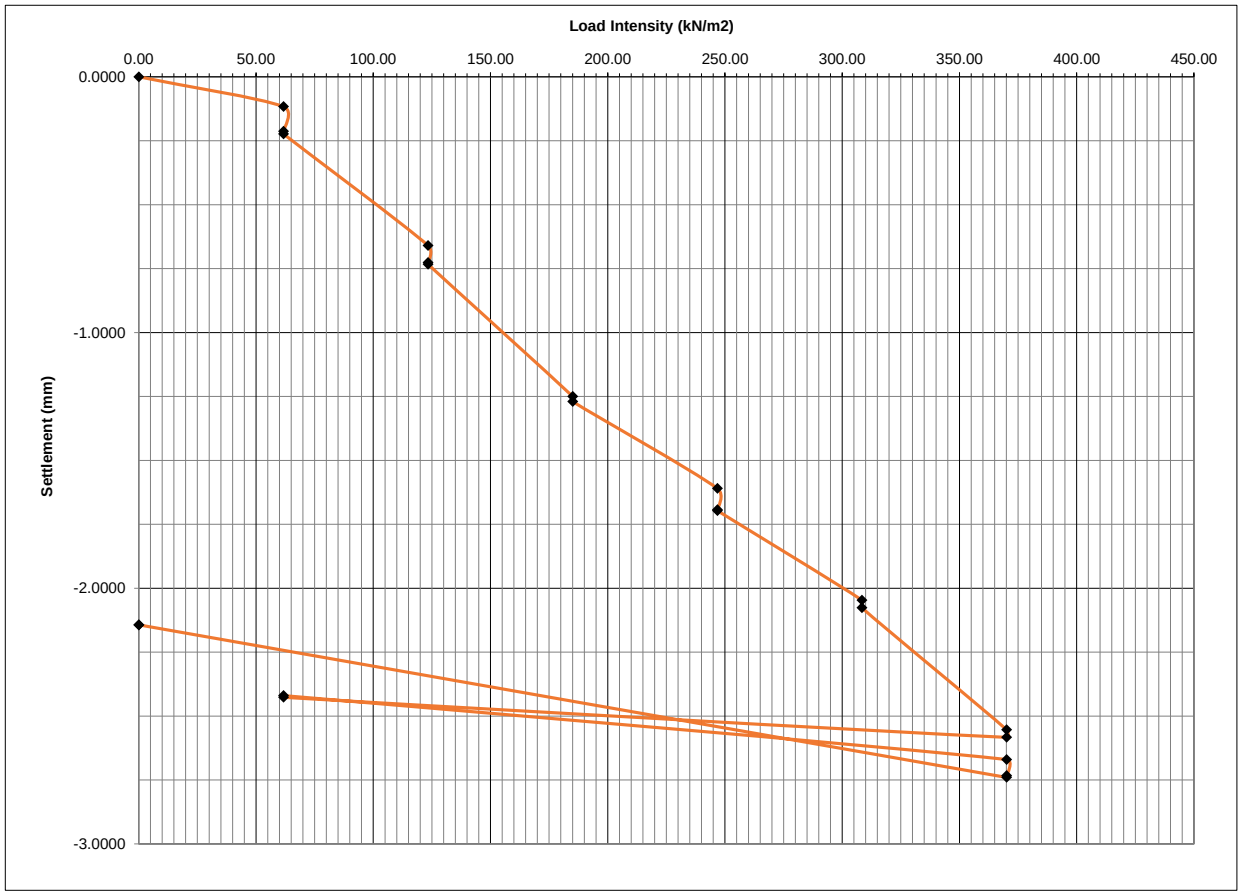
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 73***	
Site Ref:	*15-974*		**Test Date:**	*20/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386218*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397082*	
Max Deformation:	*-2.74*	*mm*	**W3W:**	*///gross.park.l* *oops*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 26%

Max Deformation of -2.74 mm

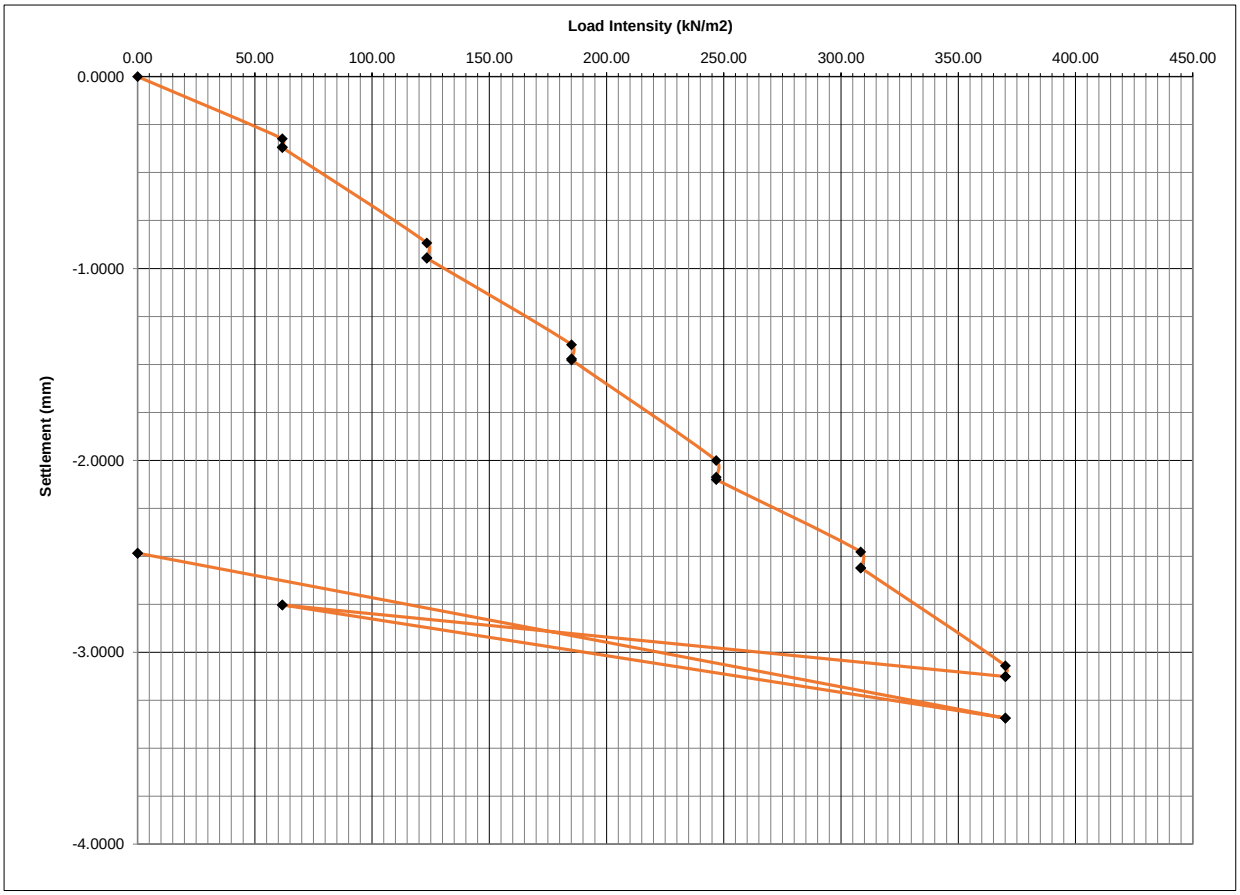
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Plot 74***
Site Ref:	*15-974*	**Test Date:**	*20/09/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL mbgl*
Plate Diameter:	*450 mm*	**Easting:**	*386219*
Max Applied Pressure:	*370.09 kN/m2*	**Northing:**	*397097*
Max Deformation:	*-3.34 mm*	**W3W:**	*///exact.post.o asis*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 21%

Max Deformation of -3.34 mm

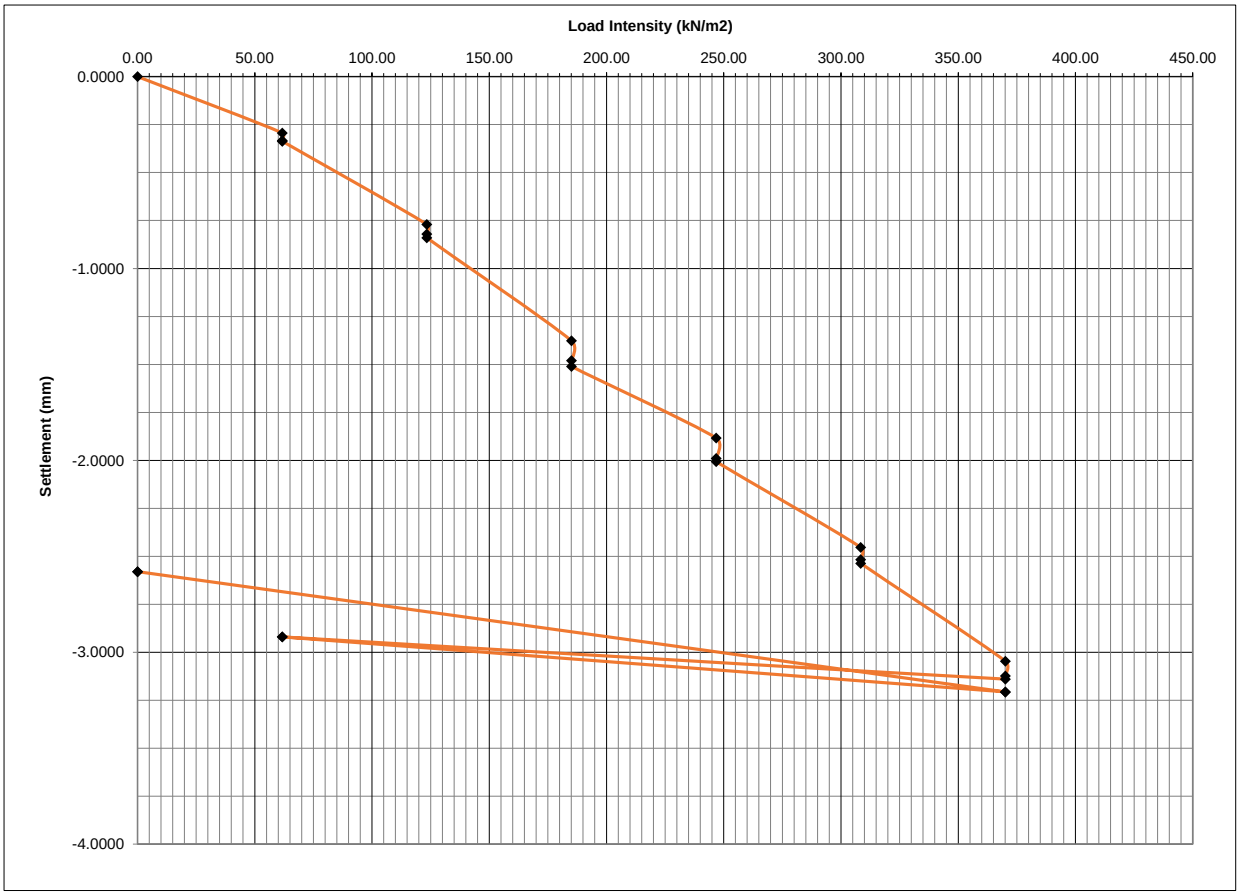
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 76***	
Site Ref:	*15-974*		**Test Date:**	*20/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386210*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397106*	
Max Deformation:	*-3.21*	*mm*	**W3W:**	*///served.trans fers.lines*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 22%

Max Deformation of -3.21 mm

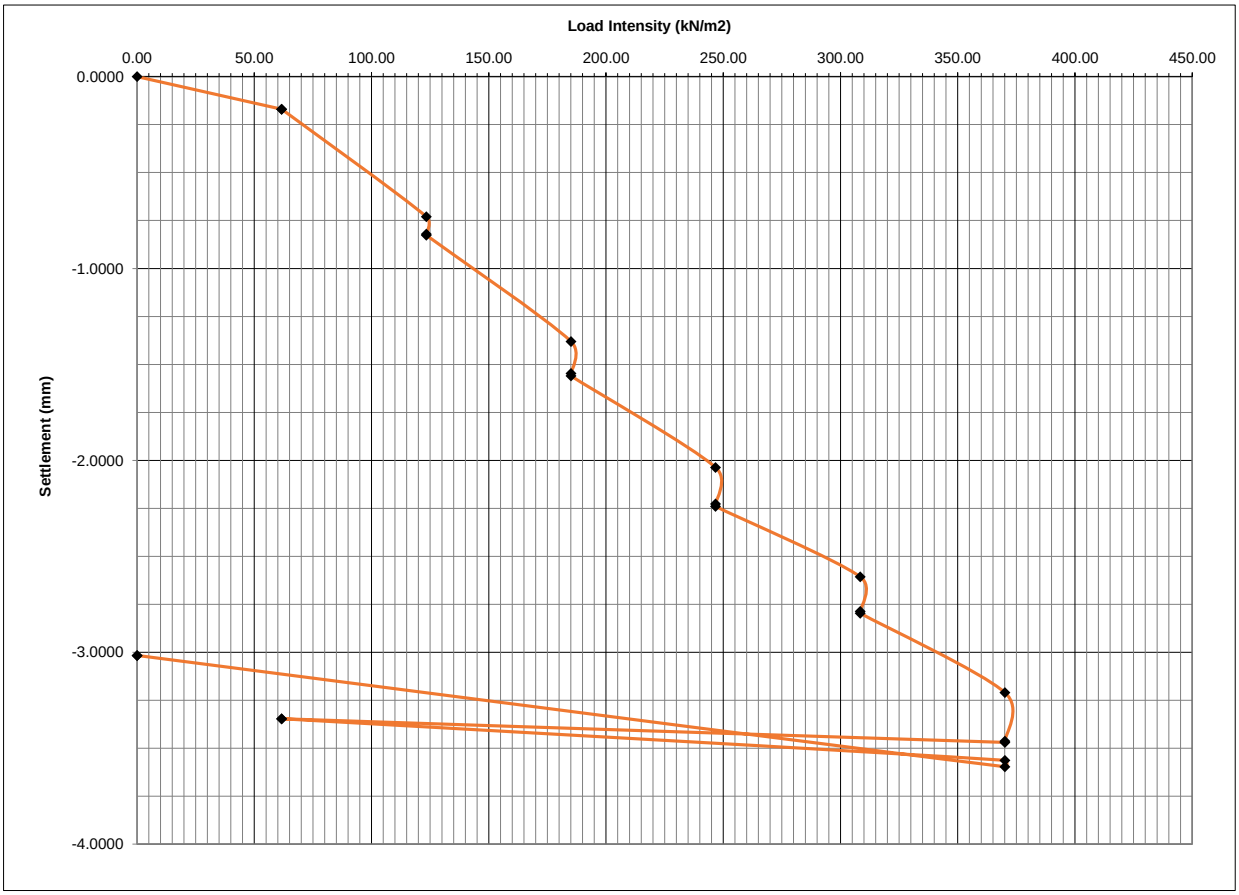
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 77***	
Site Ref:	*15-974*		**Test Date:**	*20/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386219*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397121*	
Max Deformation:	*-3.60*	*mm*	**W3W:**	*///brief.chips.u ses*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 22%

Max Deformation of -3.60 mm

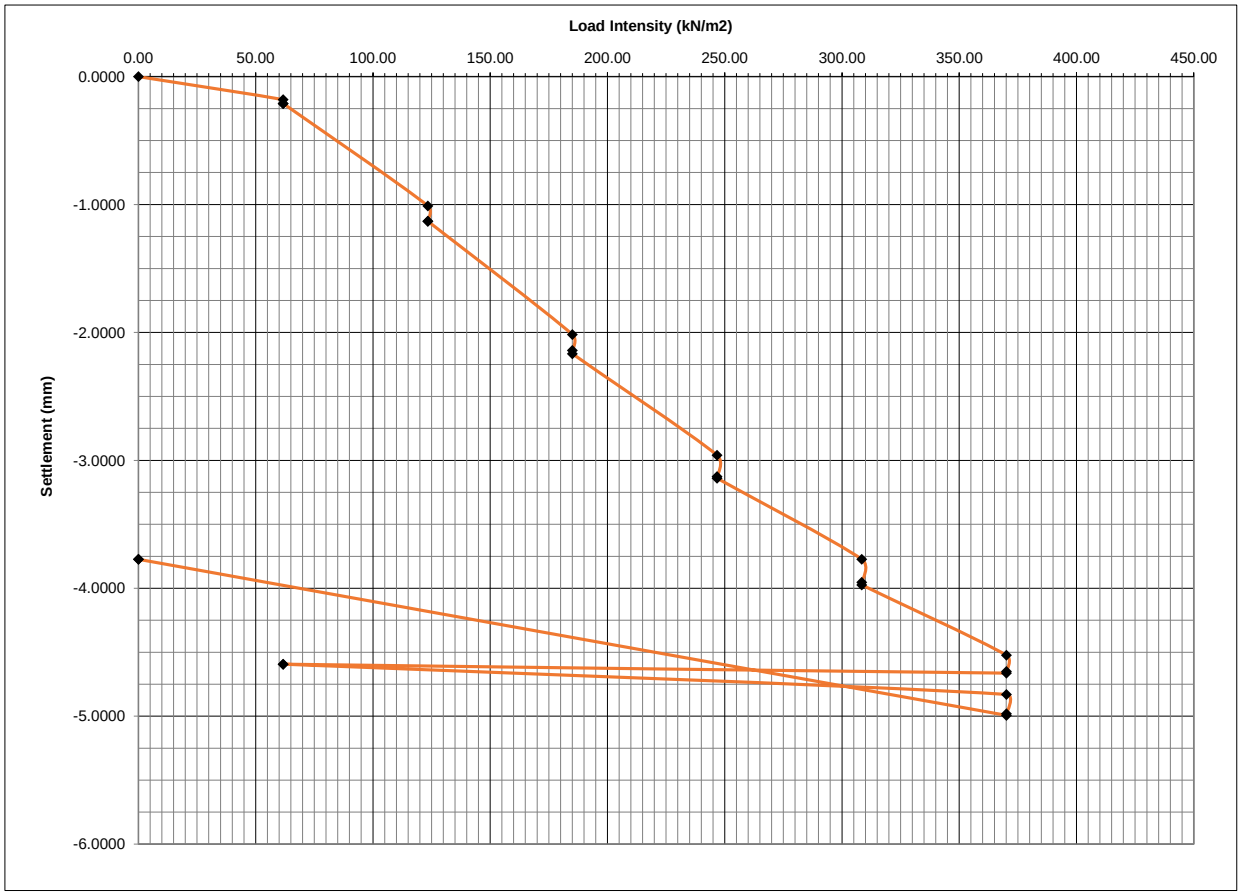
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Plot 79*	
Site Ref:	*15-974*		**Test Date:**	*20/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386216*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397126*	
Max Deformation:	*-4.99*	*mm*	**W3W:**	*///month.local.* *crown*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 14%

Max Deformation of -4.99 mm

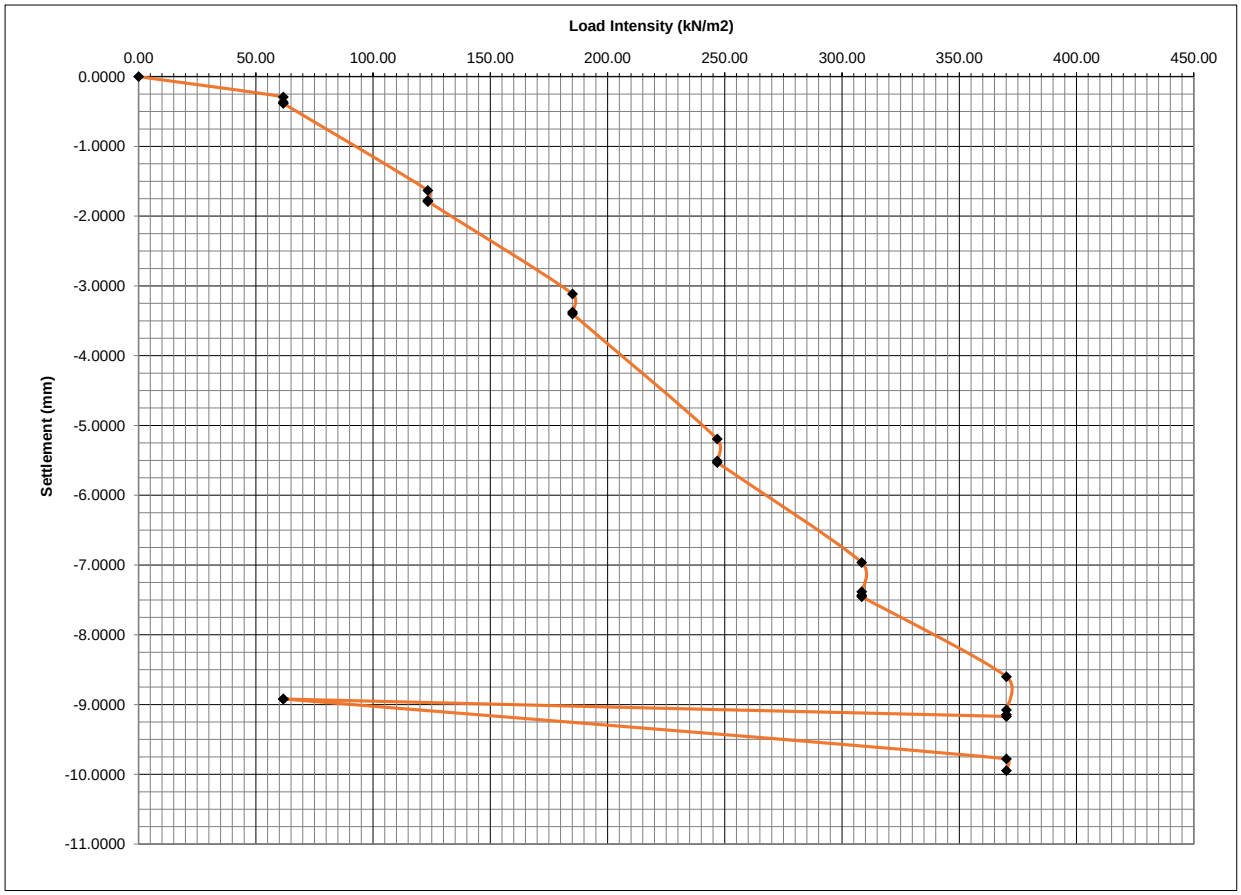
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 60***	
Site Ref:	*15-974*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386246*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397138*	
Max Deformation:	*-9.95*	*mm*	**W3W:**	*///values.zips.half*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 10%

Max Deformation of -9.95 mm

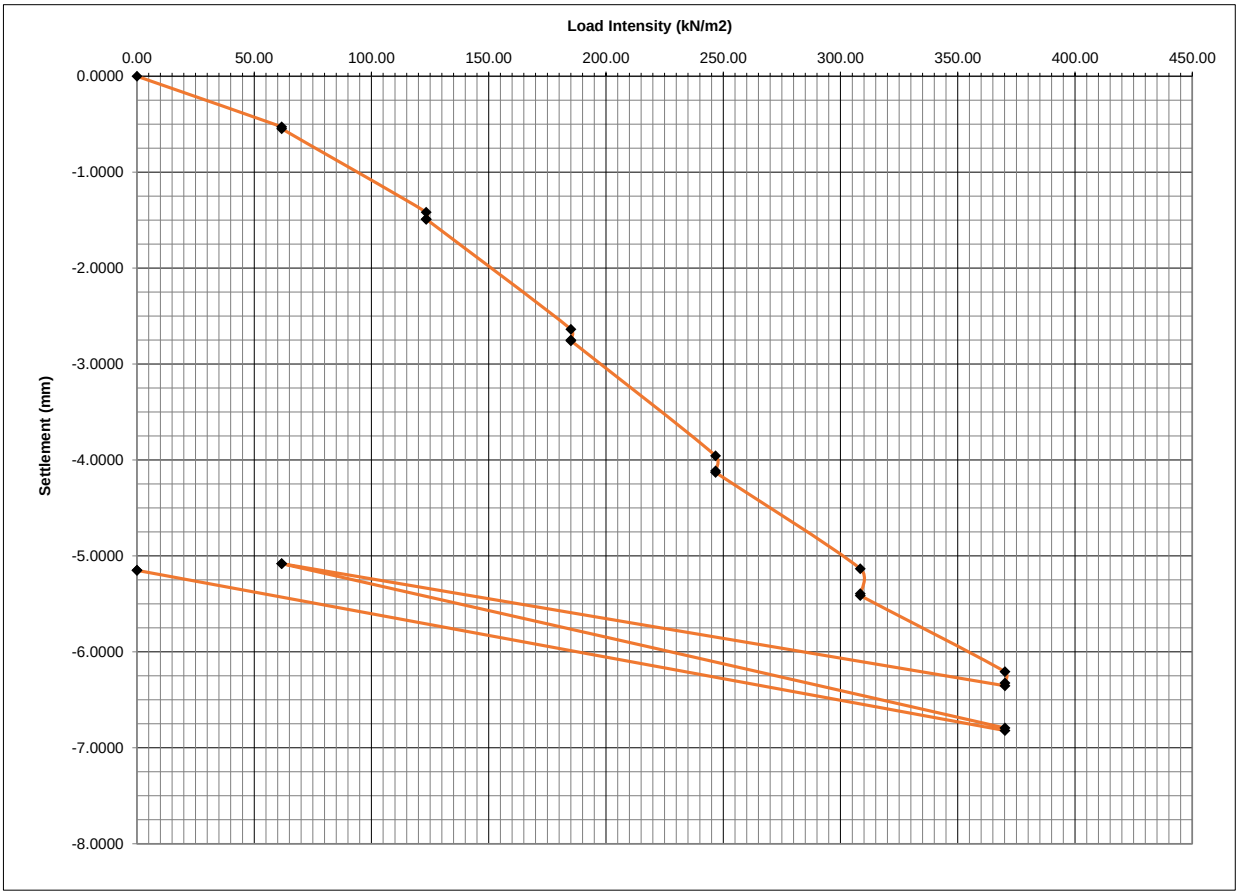
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 63***	
Site Ref:	*15-974*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386249*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397126*	
Max Deformation:	*-6.82*	*mm*	**W3W:**	*///silly.spicy.news*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 10%

Max Deformation of -6.82 mm

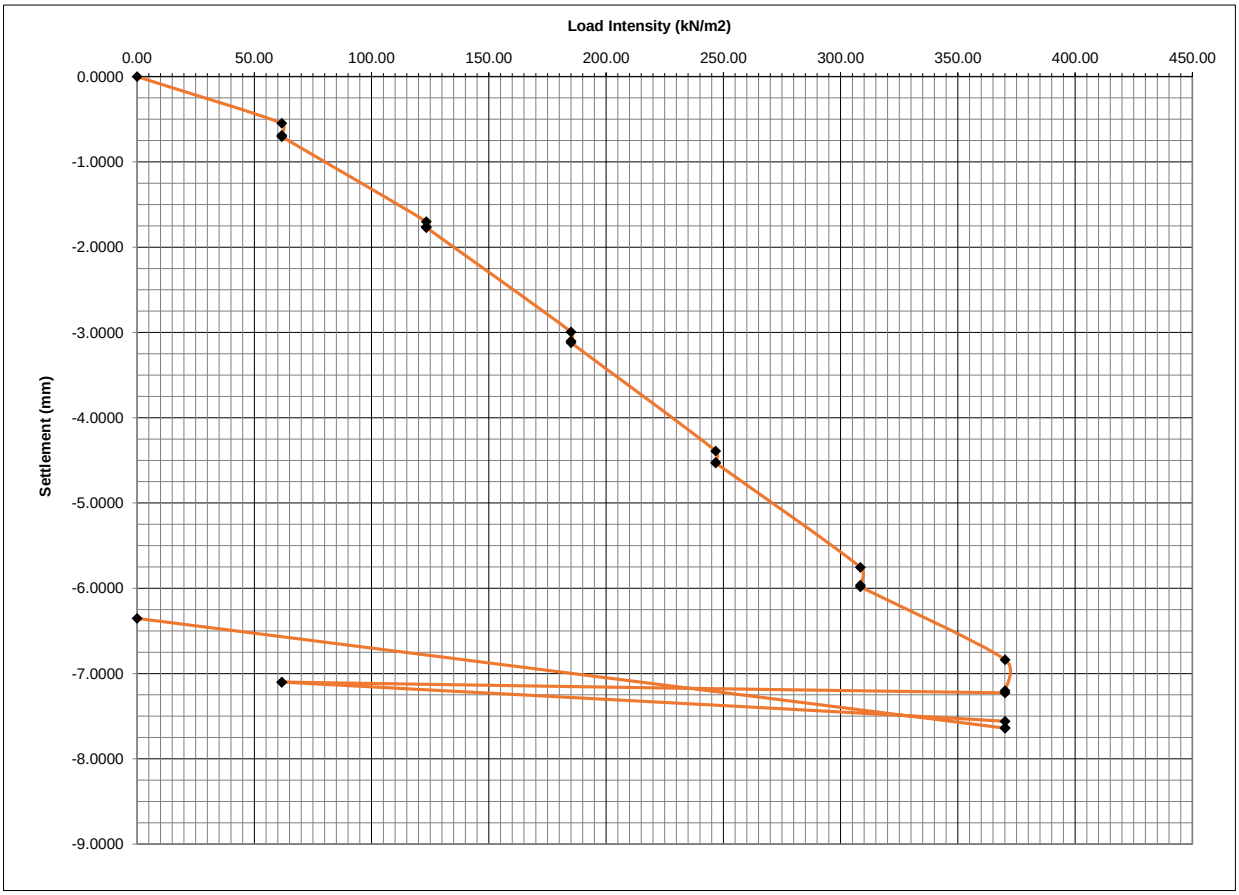
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 65***	
Site Ref:	*15-974*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386249*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397108*	
Max Deformation:	*-7.64*	*mm*	**W3W:**	*///slope.dining .grain*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 8%

Max Deformation of -7.64 mm

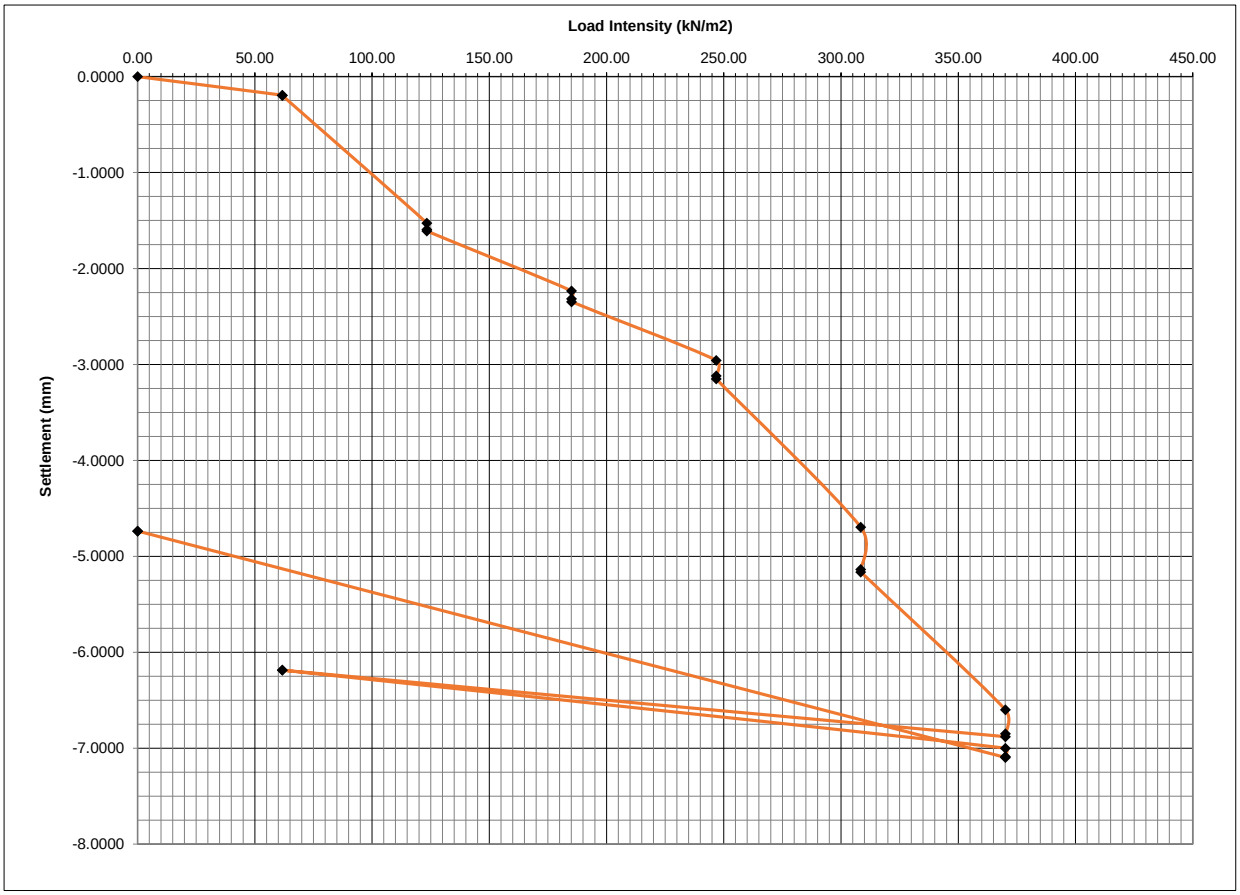
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	*Plot 66-67*	
Site Ref:	*15-974*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386249*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397099*	
Max Deformation:	*-7.10*	*mm*	**W3W:**	*///accent.bars.ducks*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 10%

Max Deformation of -7.10 mm

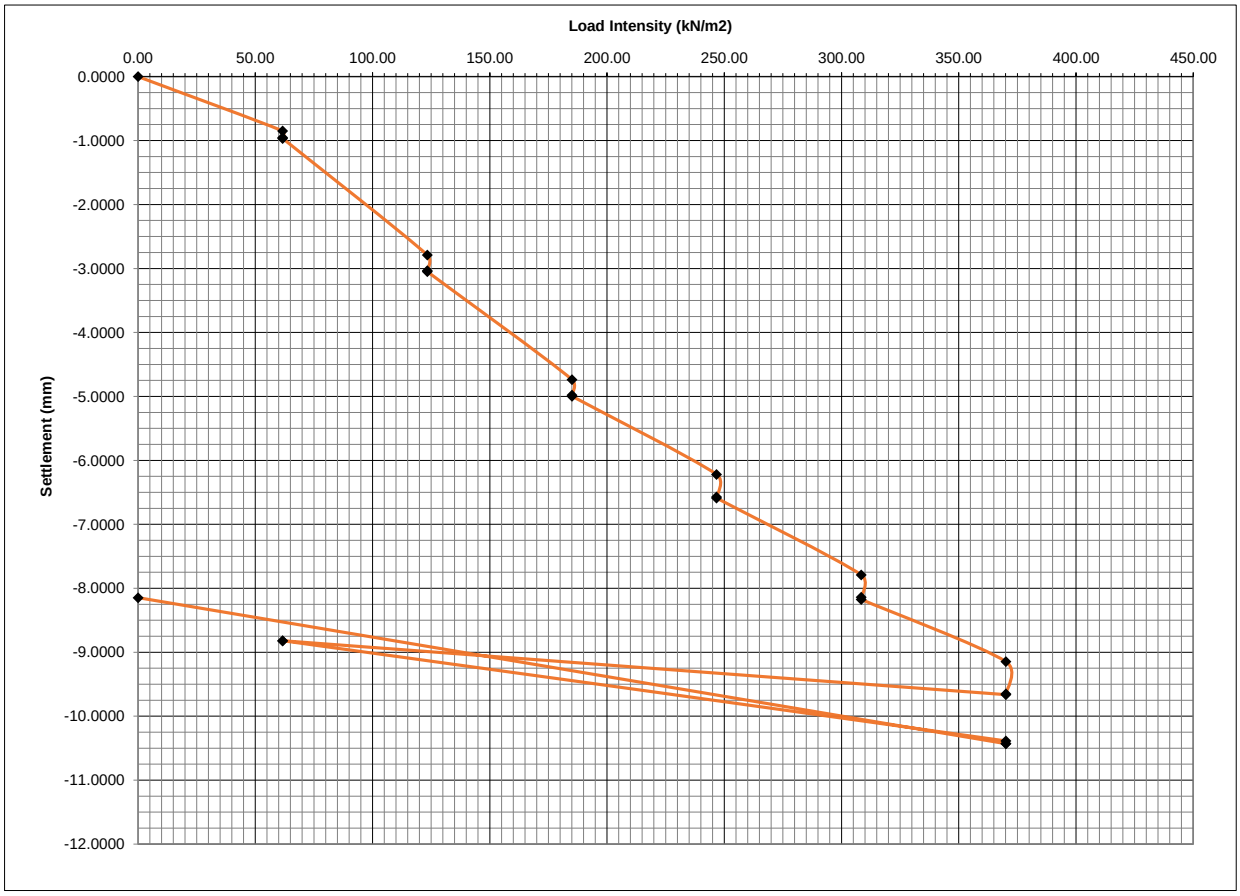
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 70***	
Site Ref:	*15-974*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386252*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397072*	
Max Deformation:	*-10.43*	*mm*	**W3W:**	*///oils.silver.ca* *ves*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 5%

Max Deformation of -10.43 mm

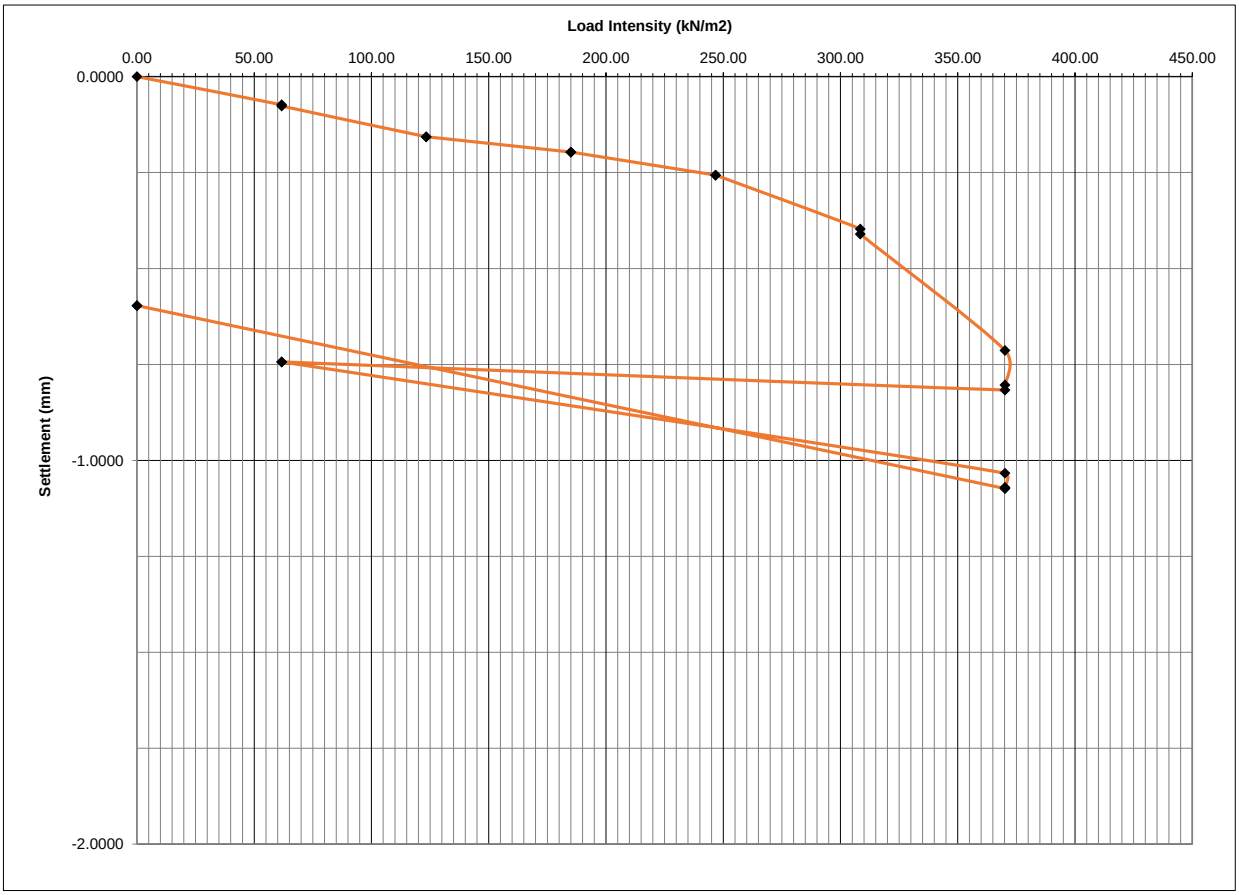
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Plot 167***
Site Ref:	*15-974*	**Test Date:**	*23/09/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL mbgl*
Plate Diameter:	*450 mm*	**Easting:**	*386206*
Max Applied Pressure:	*370.09 kN/m2*	**Northing:**	*397049*
Max Deformation:	*-1.07 mm*	**W3W:**	*///bucket.heat. sound*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Rain*

Comments:



Equivalent CBR Value of >85 %

Max Deformation of -1.07 mm

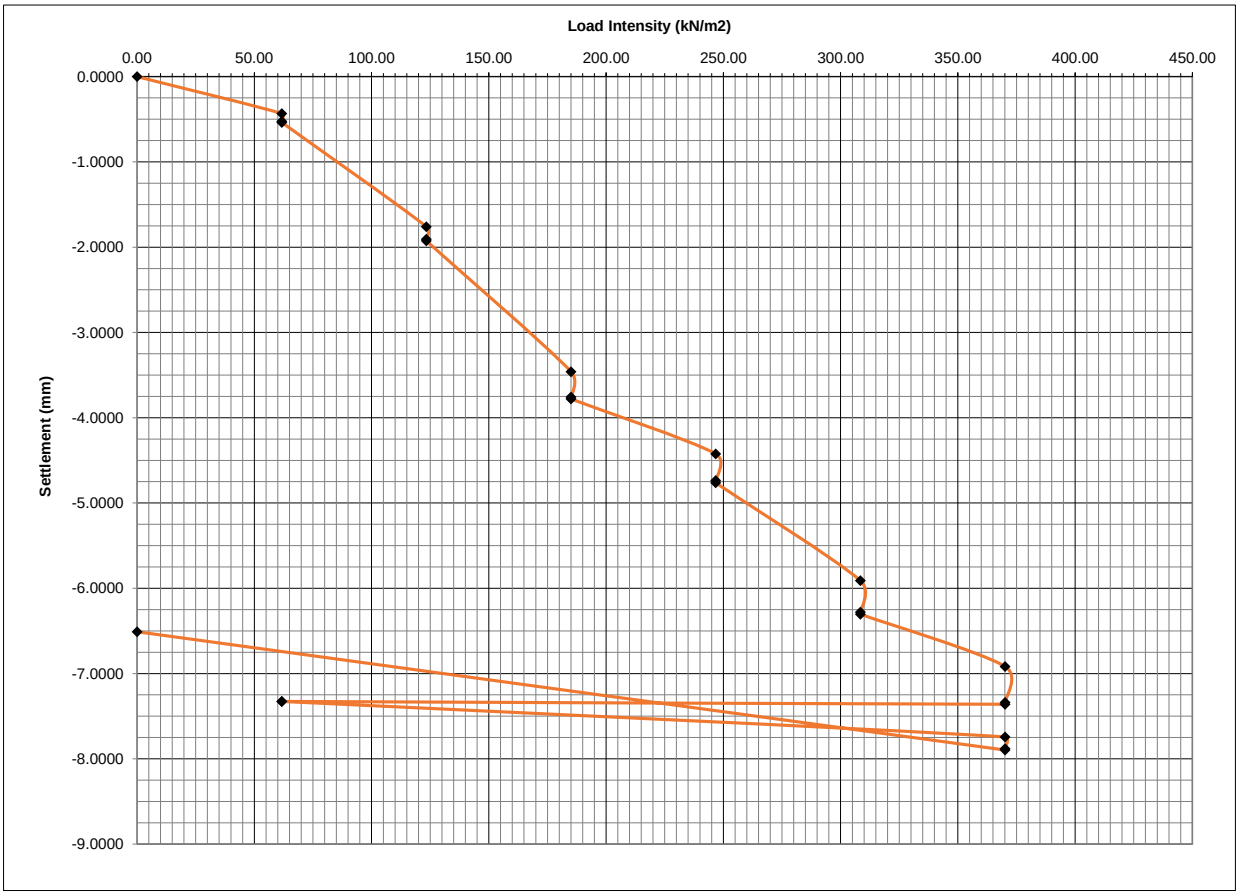
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 169***	
Site Ref:	*15-974*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386203*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397052*	
Max Deformation:	*-7.90*	*mm*	**W3W:**	*///toxic.jeeps.leads*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 9%

Max Deformation of -7.90 mm

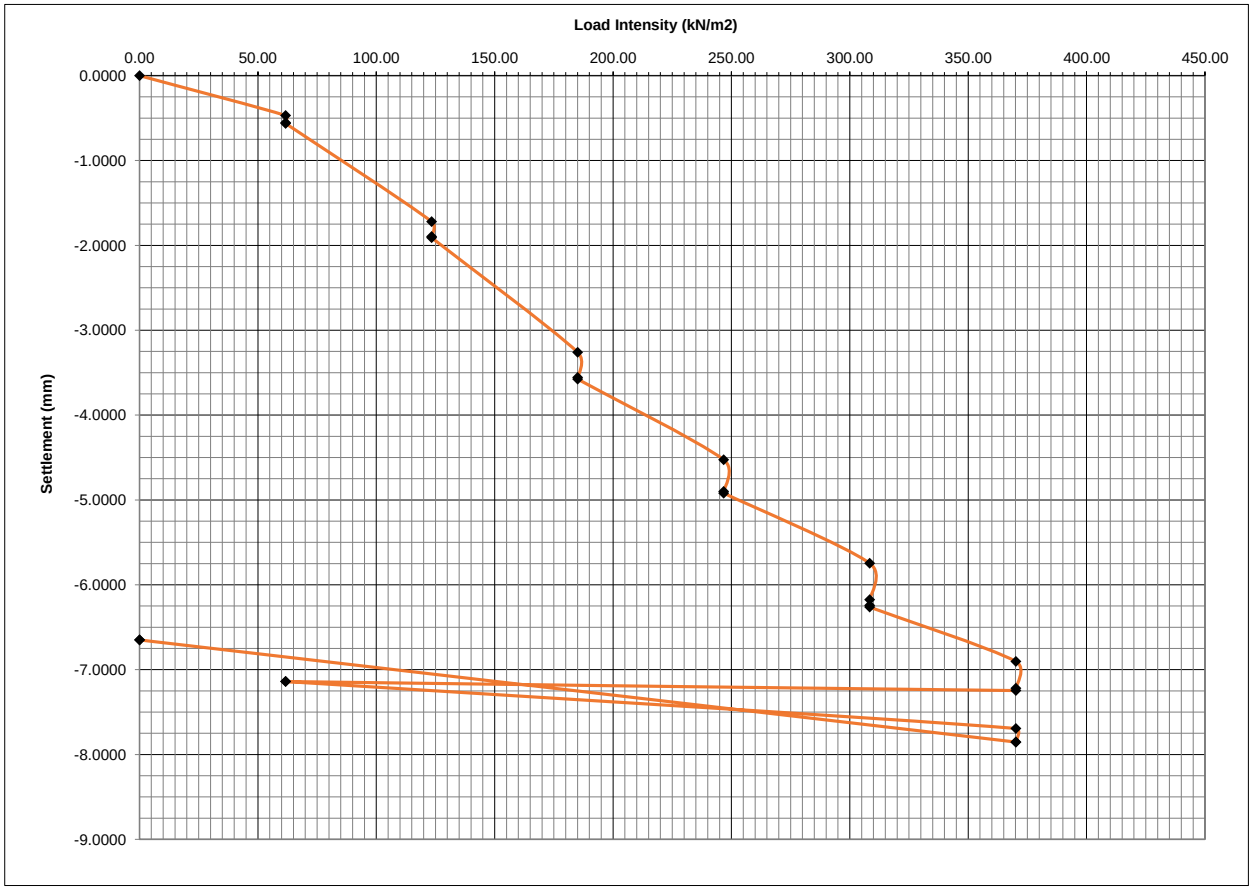
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 170***	
Site Ref:	*15-974*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386197*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397049*	
Max Deformation:	*-7.85*	*mm*	**W3W:**	*///count.view.drips*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 9%

Max Deformation of -7.85 mm

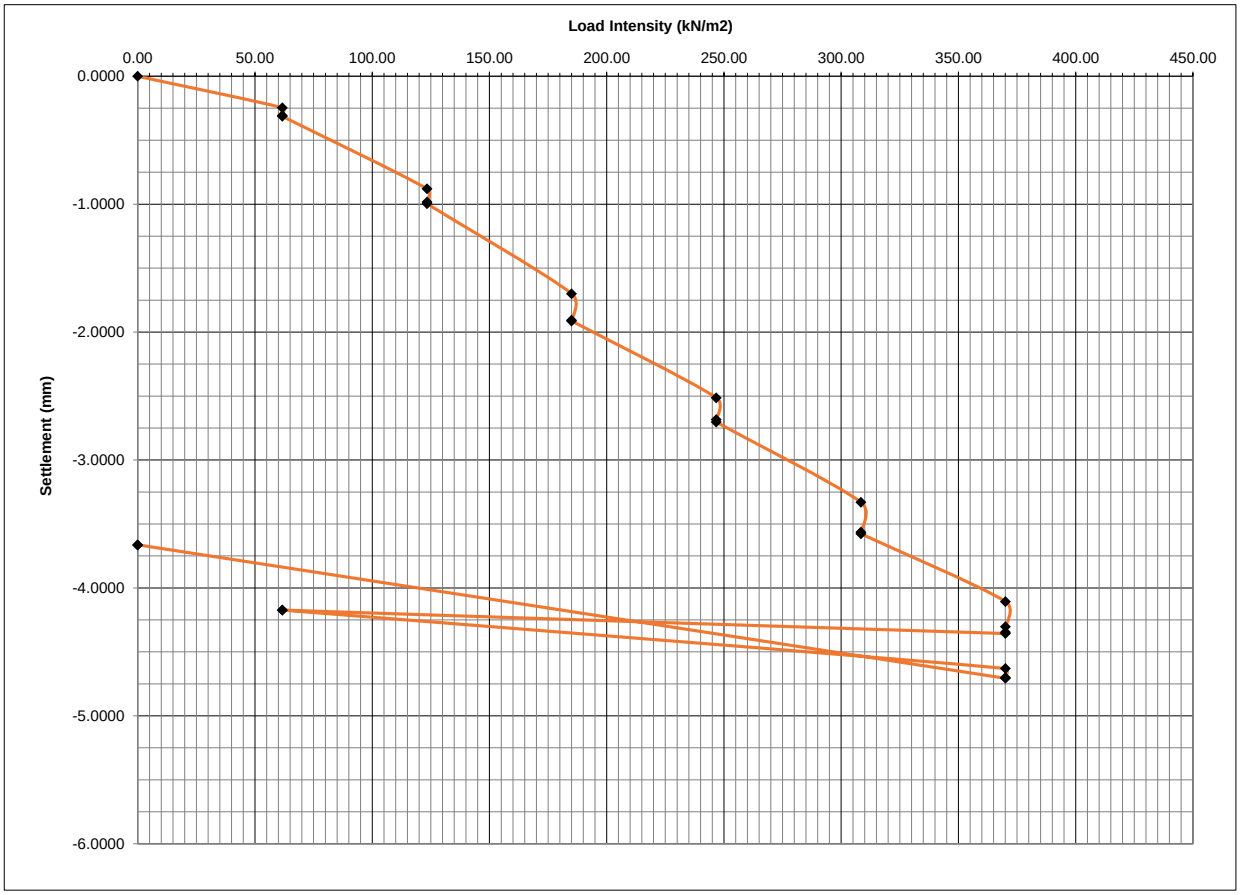
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	*Plot 172*
Site Ref:	*15-974*	**Test Date:**	*23/09/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL mbgl*
Plate Diameter:	*450 mm*	**Easting:**	*386185*
Max Applied Pressure:	*370.09 kN/m2*	**Northing:**	*397046*
Max Deformation:	*-4.71 mm*	**W3W:**	*///lance.sailor. tribe*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Rain*

Comments:



Equivalent CBR Value of 17%

Max Deformation of -4.71 mm

lot 14 saved

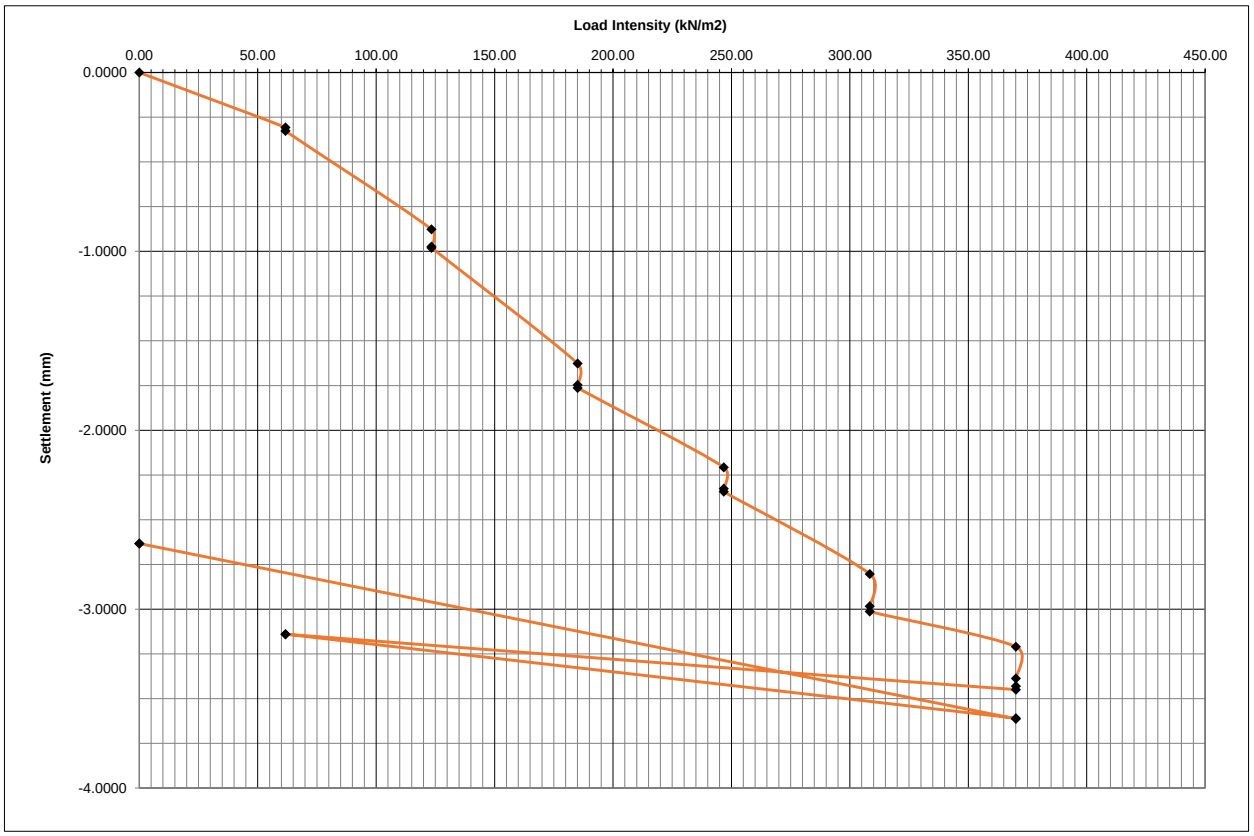
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	26/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Rd3-Rd4 Junction***	
Site Ref:	*15-974*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386270*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397072*	
Max Deformation:	*-3.61*	*mm*	**W3W:**	*///reds.shapes.moods*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 18%

Max Deformation of -3.61 mm

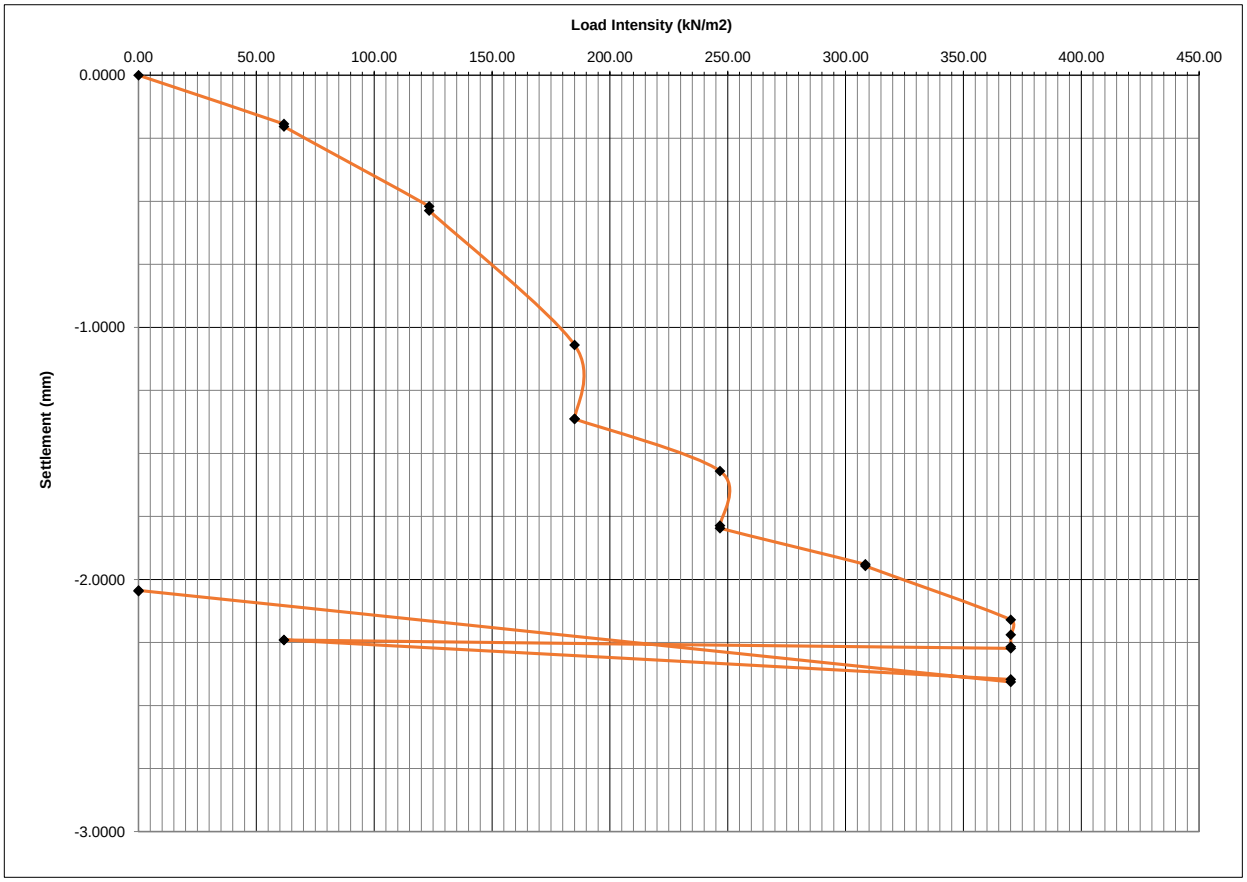
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	27/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***R3+R5 J + 10m***	
Site Ref:	*15-974*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386221*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397061*	
Max Deformation:	*-2.41*	*mm*	**W3W:**	*///rinse.ended.dive*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 26%

Max Deformation of -2.41 mm

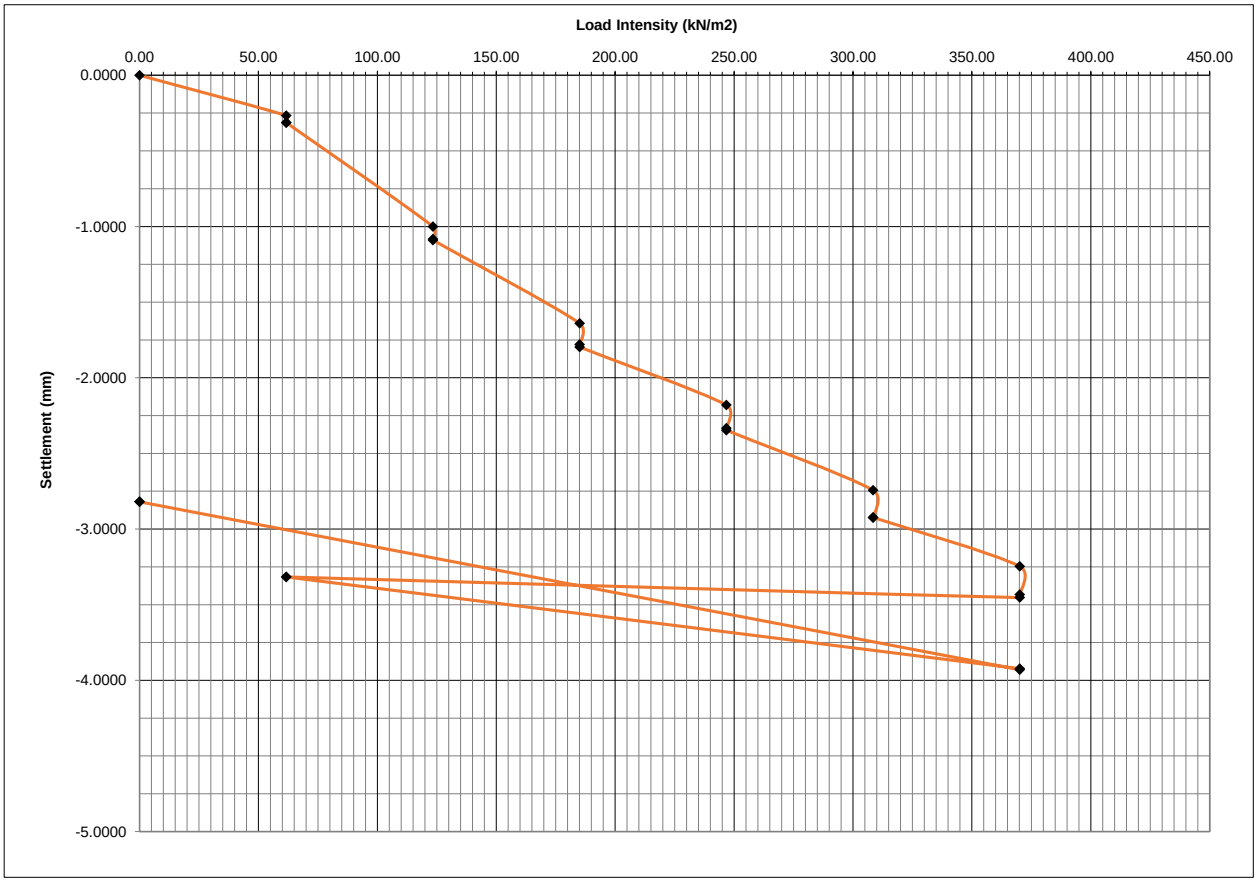
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	27/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Rd 3-5 +20m***	
Site Ref:	*15-974*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386233*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397066*	
Max Deformation:	*-3.93*	*mm*	**W3W:**	*///pines.yoga.bike*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 16%

Max Deformation of -3.93 mm

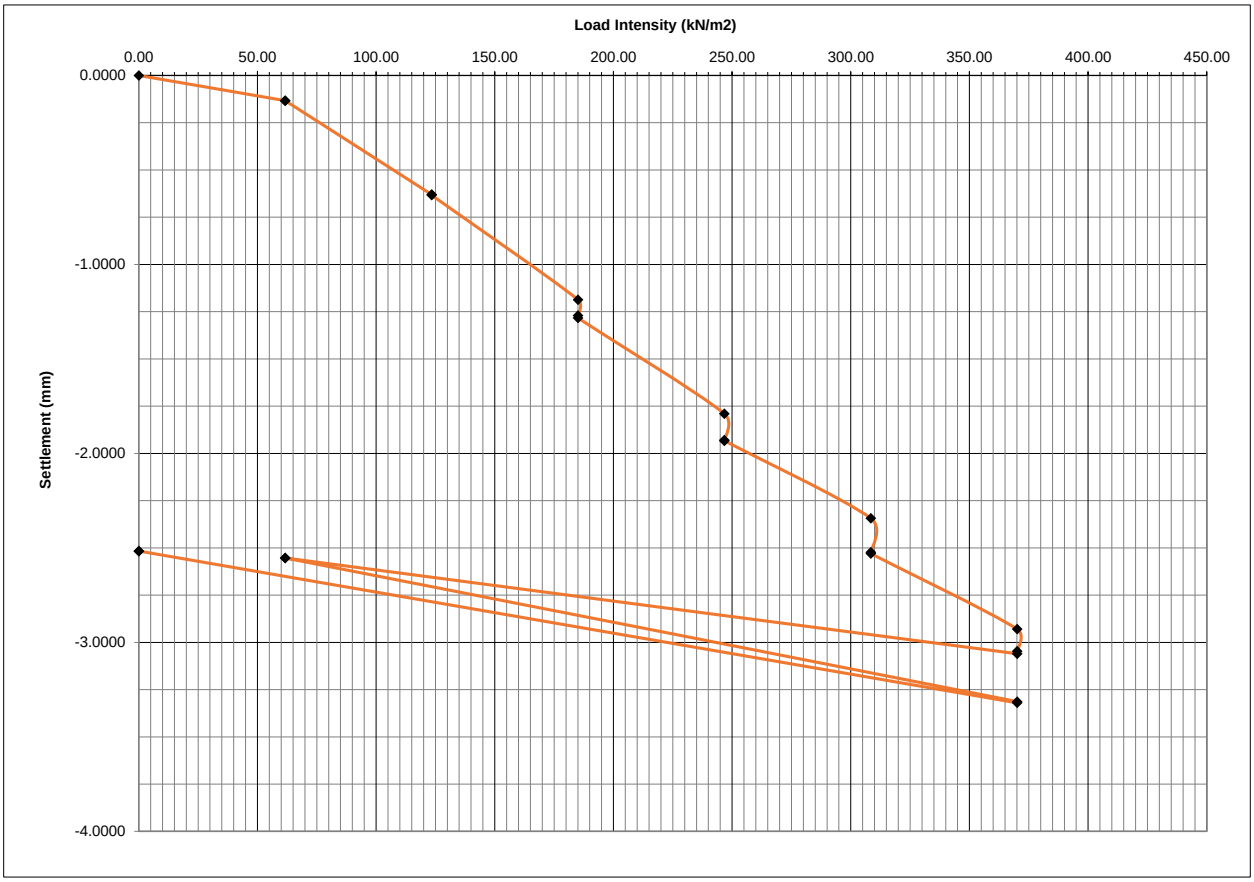
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	27/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Rd 3-5 +30m***	
Site Ref:	*15-974*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386243*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397090*	
Max Deformation:	*-3.32*	*mm*	**W3W:**	*'//remote.audio.ozone*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 26%

Max Deformation of -3.32 mm

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	27/09/2024

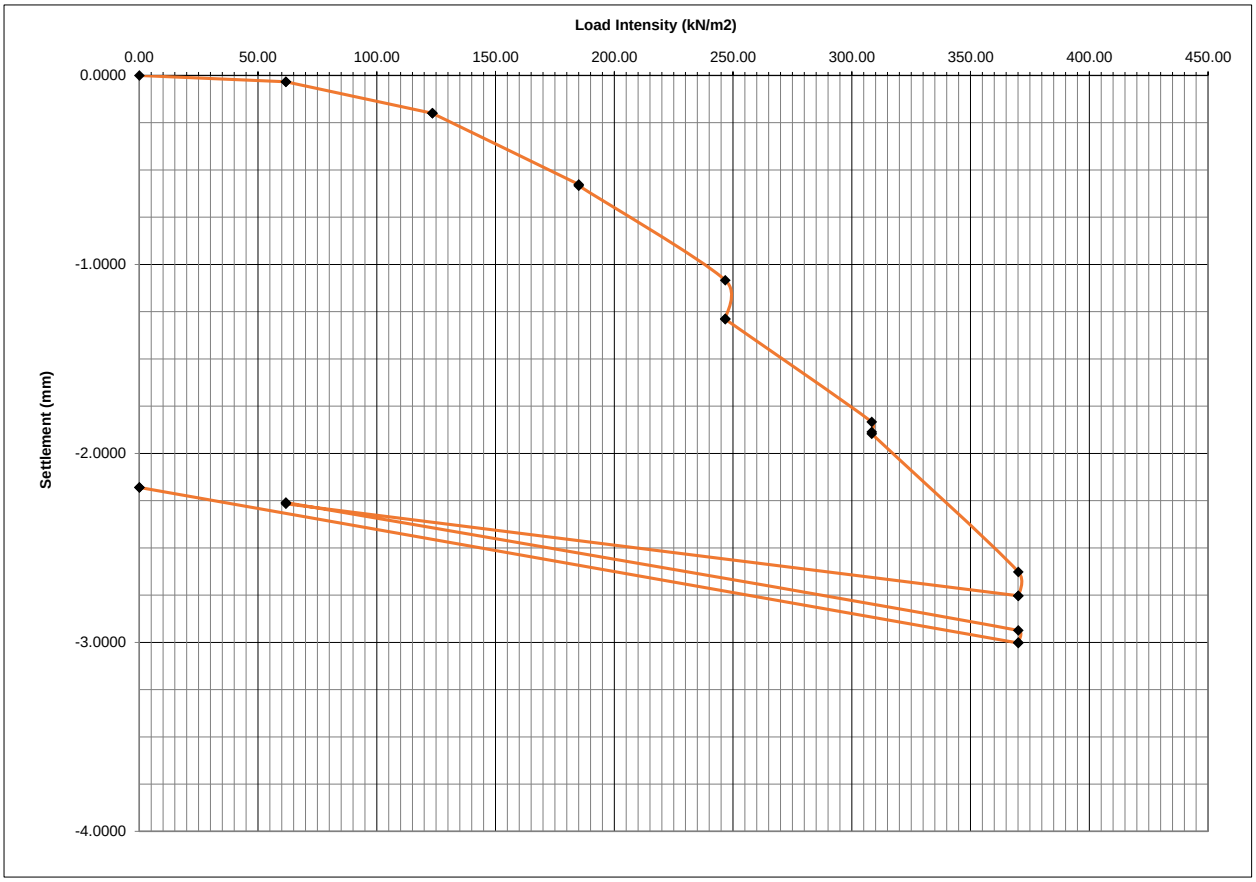
Environmental Engineering Partnership Limited trading as E3P Registered in England No: 08725262 Registered Office: Taylor Road Trafford Park Urmston Manchester M41 7JQ

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Rd 3-5 +40m***
Site Ref:	*15-974*	**Test Date:**	*23/09/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL mbgl*
Plate Diameter:	*450 mm*	**Easting:**	*386252*
Max Applied Pressure:	*370.09 kN/m2*	**Northing:**	*397066*
Max Deformation:	*-3.00 mm*	**W3W:**	*///second.trying.dime*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Rain*

Comments:



Equivalent CBR Value of 42%

Max Deformation of -3.00 mm

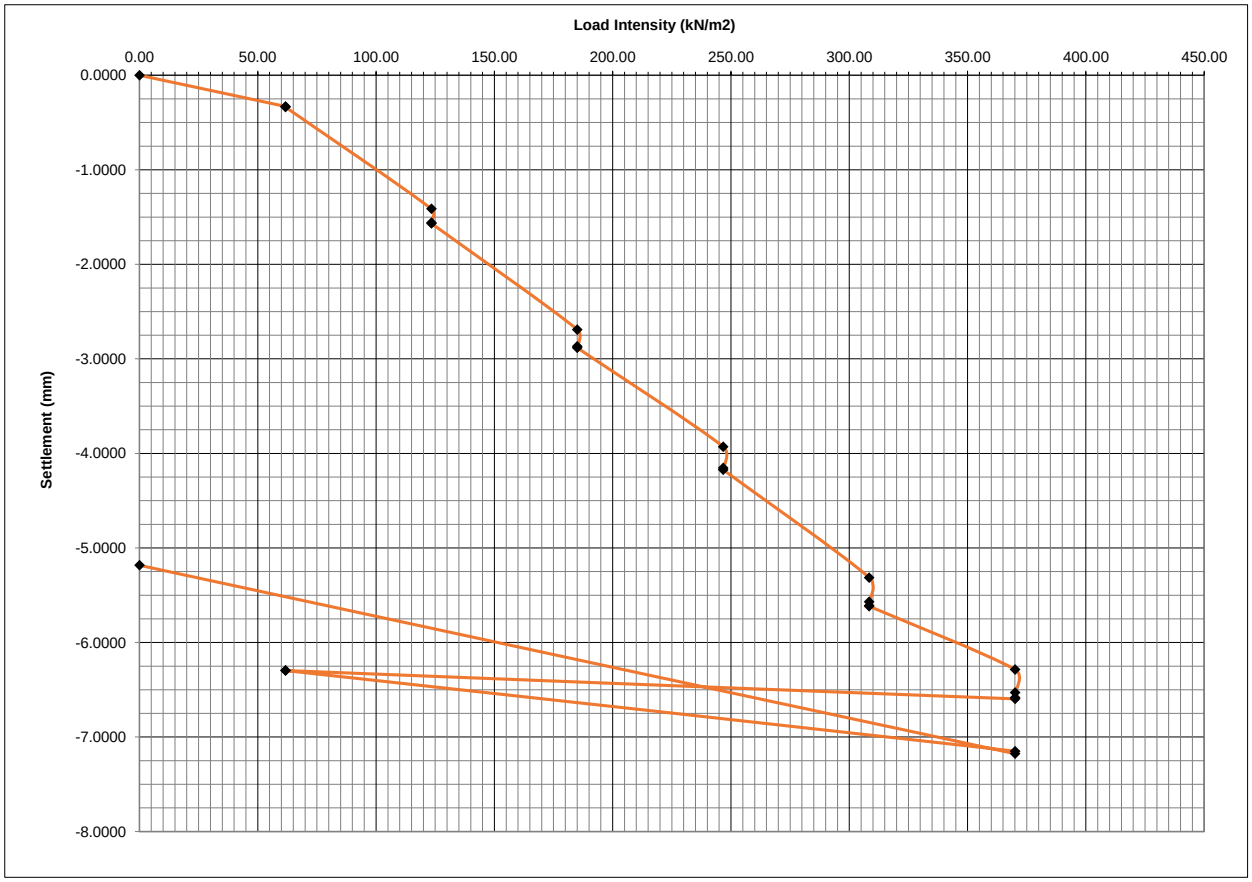
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	27/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Rd 3-5 +50m***	
Site Ref:	*15-974*		**Test Date:**	*23/09/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386258*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397075*	
Max Deformation:	*-7.18*	*mm*	**W3W:**	*///also.things.joined*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Rain*	

Comments:



Equivalent CBR Value of 11%

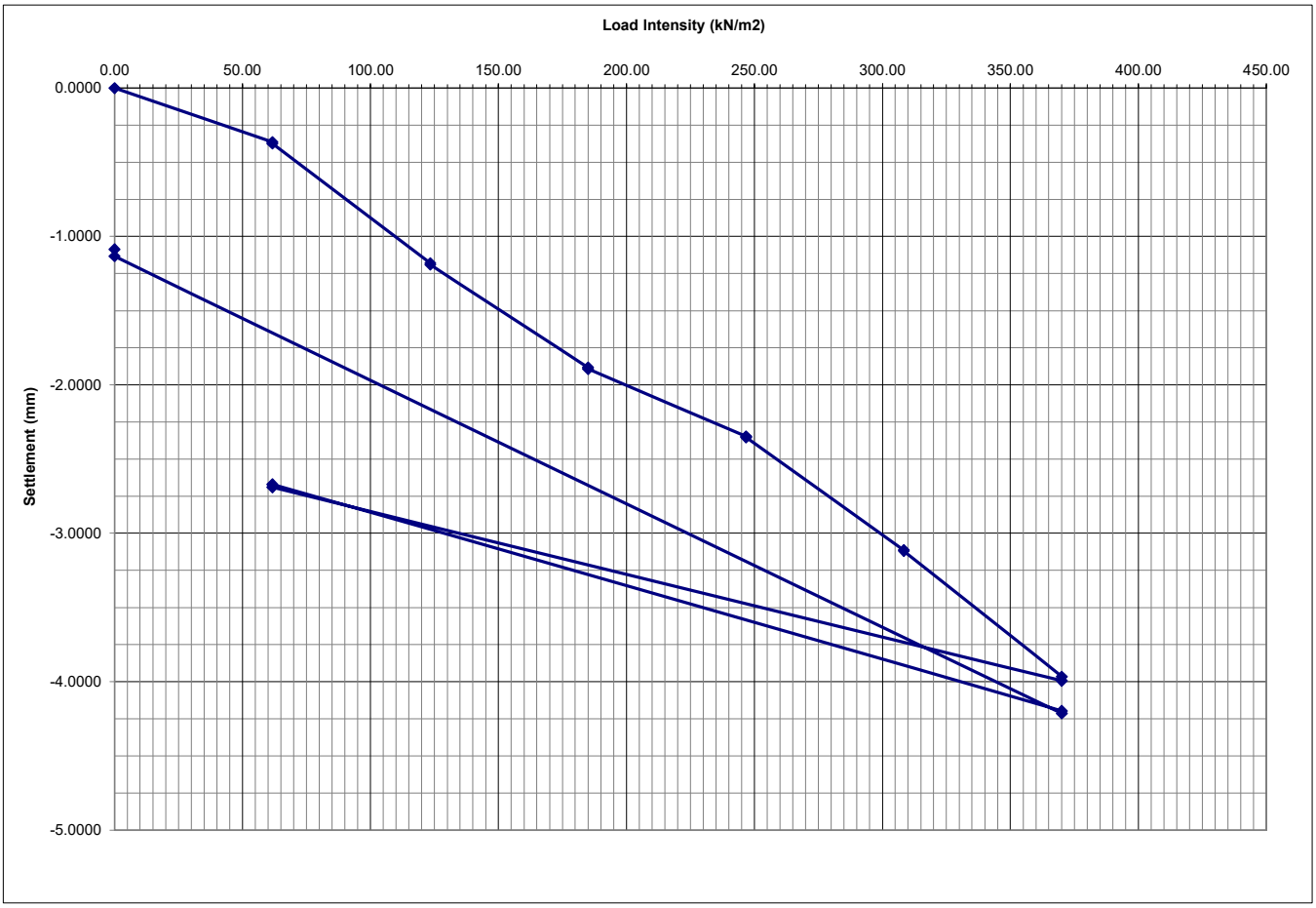
Max Deformation of -7.18 mm

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/09/2024	R. Walker	27/09/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	15/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	CBR101	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	0
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	0
Maximum Deformation (mm):	-4.21	**Weather:**	Dry
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 14%

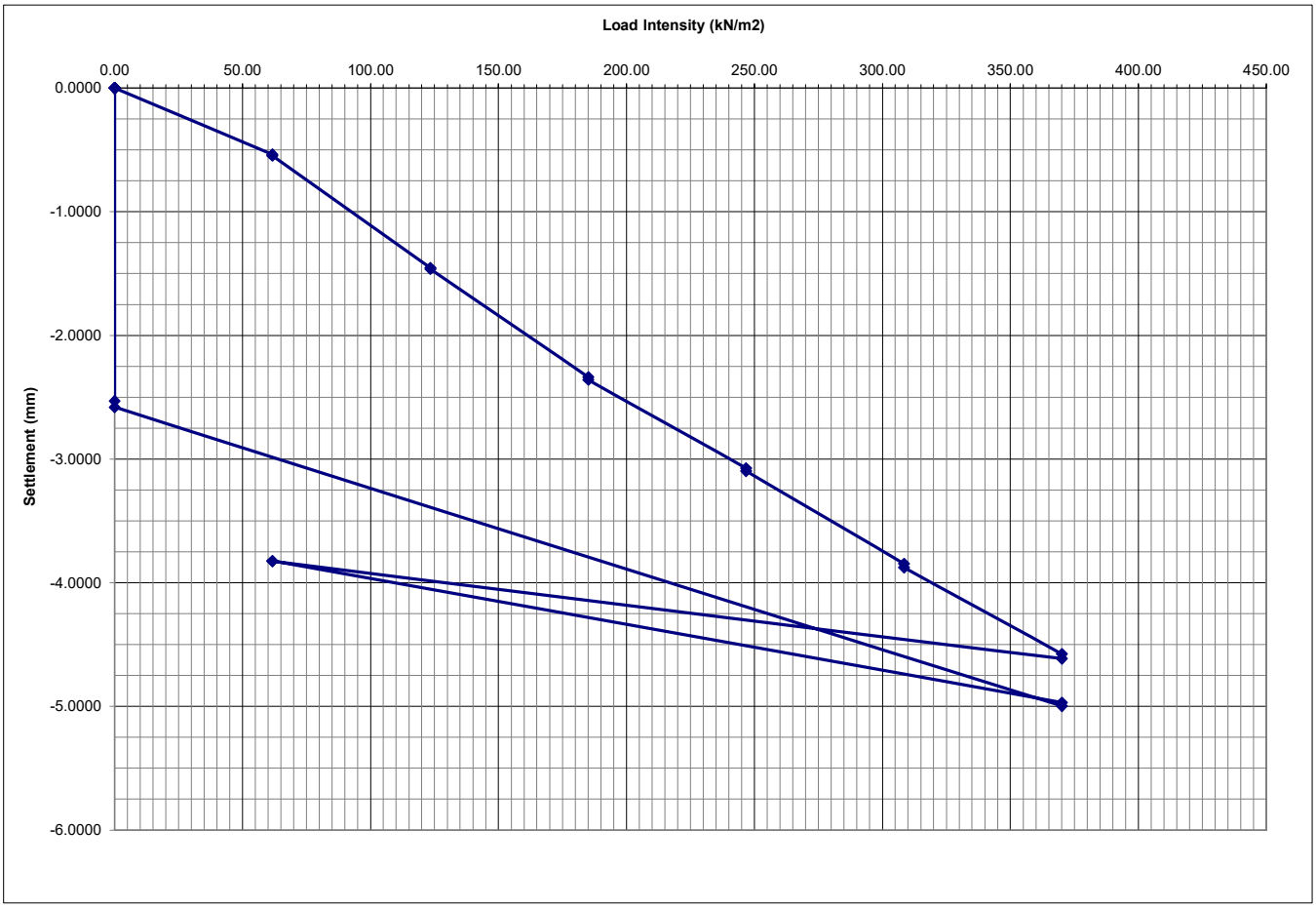
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R. Webster	M. Dee	15/09/2023	R. Walker	15/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	15/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	CBR102	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	0
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	0
Maximum Deformation (mm):	-5.00	**Weather:**	Dry
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 10%

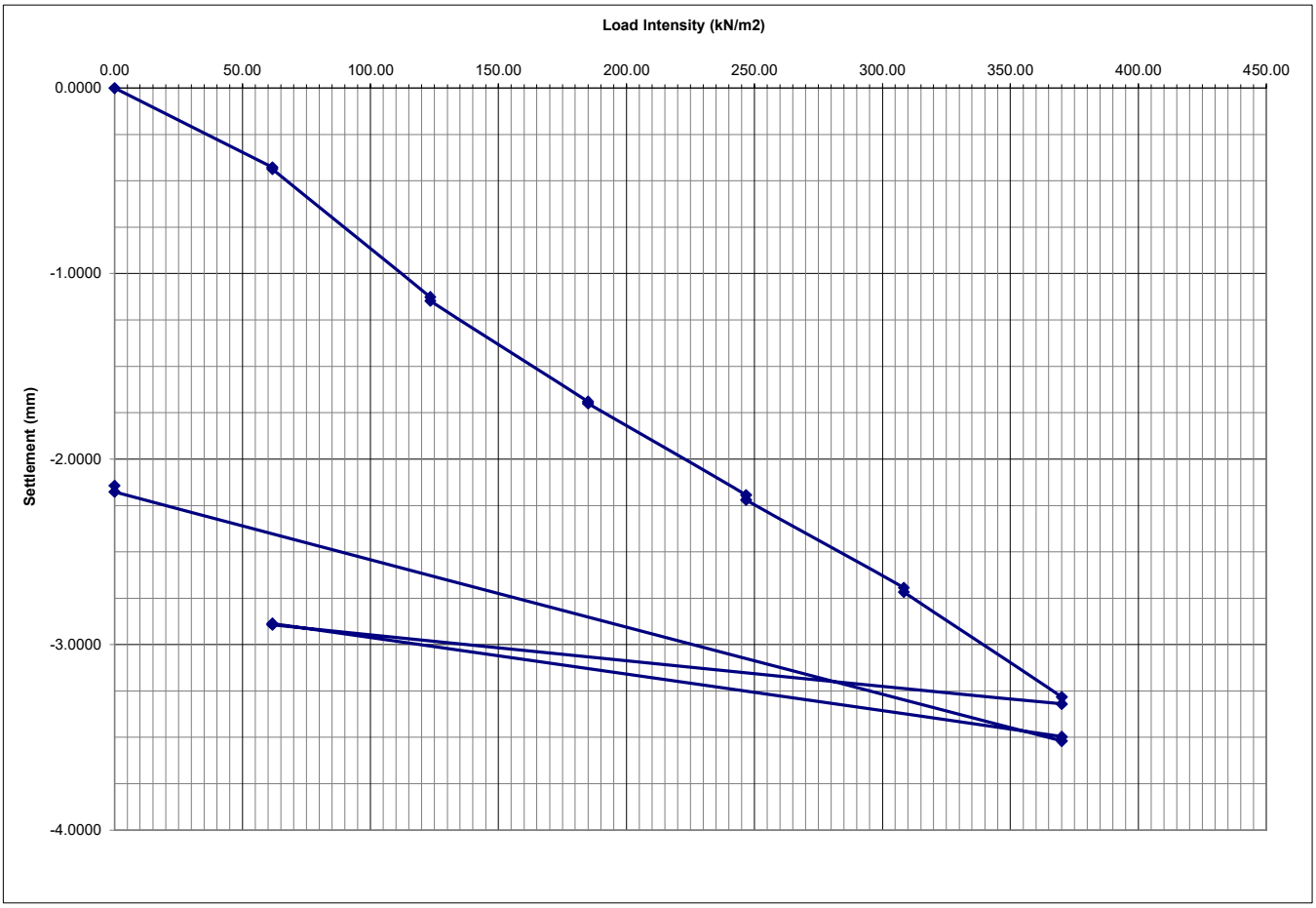
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R. Webster	M. Dee	15/09/2023	R. Walker	15/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	15/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	CBR103	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	0
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	0
Maximum Deformation (mm):	-3.52	**Weather:**	Dry
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 15%

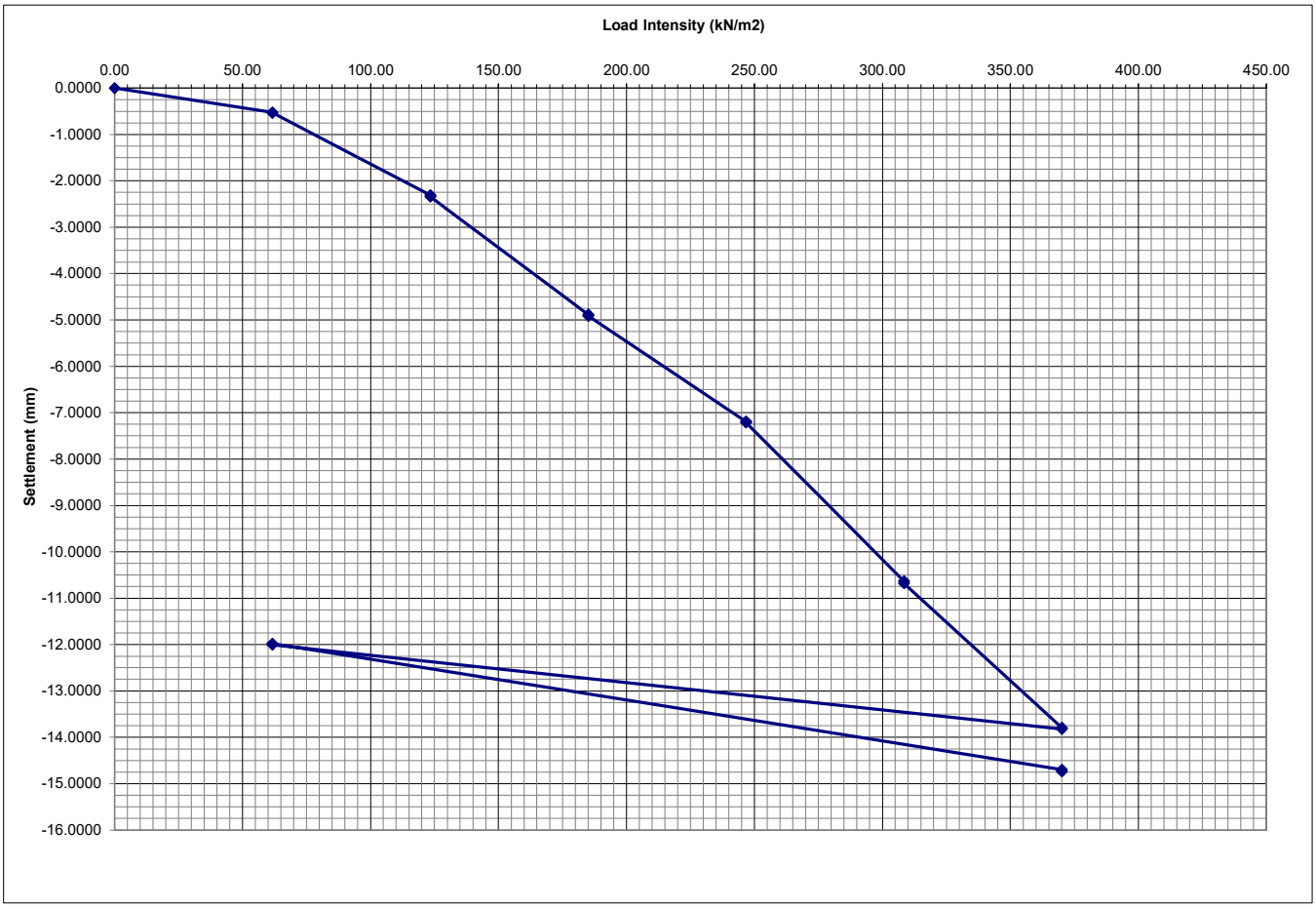
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R. Webster	M. Dee	15/09/2023	R. Walker	15/09/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	15/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	CBR104	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	0
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	0
Maximum Deformation (mm):	-14.74	**Weather:**	Dry
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 7%

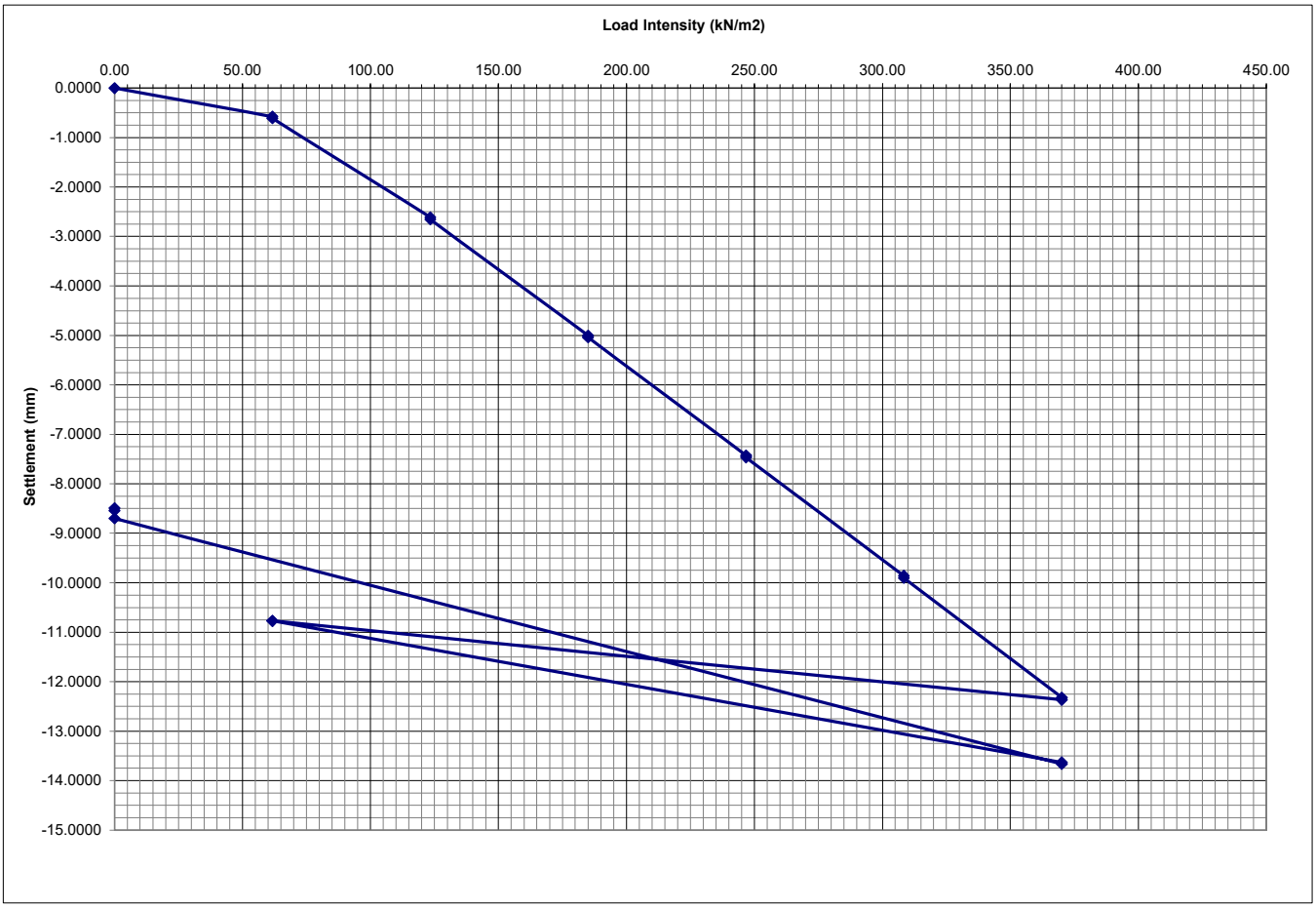
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
M. Whittaker	D. Cox	12/09/2019	M. Dyer	12/09/2019

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	15/09/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	CBR105	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	0
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	0
Maximum Deformation (mm):	-13.66	**Weather:**	Dry
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 6%

Comments

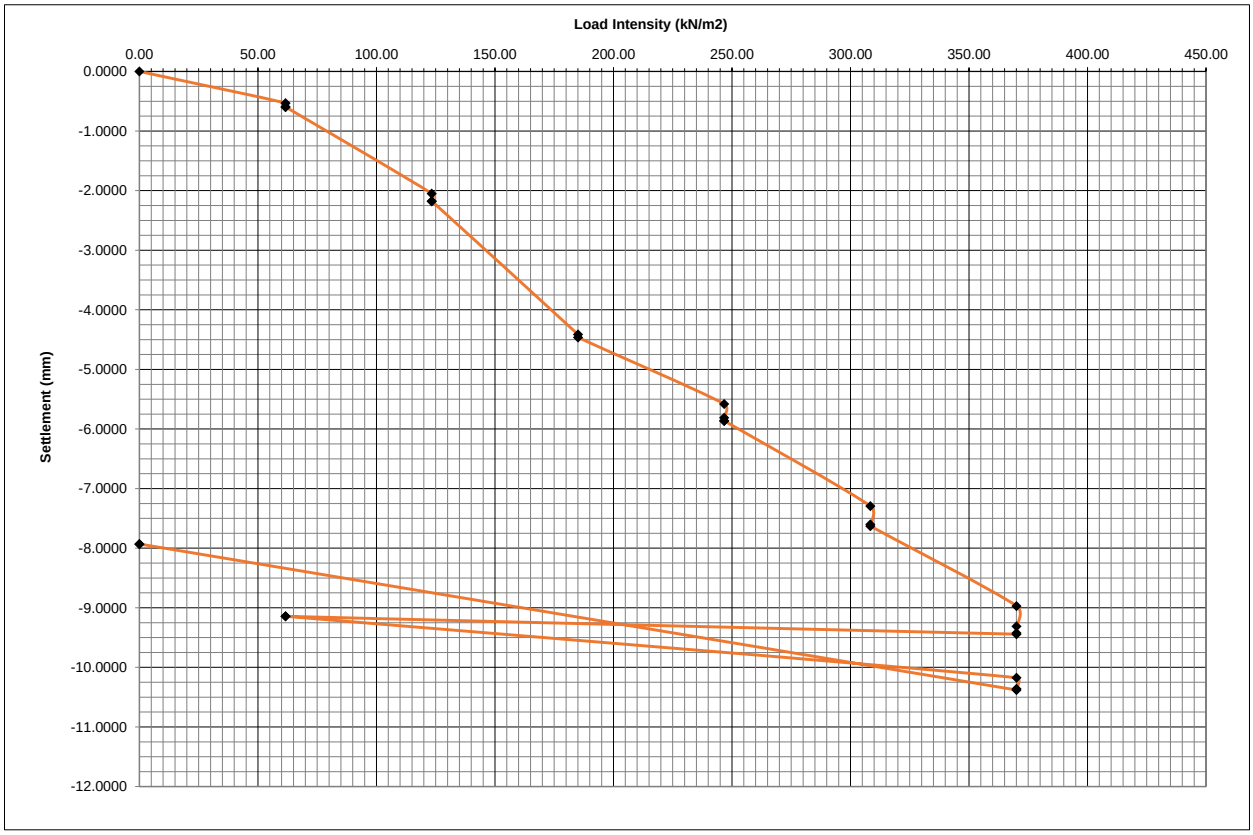
Site Engineer:	Checked By:	Date:	Approved By:	Date:
M. Whittaker	D. Cox	12/09/2019	M. Dyer	12/09/2019

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Community Centre***	
Site Ref:	*15-974*		**Test Date:**	*22/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386308*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*396961*	
Max Deformation:	*-10.38*	*mm*	**W3W:**	*///issue.occupy.after*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 7%

Max Deformation of -10.38 mm

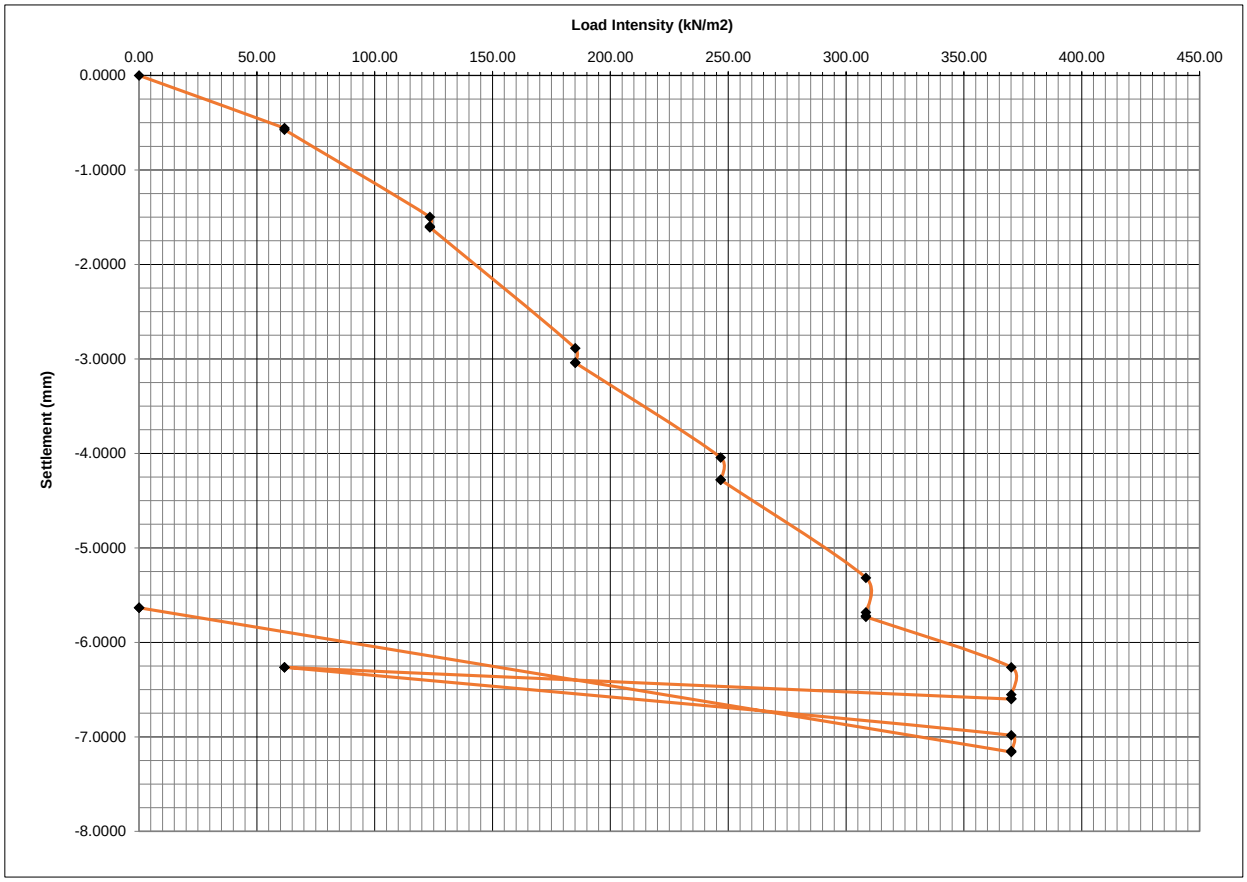
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	22/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Plot 1***
Site Ref:	*15-974*	**Test Date:**	*22/10/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL* *mbgl*
Plate Diameter:	*450* *mm*	**Easting:**	*386335*
Max Applied Pressure:	*370.09* *kN/m2*	**Northing:**	*396973*
Max Deformation:	*-7.16* *mm*	**W3W:**	*///late.lower.rams*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 10%

Max Deformation of -7.16 mm

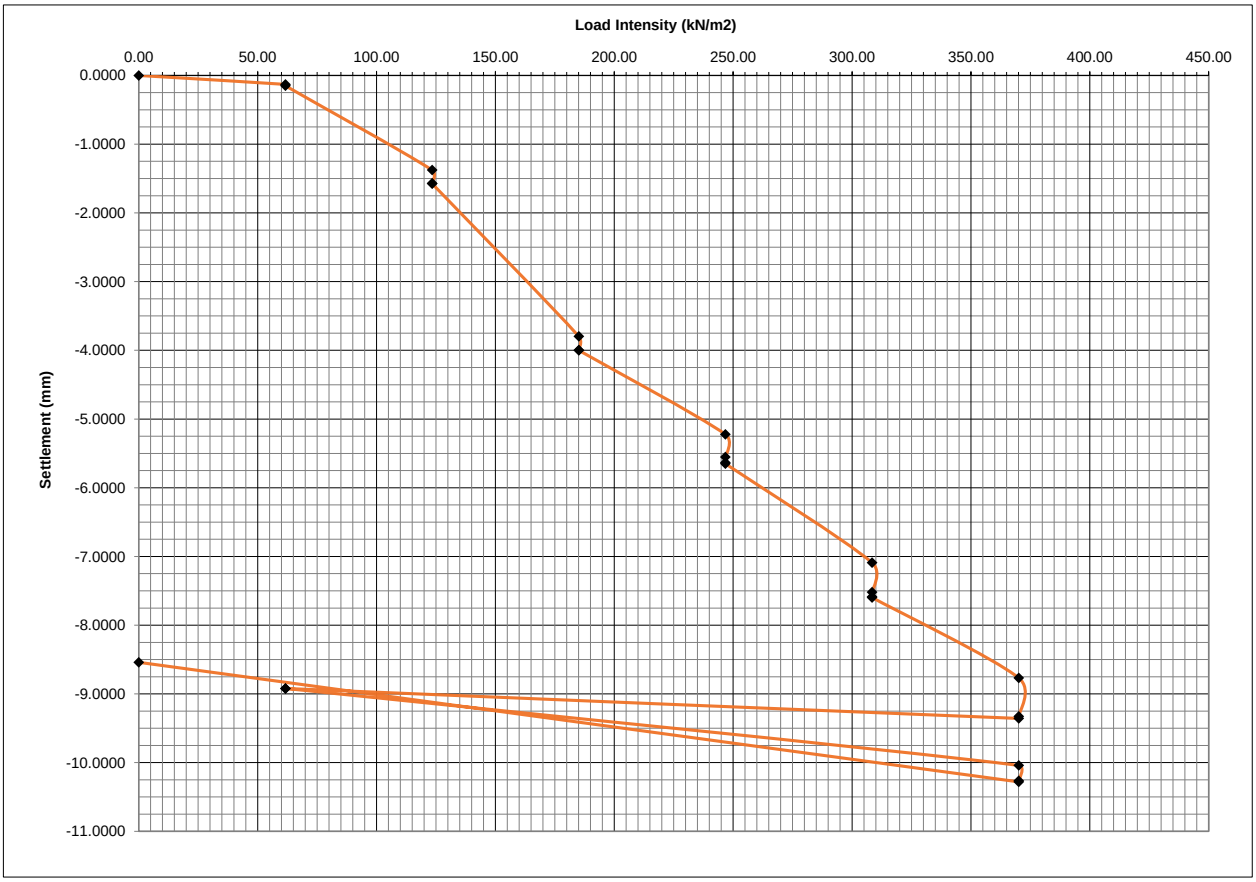
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	22/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 4***	
Site Ref:	*15-974*		**Test Date:**	*22/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386323*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*396967*	
Max Deformation:	*-10.28*	*mm*	**W3W:**	*///broad.ballots.bits*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 12%

Max Deformation of -10.28 mm

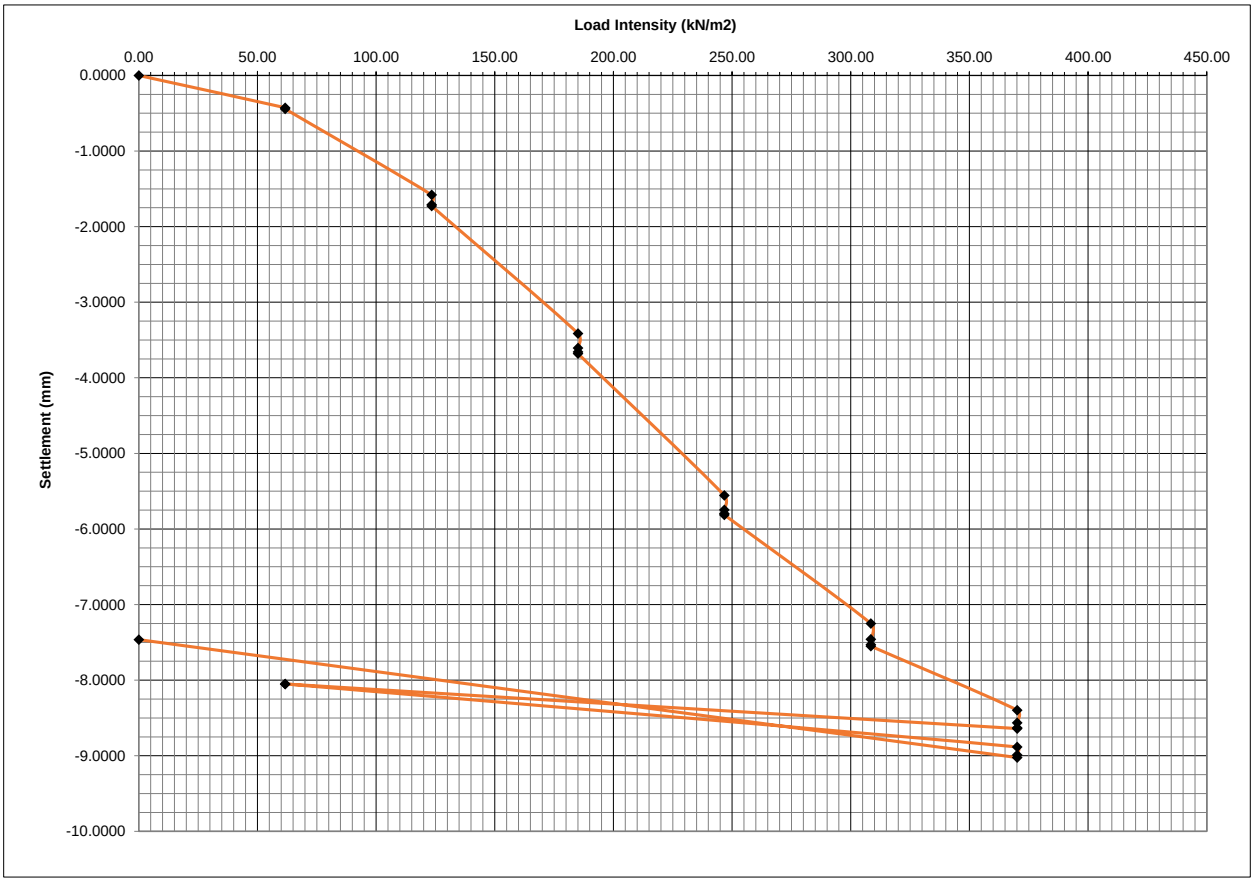
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	22/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 33-34***	
Site Ref:	*15-974*		**Test Date:**	*22/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386320*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*396985*	
Max Deformation:	*-9.02*	*mm*	**W3W:**	*///loud.beside.robot*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 10%

Max Deformation of -9.02 mm

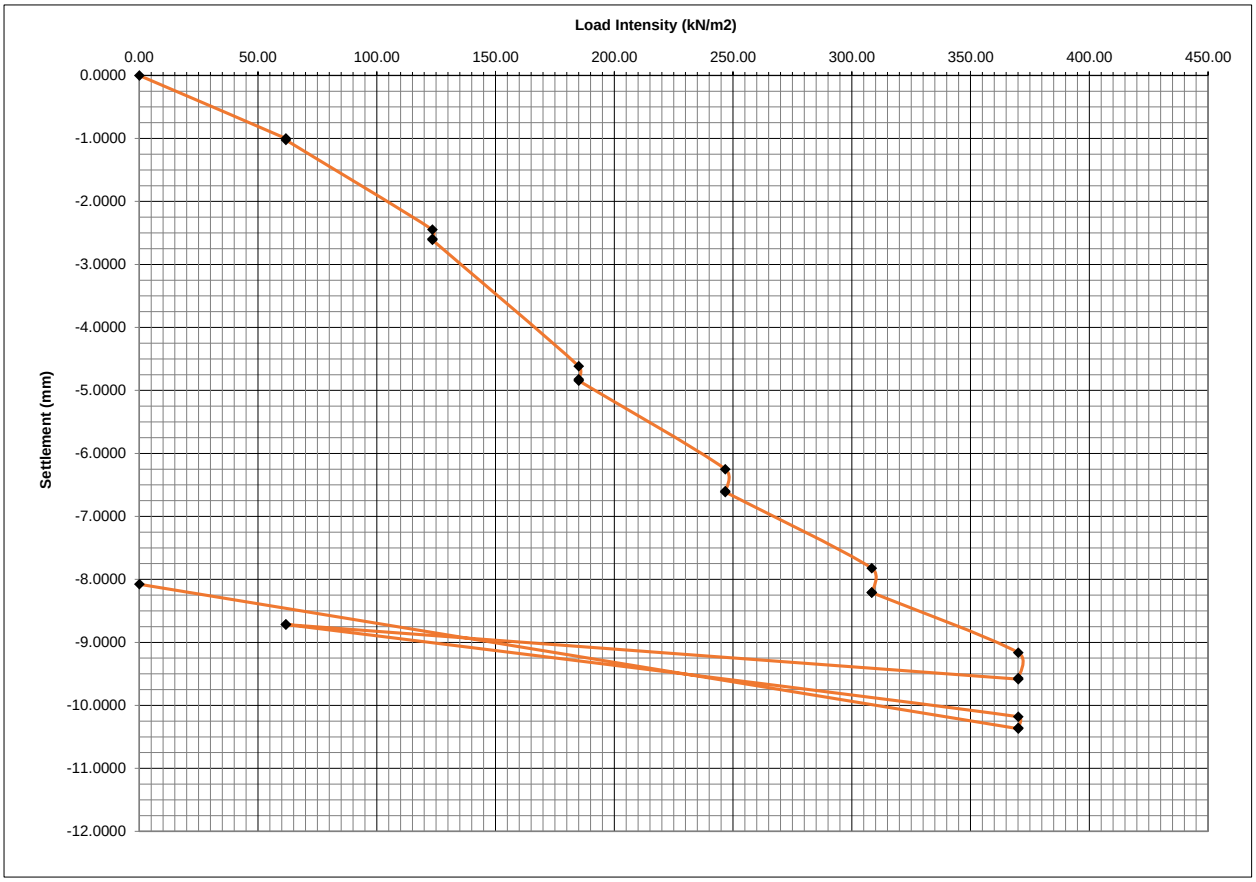
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	22/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 35-36***	
Site Ref:	*15-974*		**Test Date:**	*22/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386336*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*396994*	
Max Deformation:	*-10.37*	*mm*	**W3W:**	*///dress.erase.lower*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 5%

Max Deformation of -10.37 mm

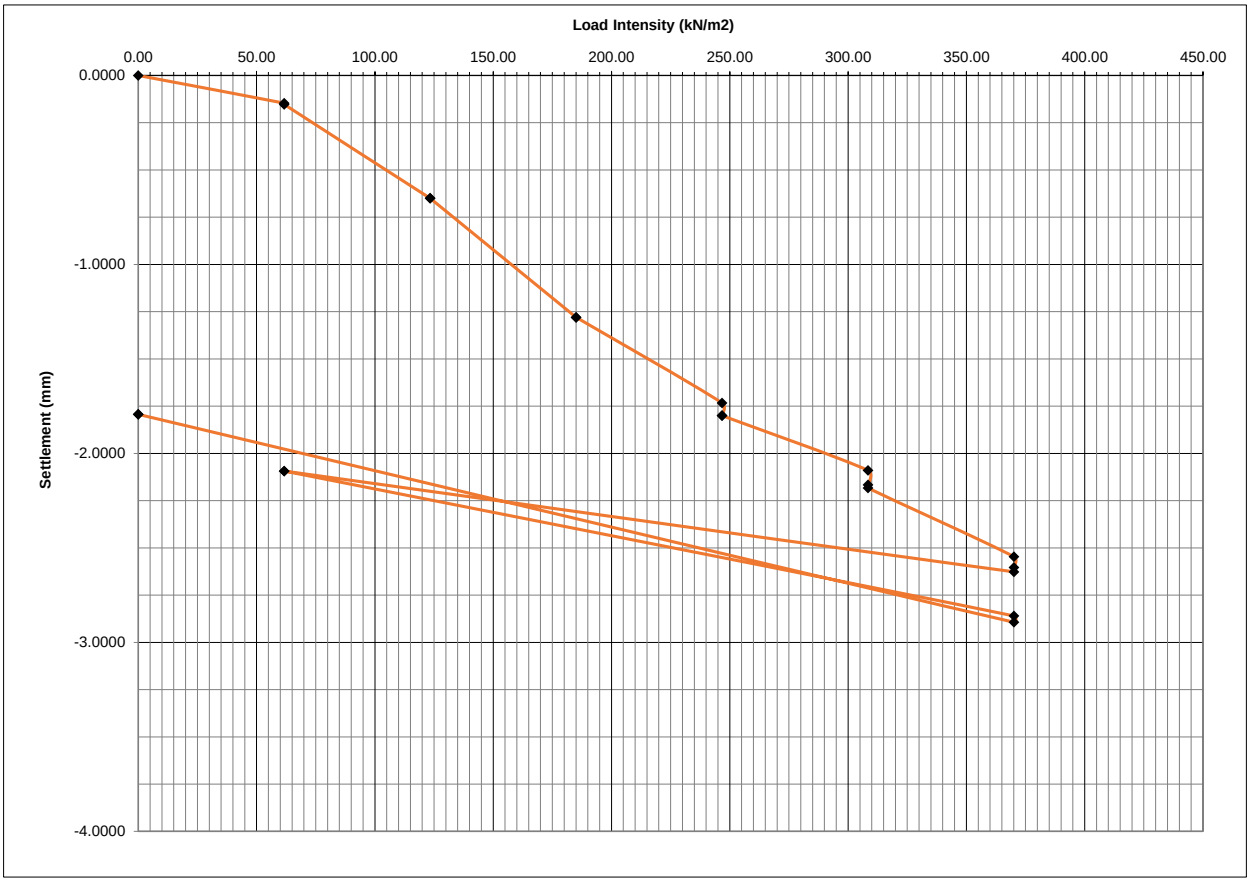
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	22/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 41-42***	
Site Ref:	*15-974*		**Test Date:**	*23/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386306*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397045*	
Max Deformation:	*-2.89*	*mm*	**W3W:**	*'//types.powers.smile*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 25%

Max Deformation of -2.89 mm

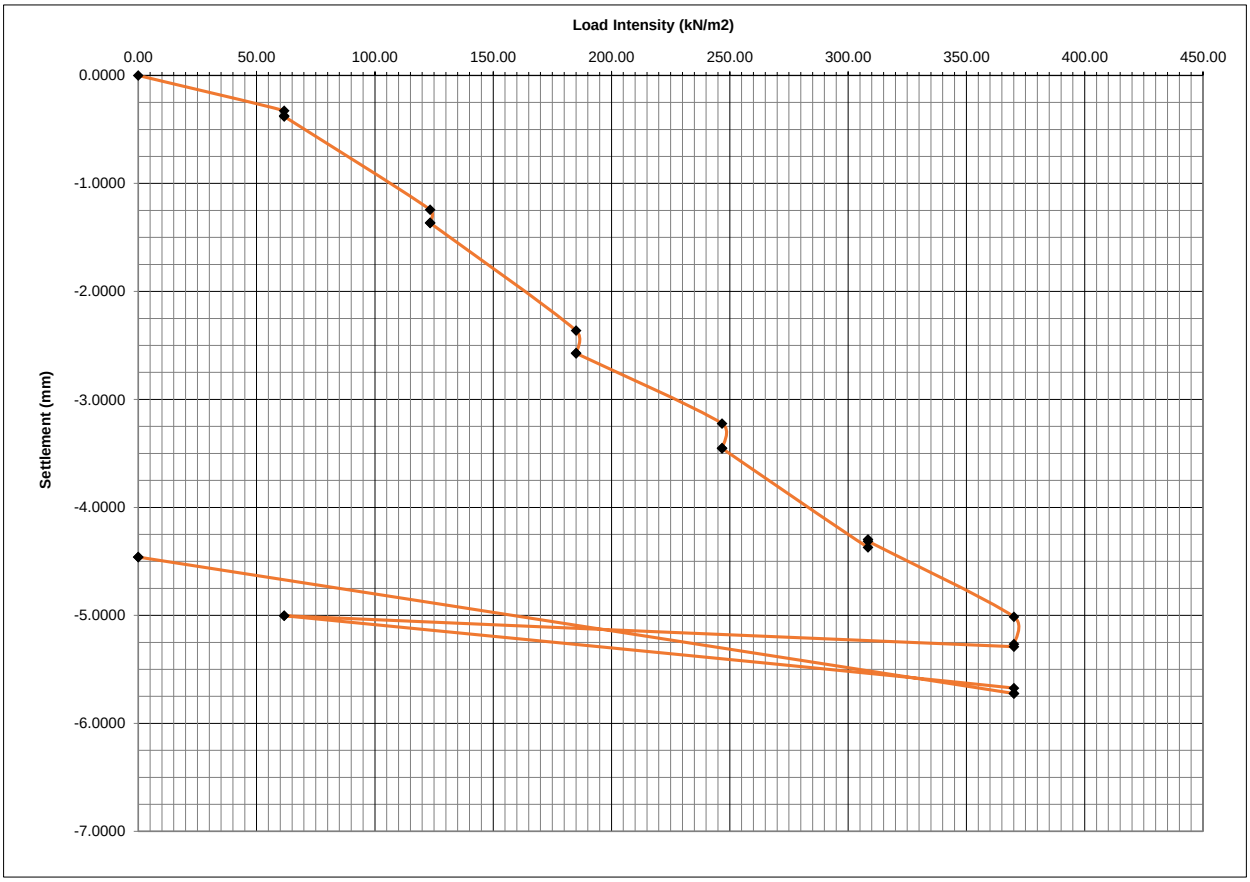
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 43***	
Site Ref:	*15-974*		**Test Date:**	*23/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386306*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397057*	
Max Deformation:	*-5.72*	*mm*	**W3W:**	*'/sugars.paused.spent*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 13%

Max Deformation of -5.72 mm

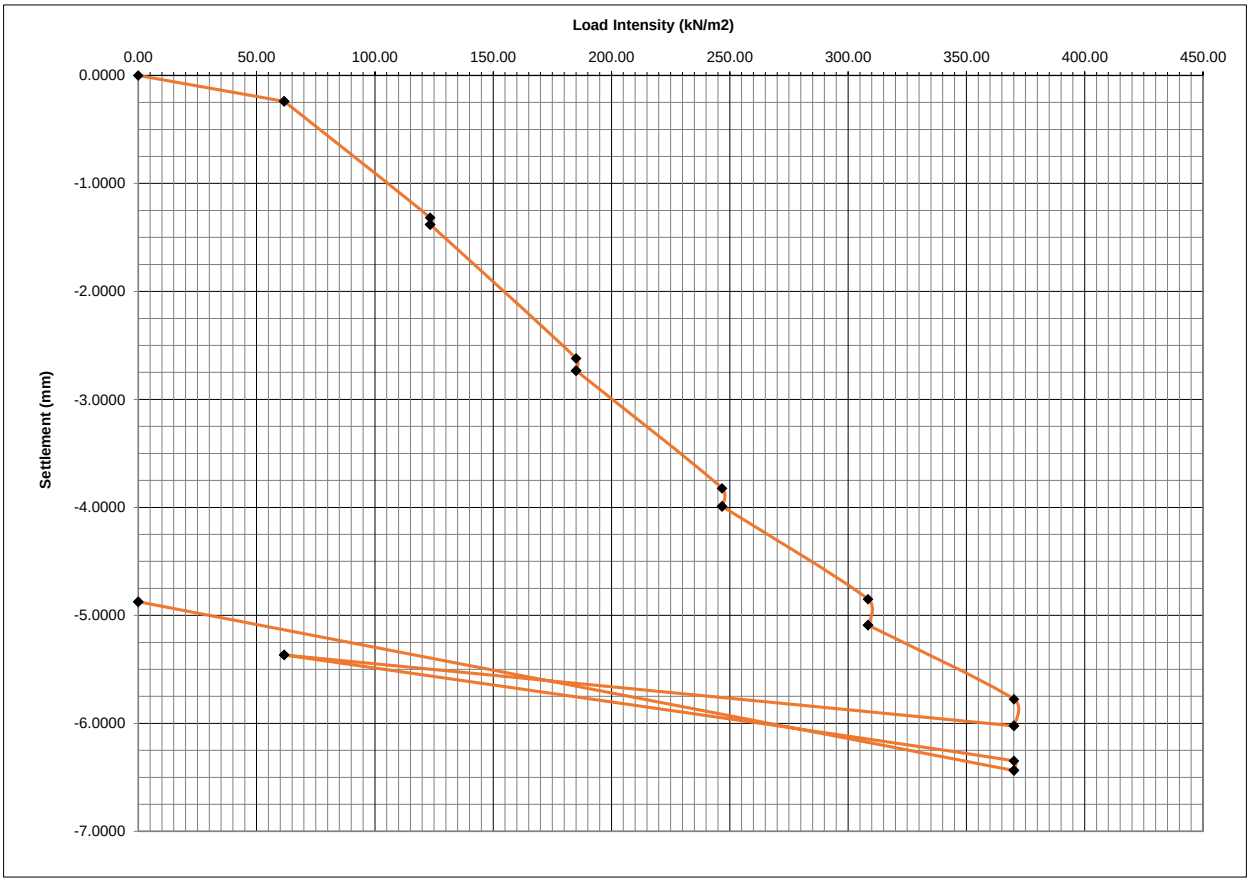
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 45***	
Site Ref:	*15-974*		**Test Date:**	*23/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386306*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397063*	
Max Deformation:	*-6.44*	*mm*	**W3W:**	*///stay.boots.rests*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 12%

Max Deformation of -6.44 mm

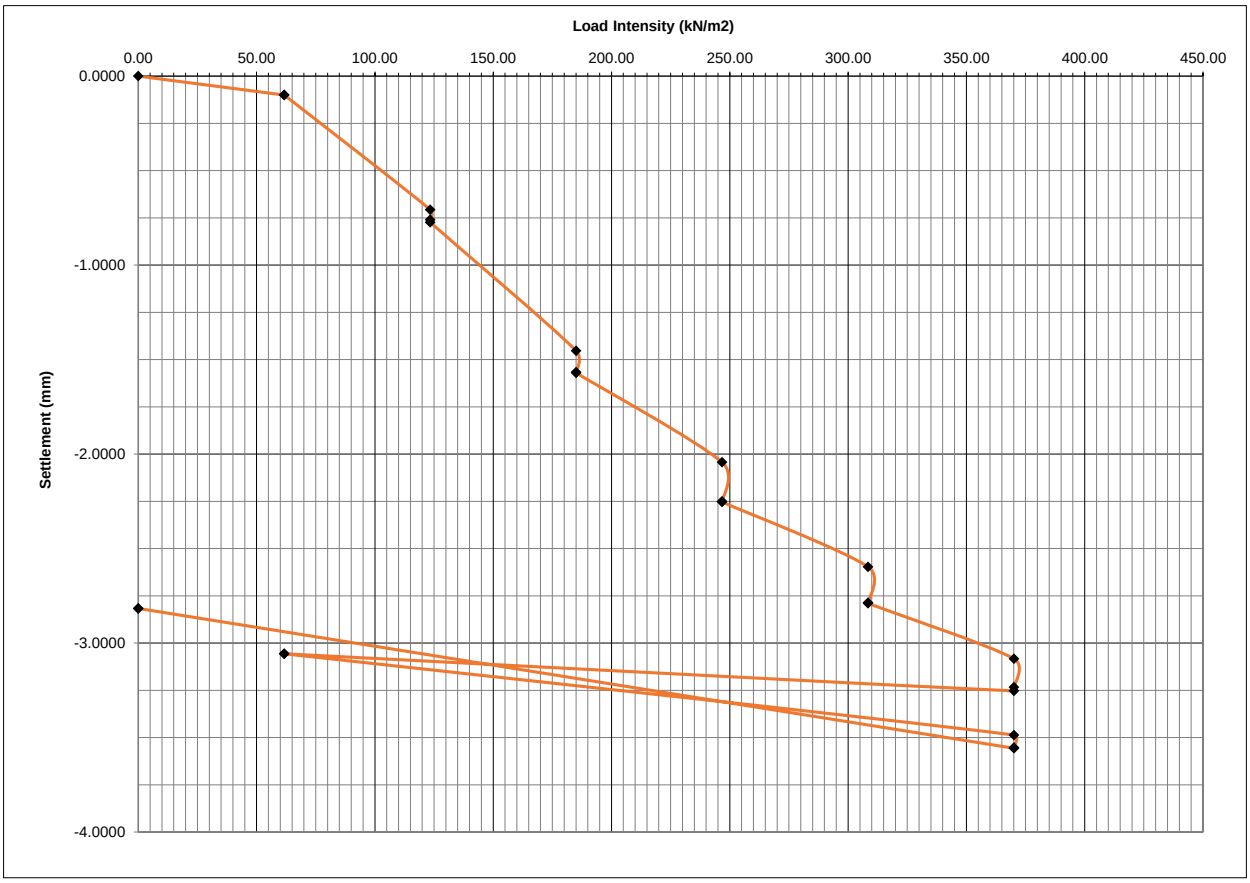
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 46***	
Site Ref:	*15-974*		**Test Date:**	*23/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386306*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397072*	
Max Deformation:	*-3.56*	*mm*	**W3W:**	*///splice.sleeps.universally*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 22%

Max Deformation of -3.56 mm

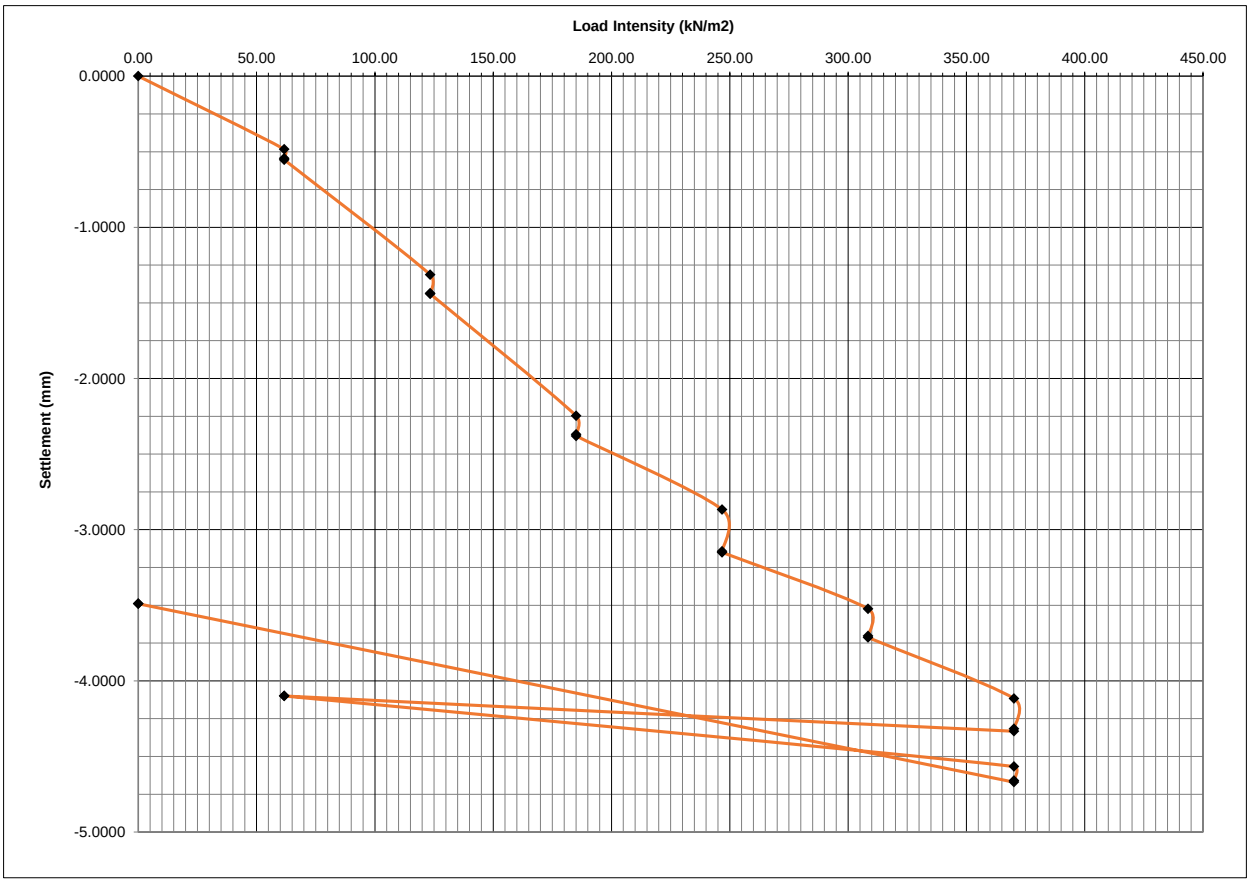
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 48***	
Site Ref:	*15-974*		**Test Date:**	*23/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386306*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397069*	
				///squad.beyond.ri	
Max Deformation:	*-4.67*	*mm*	**W3W:**	*ps*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 12%

Max Deformation of -4.67 mm

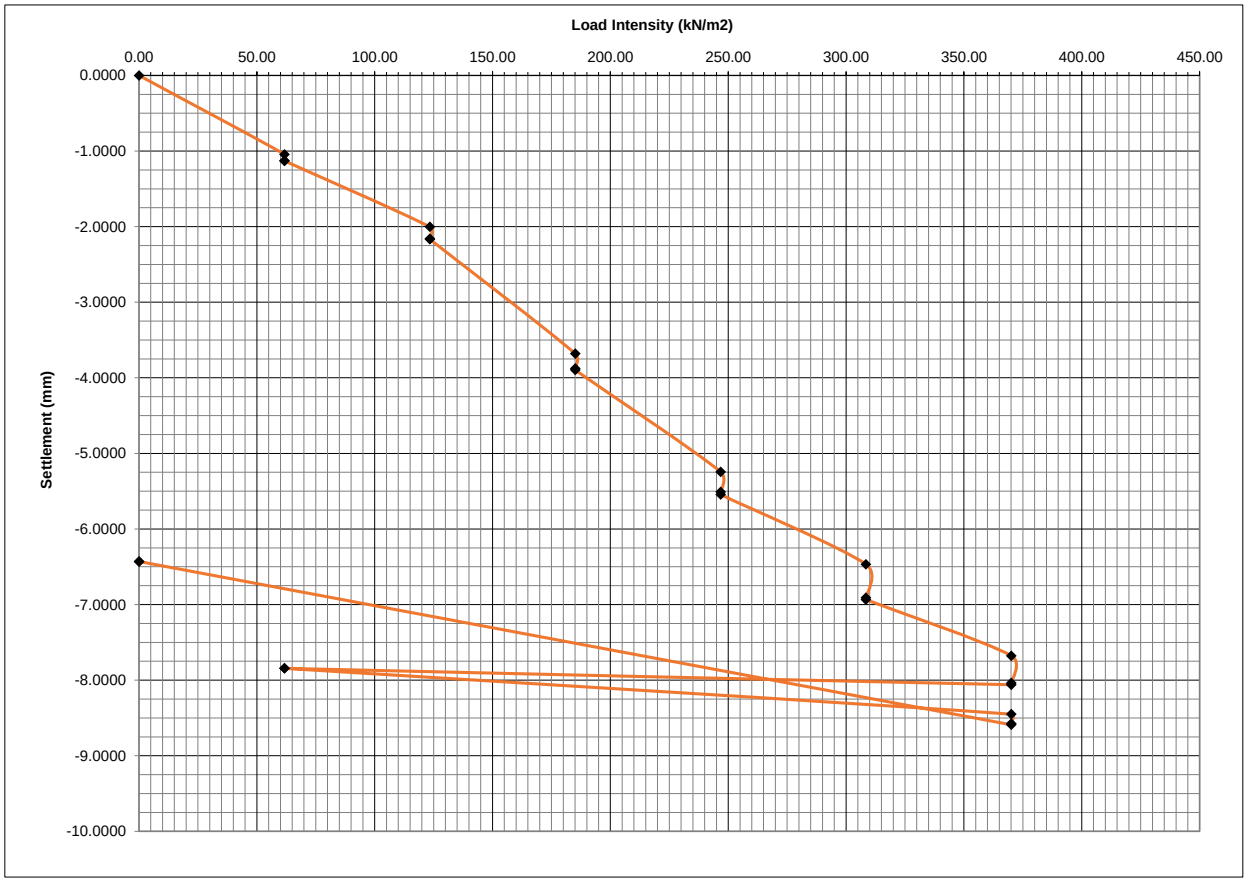
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Rd2 + 30m***
Site Ref:	*15-974*	**Test Date:**	*23/10/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL mbgl*
Plate Diameter:	*450 mm*	**Easting:**	*386294*
Max Applied Pressure:	*370.09 kN/m2*	**Northing:**	*397051*
Max Deformation:	*-8.59 mm*	**W3W:**	*///mice.fans.book*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 5%

Max Deformation of -8.59 mm

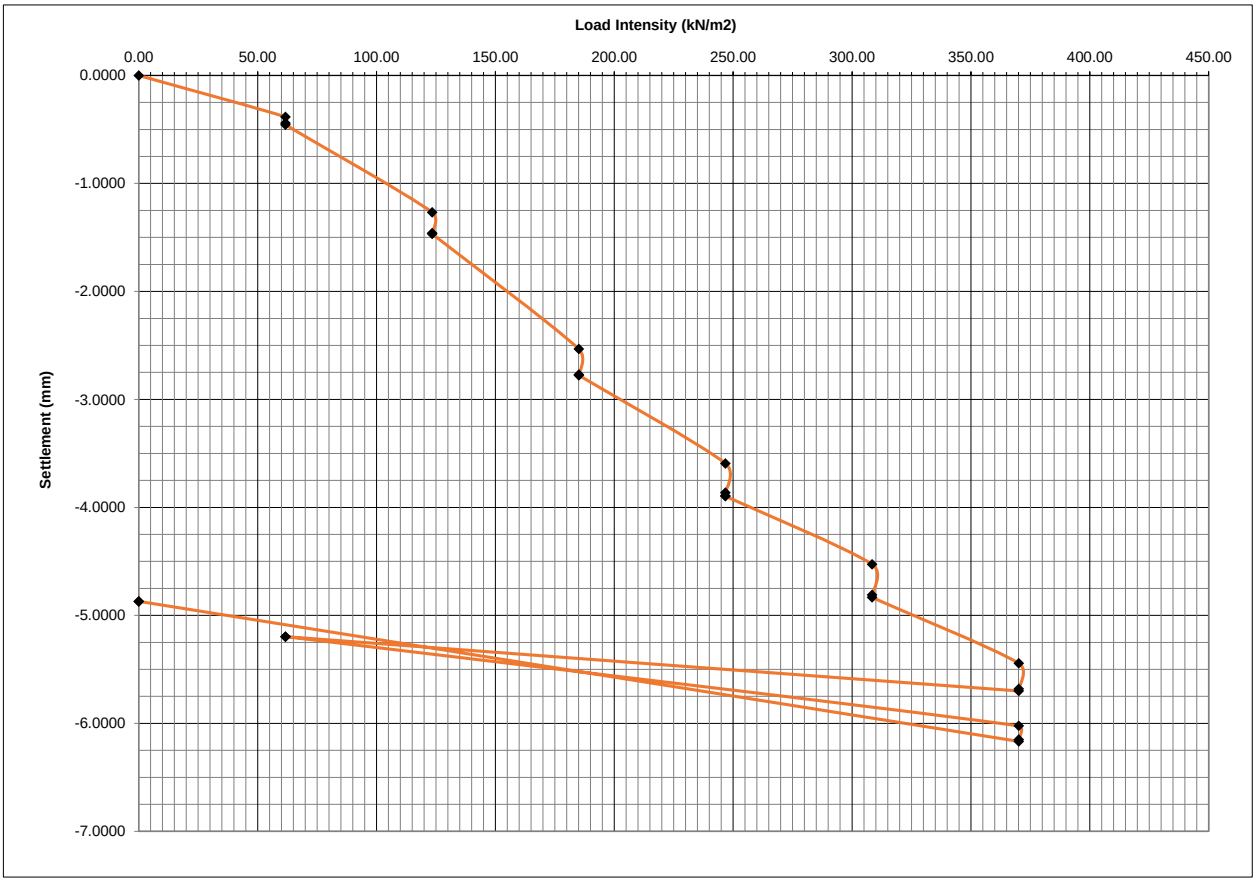
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Rd2 + 40m***
Site Ref:	*15-974*	**Test Date:**	*23/10/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL* *mbgl*
Plate Diameter:	*450* *mm*	**Easting:**	*386297*
Max Applied Pressure:	*370.09* *kN/m2*	**Northing:**	*397042*
Max Deformation:	*-6.17* *mm*	**W3W:**	*///trio.faces.events*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 12%

Max Deformation of -6.17 mm

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/10/2024	R. Walker	28/10/2024

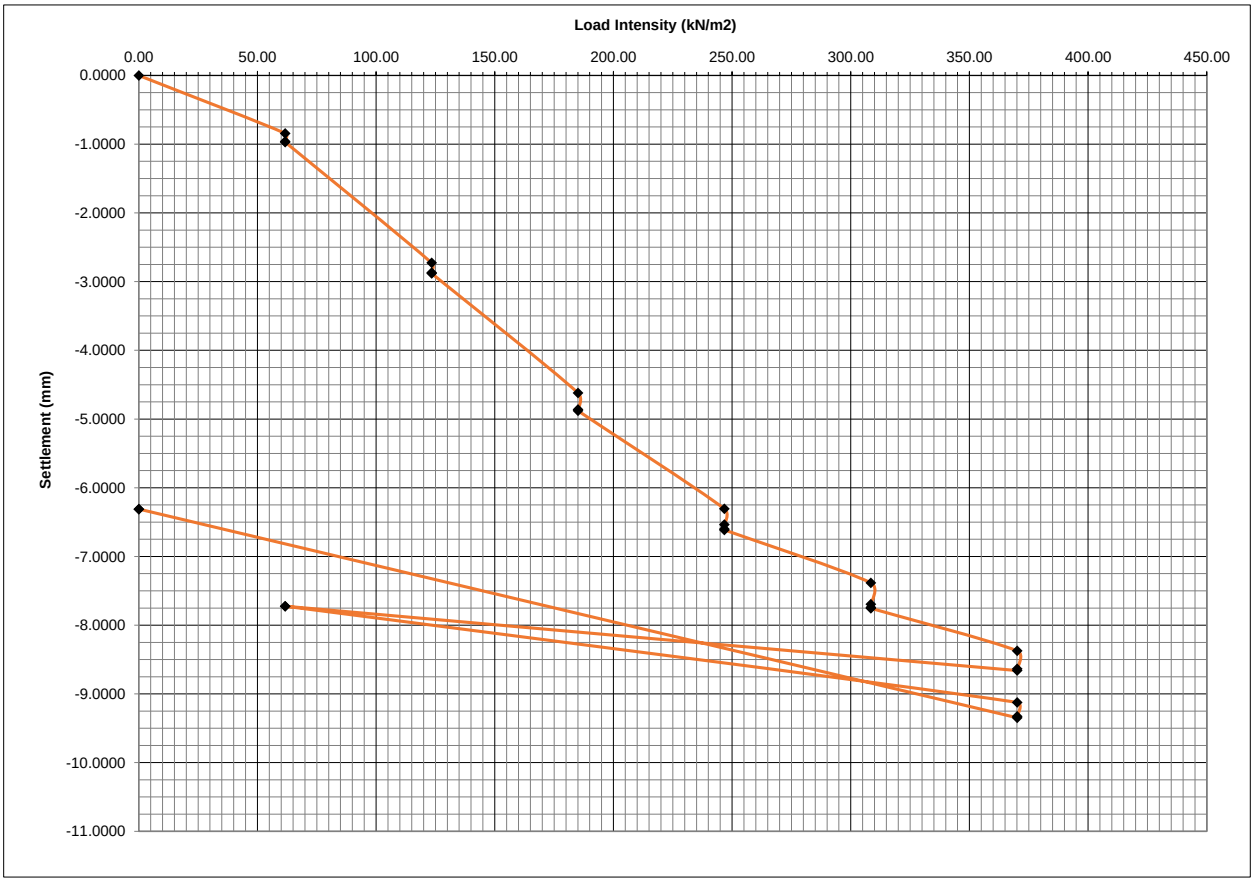
Environmental Engineering Partnership Limited trading as E3P Registered in England No: 08725262 Registered Office: Taylor Road Trafford Park Urmston Manchester M41 7JQ

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Rd 2 +50m***	
Site Ref:	*15-974*		**Test Date:**	*23/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386294*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397033*	
Max Deformation:	*-9.35*	*mm*	**W3W:**	*///vast.corn.doctor*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 5%

Max Deformation of -9.35 mm

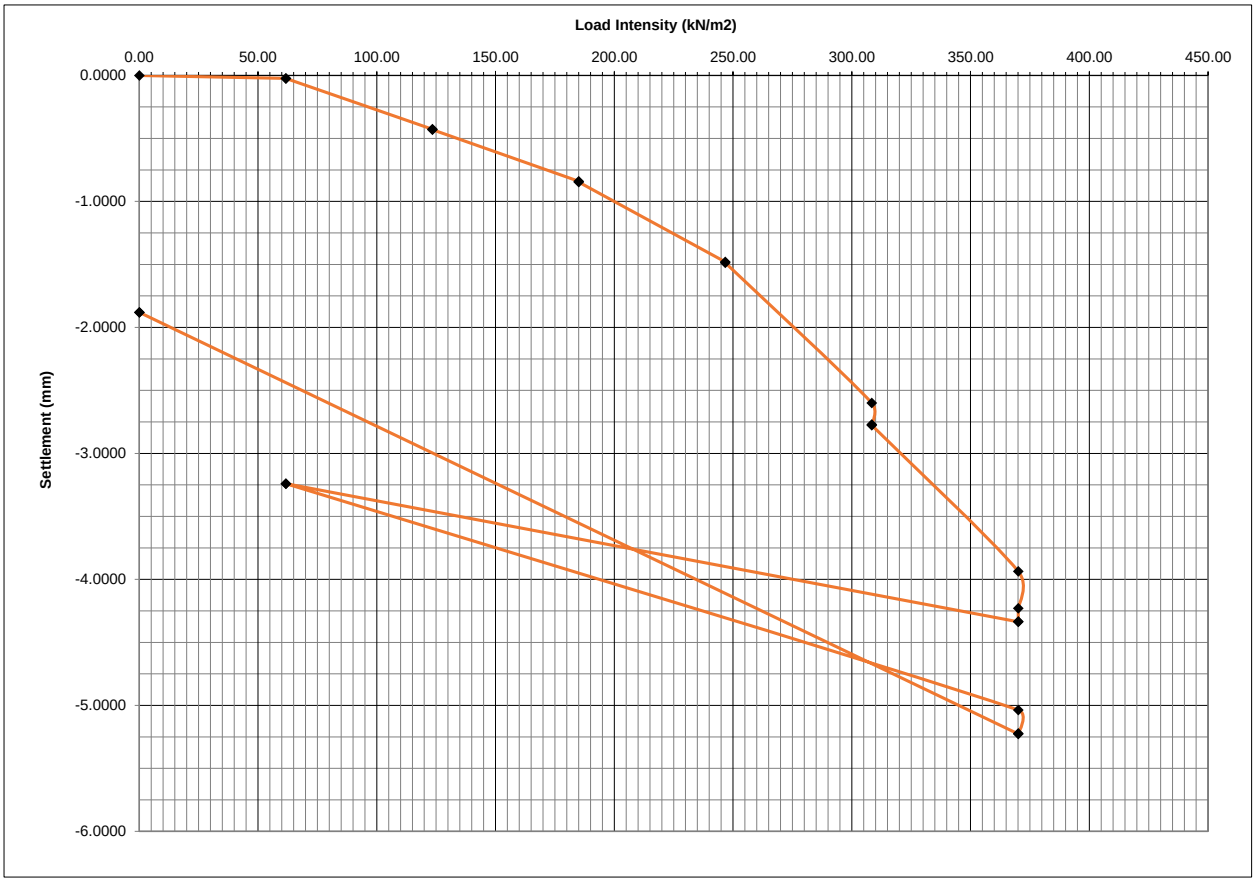
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Rd2 + 60m***
Site Ref:	*15-974*	**Test Date:**	*23/10/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL* *mbgl*
Plate Diameter:	*450* *mm*	**Easting:**	*386296*
Max Applied Pressure:	*370.09* *kN/m2*	**Northing:**	*397024*
Max Deformation:	*-5.23* *mm*	**W3W:**	*///guides.such.focal*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 36%

Max Deformation of -5.23 mm

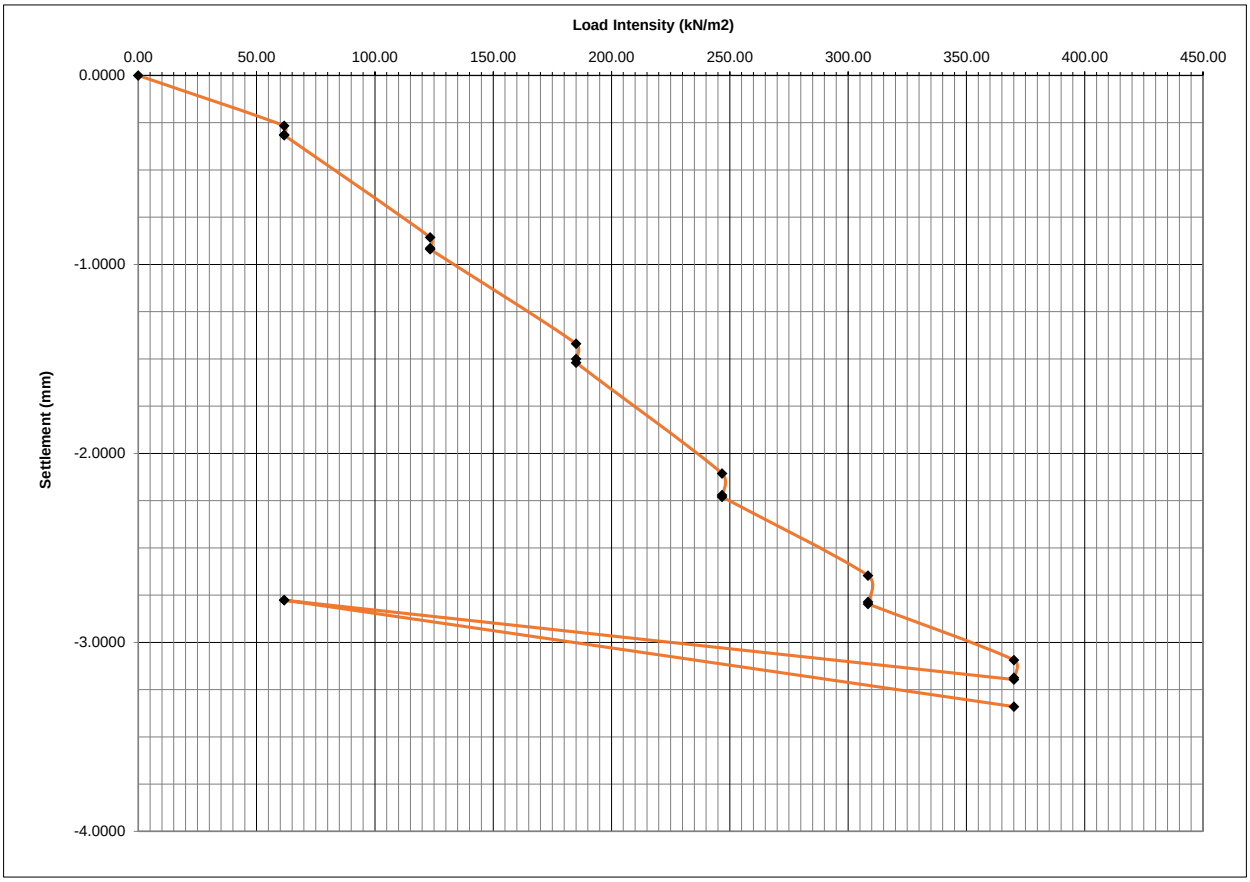
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Rd2 + 70m***	
Site Ref:	*15-974*		**Test Date:**	*23/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386293*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397018*	
Max Deformation:	*-3.40*	*mm*	**W3W:**	*///calms.indeed.risks*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 21%

Max Deformation of -3.40 mm

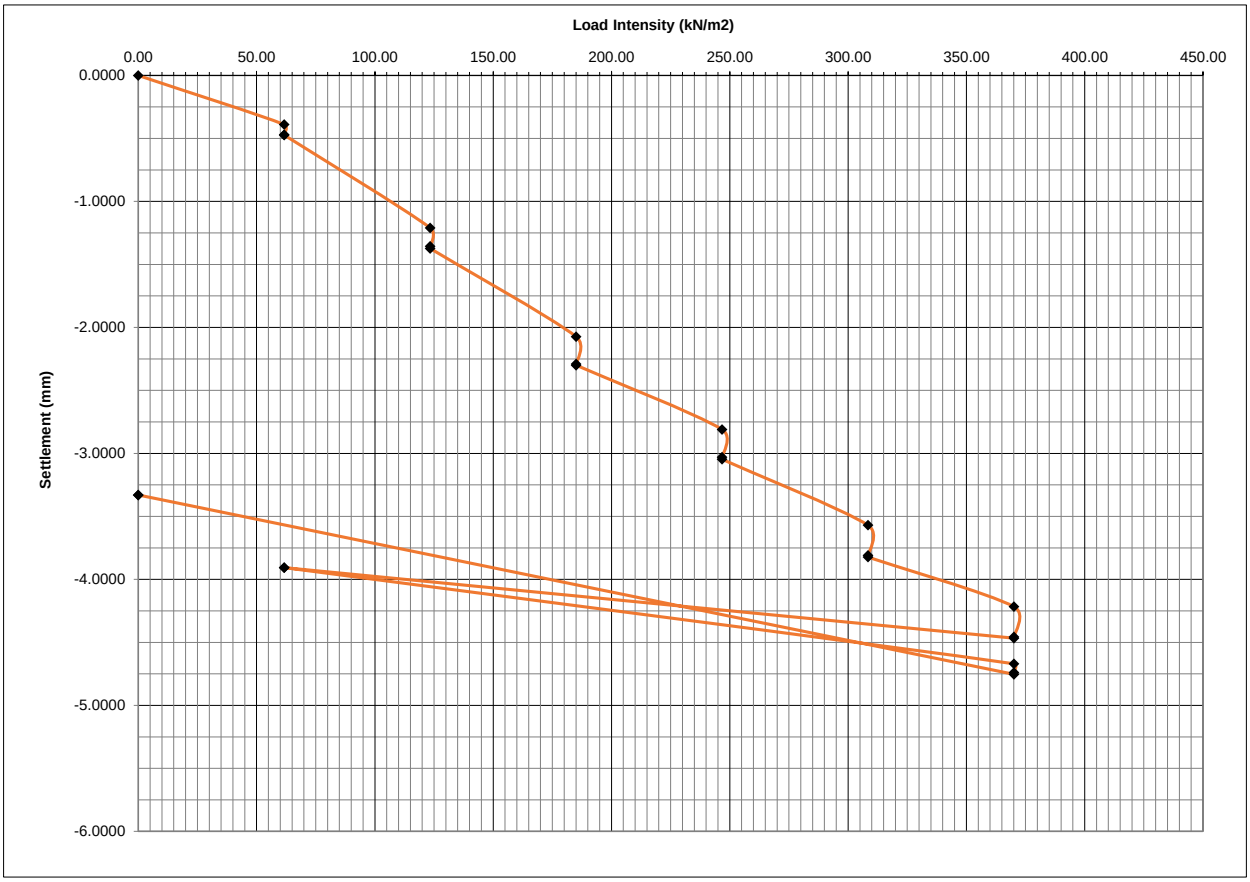
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Rd2 + 80m***
Site Ref:	*15-974*	**Test Date:**	*23/10/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL* *mbgl*
Plate Diameter:	*450* *mm*	**Easting:**	*386296*
Max Applied Pressure:	*370.09* *kN/m2*	**Northing:**	*397006*
Max Deformation:	*-4.75* *mm*	**W3W:**	*///chef.good.rides*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 13%

Max Deformation of -4.75 mm

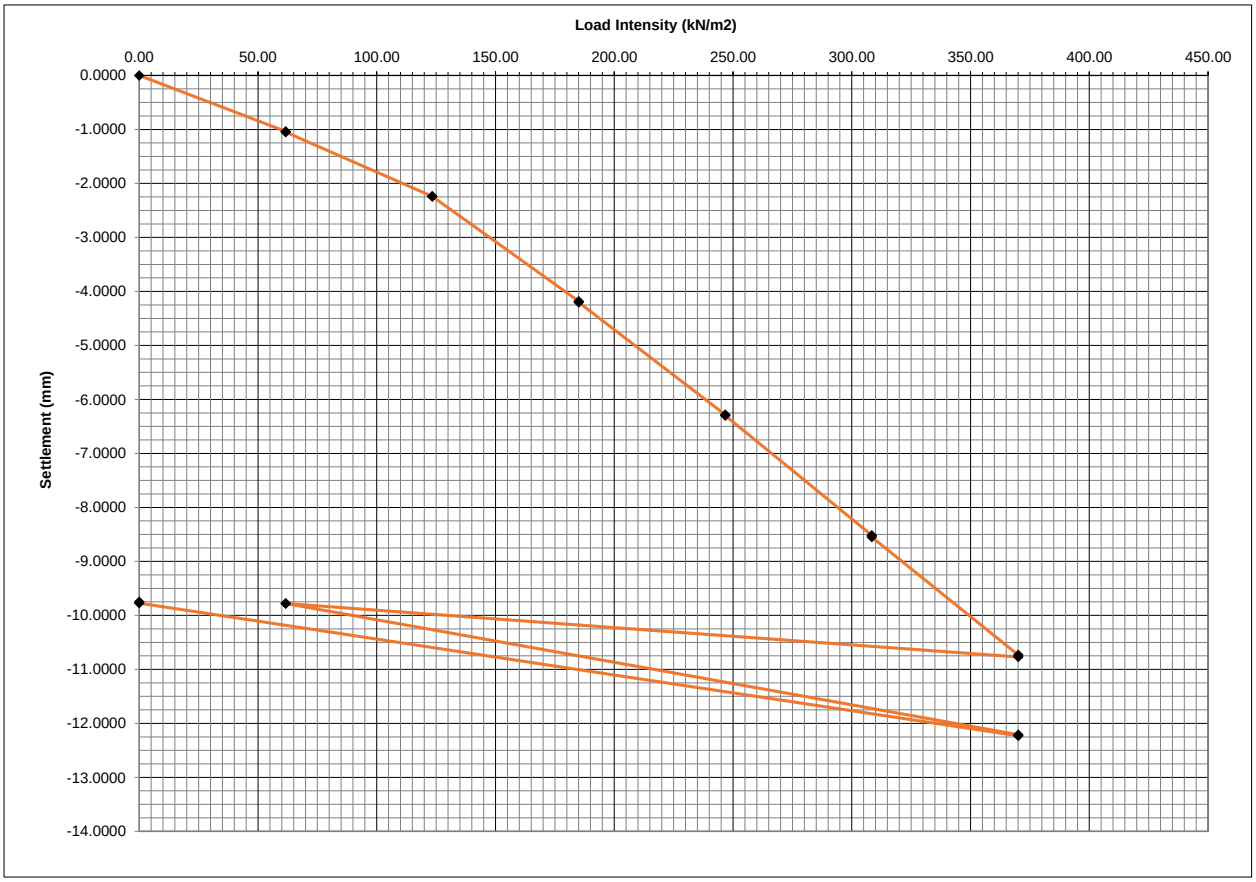
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	23/10/2024	R. Walker	28/10/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Plot 5/6***
Site Ref:	*15-974*	**Test Date:**	*07/11/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL mbgl*
Plate Diameter:	*450 mm*	**Easting:**	*386308*
Max Applied Pressure:	*370.09 kN/m2*	**Northing:**	*396940*
Max Deformation:	*-12.23 mm*	**W3W:**	*///tribal.assume.danger*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 5%

Max Deformation of -12.23 mm

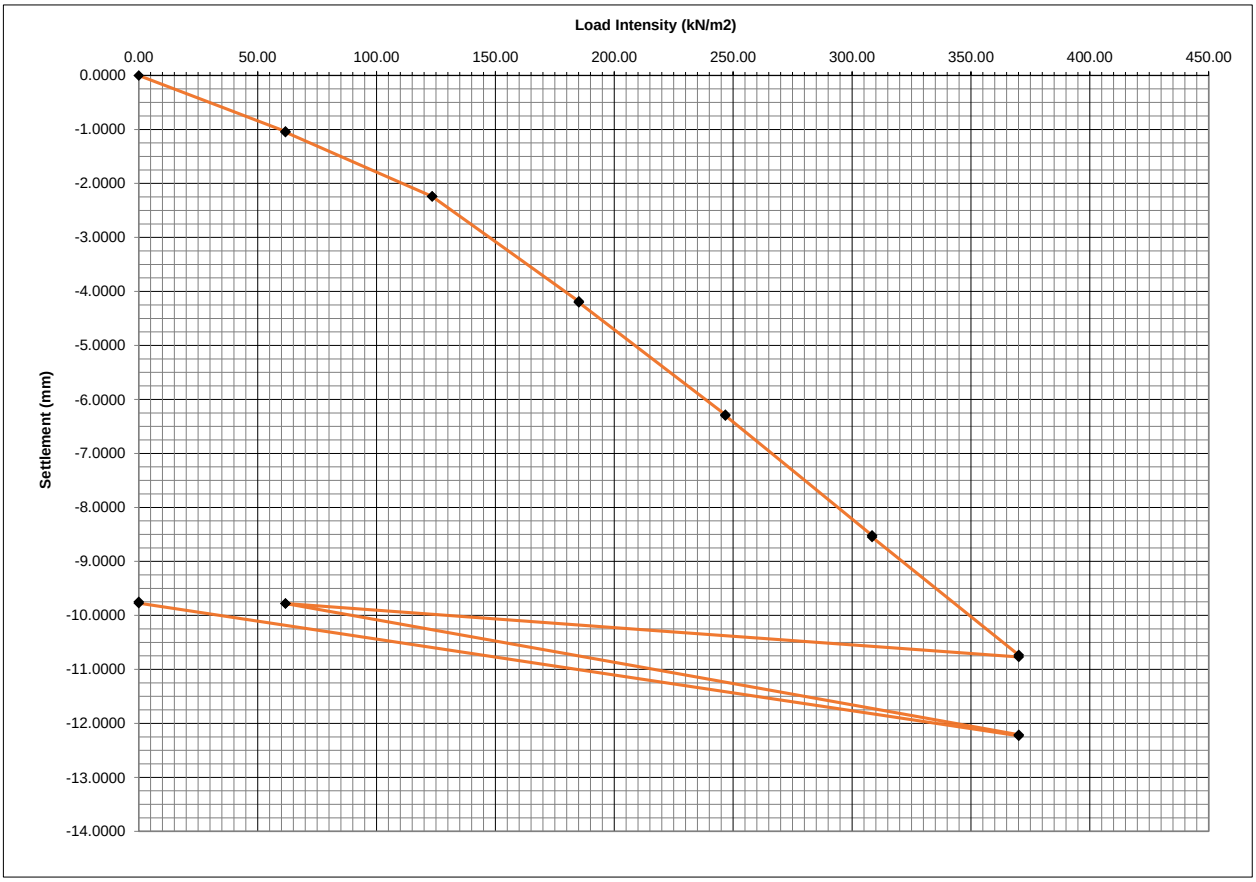
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	11/11/2024	R. Walker	25/11/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Plot 7/8***
Site Ref:	*15-974*	**Test Date:**	*07/11/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL* *mbgl*
Plate Diameter:	*450* *mm*	**Easting:**	*386275*
Max Applied Pressure:	*370.09* *kN/m2*	**Northing:**	*396929*
Max Deformation:	*-12.23* *mm*	**W3W:**	*///kicks.overnight.store*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 5%

Max Deformation of -12.23 mm

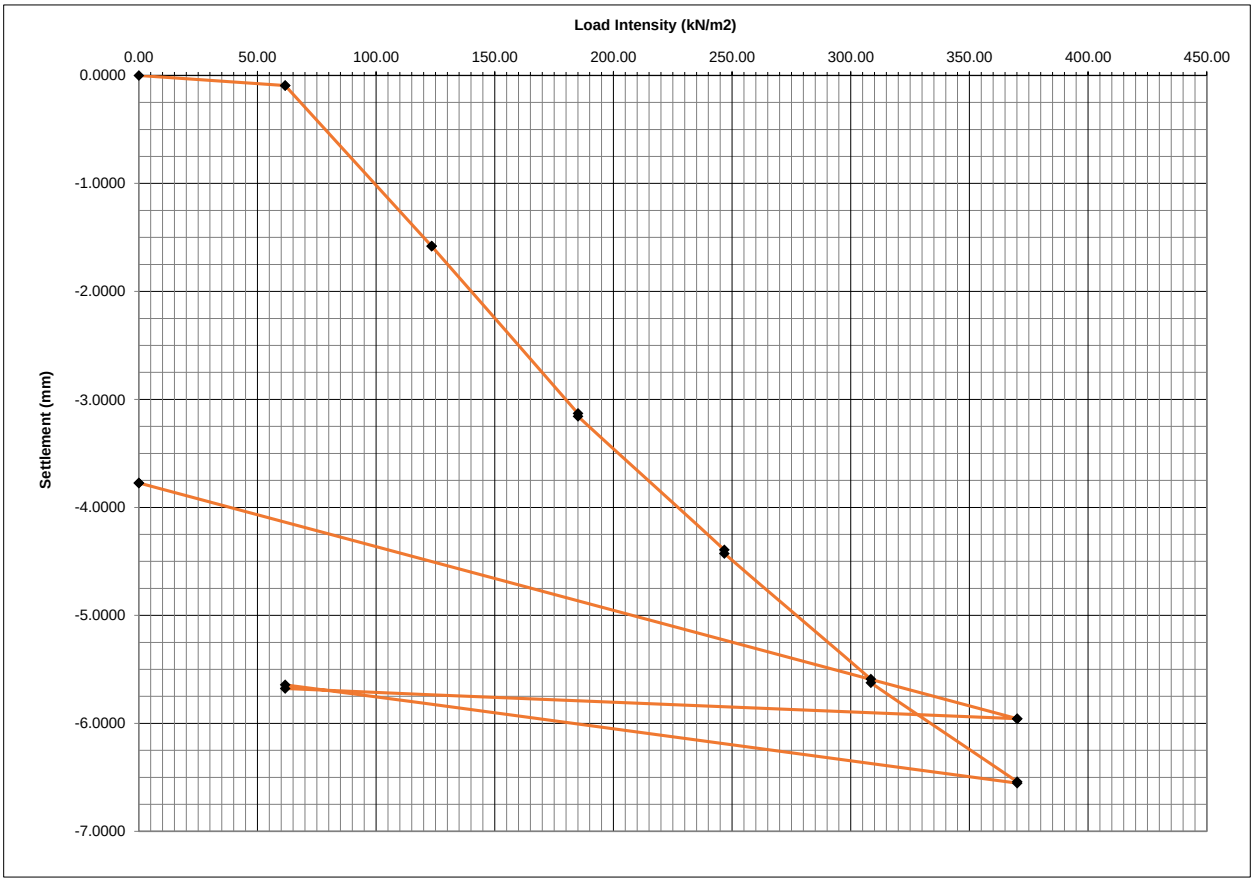
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	11/11/2024	R. Walker	25/11/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 149/150***	
Site Ref:	*15-974*		**Test Date:**	*07/11/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386242*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397022*	
Max Deformation:	*-6.55*	*mm*	**W3W:**	*///pills.galaxy.fantastic*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 10%

Max Deformation of -6.55 mm

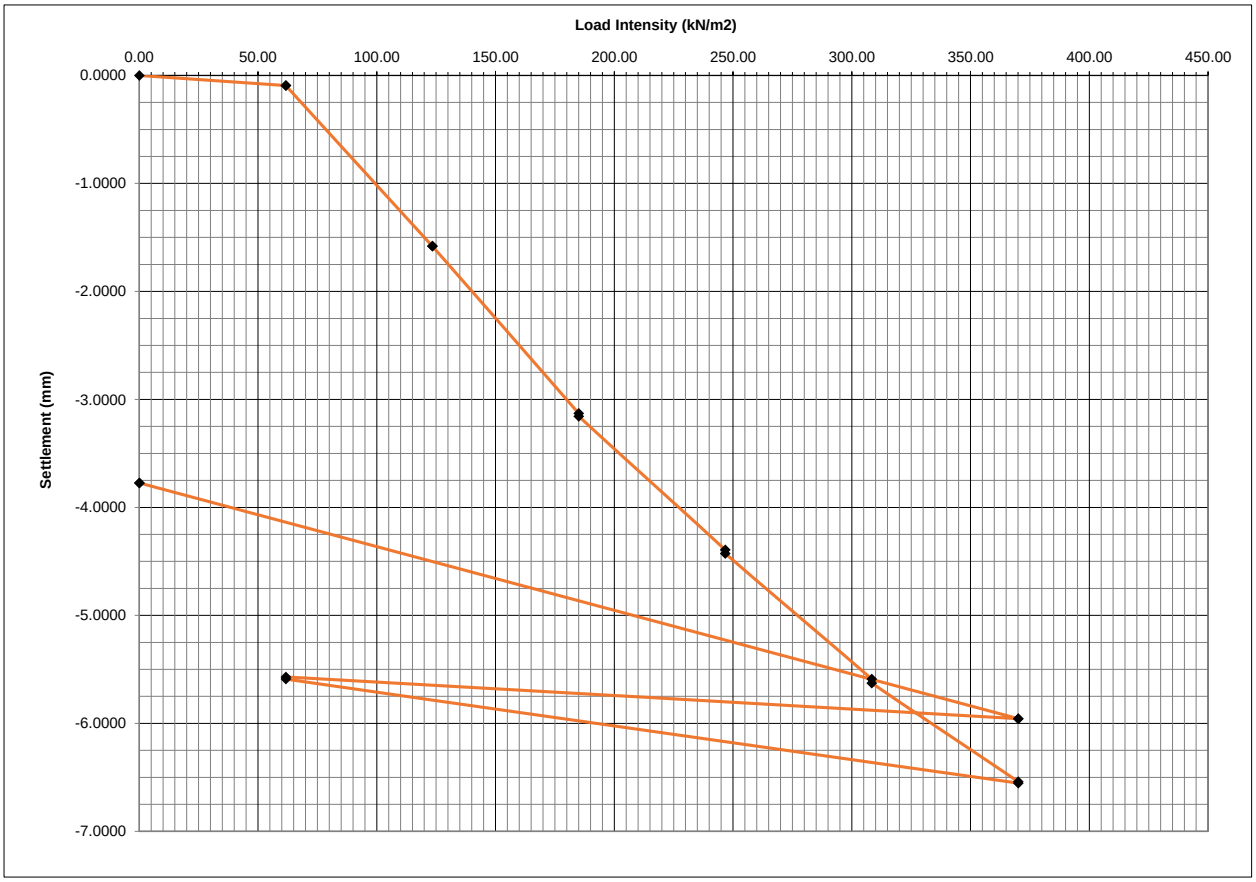
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	11/11/2024	R. Walker	25/11/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 151/152***	
Site Ref:	*15-974*		**Test Date:**	*07/11/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386257*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397027*	
Max Deformation:	*-6.55*	*mm*	**W3W:**	*///update.flat.maker*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 10%

Max Deformation of -6.55 mm

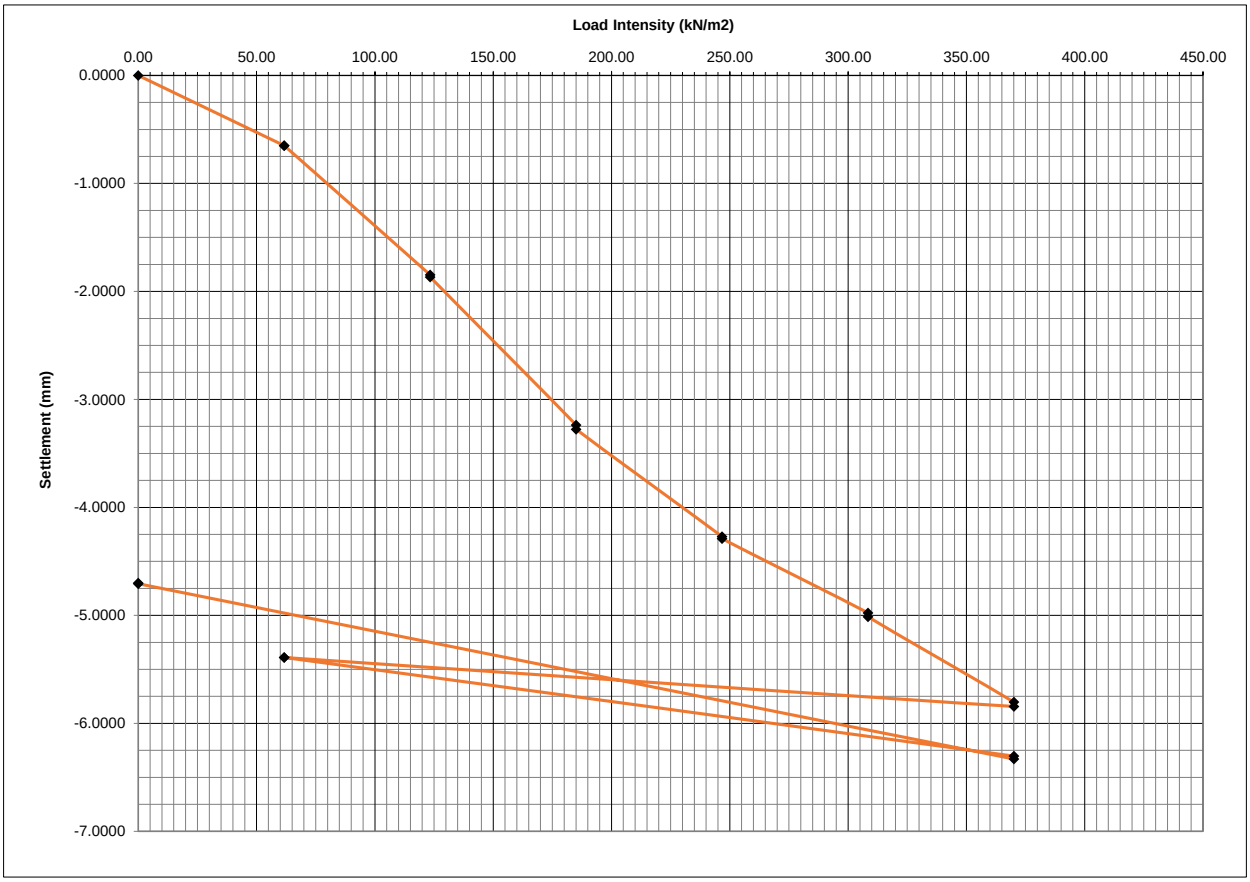
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	11/11/2024	R. Walker	25/11/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Plot 153/154***
Site Ref:	*15-974*	**Test Date:**	*23/10/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL mbgl*
Plate Diameter:	*450 mm*	**Easting:**	*386269*
Max Applied Pressure:	*370.09 kN/m2*	**Northing:**	*397030*
Max Deformation:	*-6.33 mm*	**W3W:**	*///wiser.asks.files*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 8%

Max Deformation of -6.33 mm

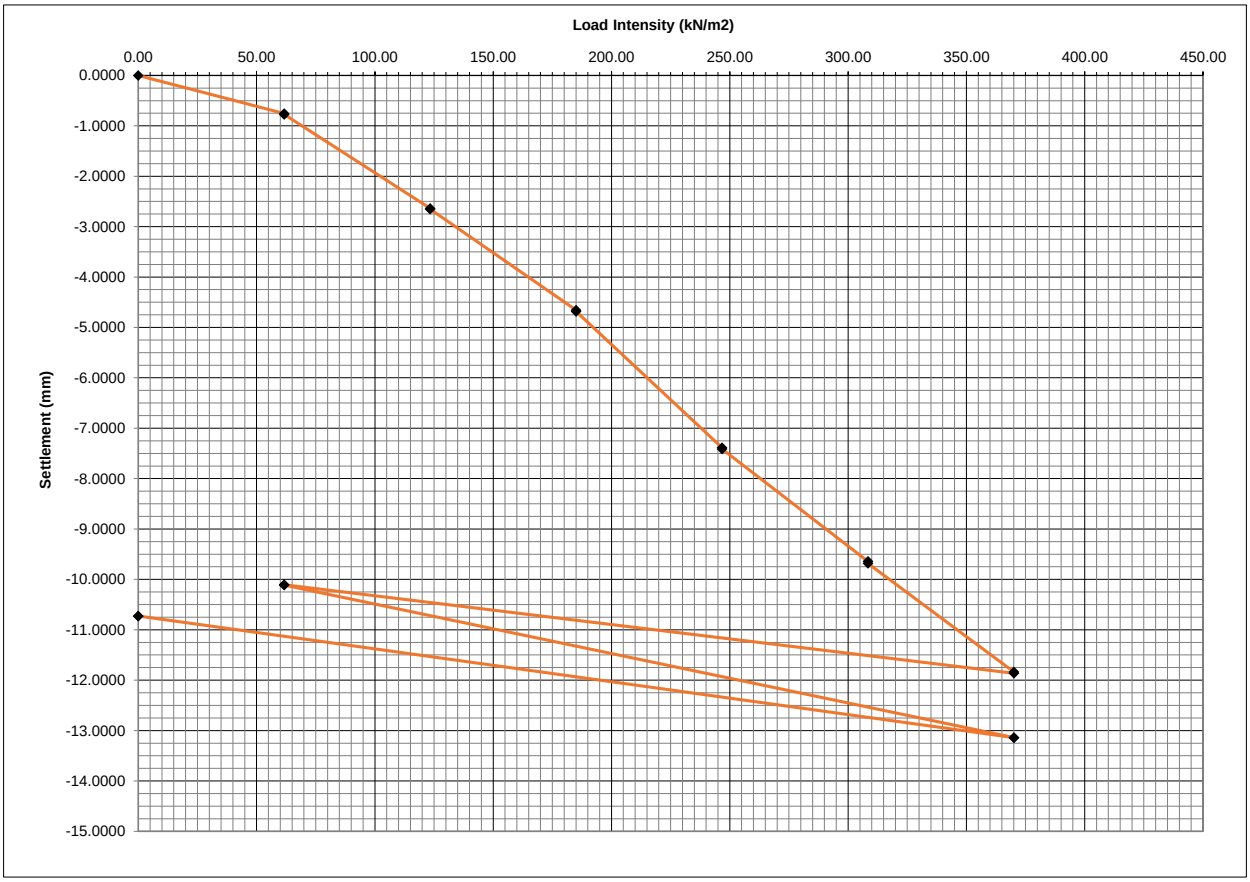
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	11/11/2024	R. Walker	25/11/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 155/156***	
Site Ref:	*15-974*		**Test Date:**	*23/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386281*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*397033*	
Max Deformation:	*-13.14*	*mm*	**W3W:**	*///fleet.took.empire*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 5%

Max Deformation of -13.14 mm

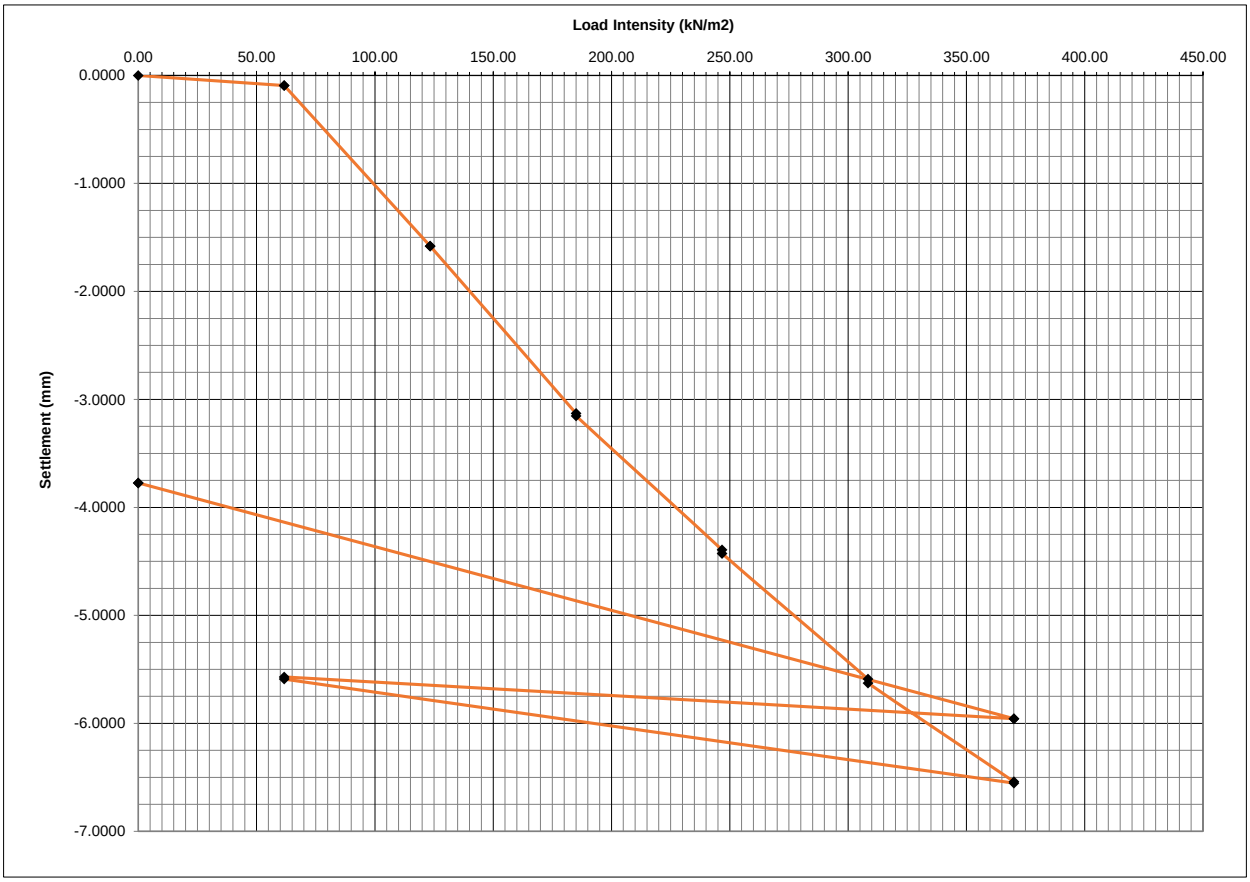
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	11/11/2024	R. Walker	25/11/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Rd2 + 130m***	
Site Ref:	*15-974*		**Test Date:**	*23/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386278*	
Max Applied Pressure:	*370.09*	*kN/m2*	**Northing:**	*396955*	
Max Deformation:	*-6.55*	*mm*	**W3W:**	*///shells.golf.also*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 10%

Max Deformation of -6.55 mm

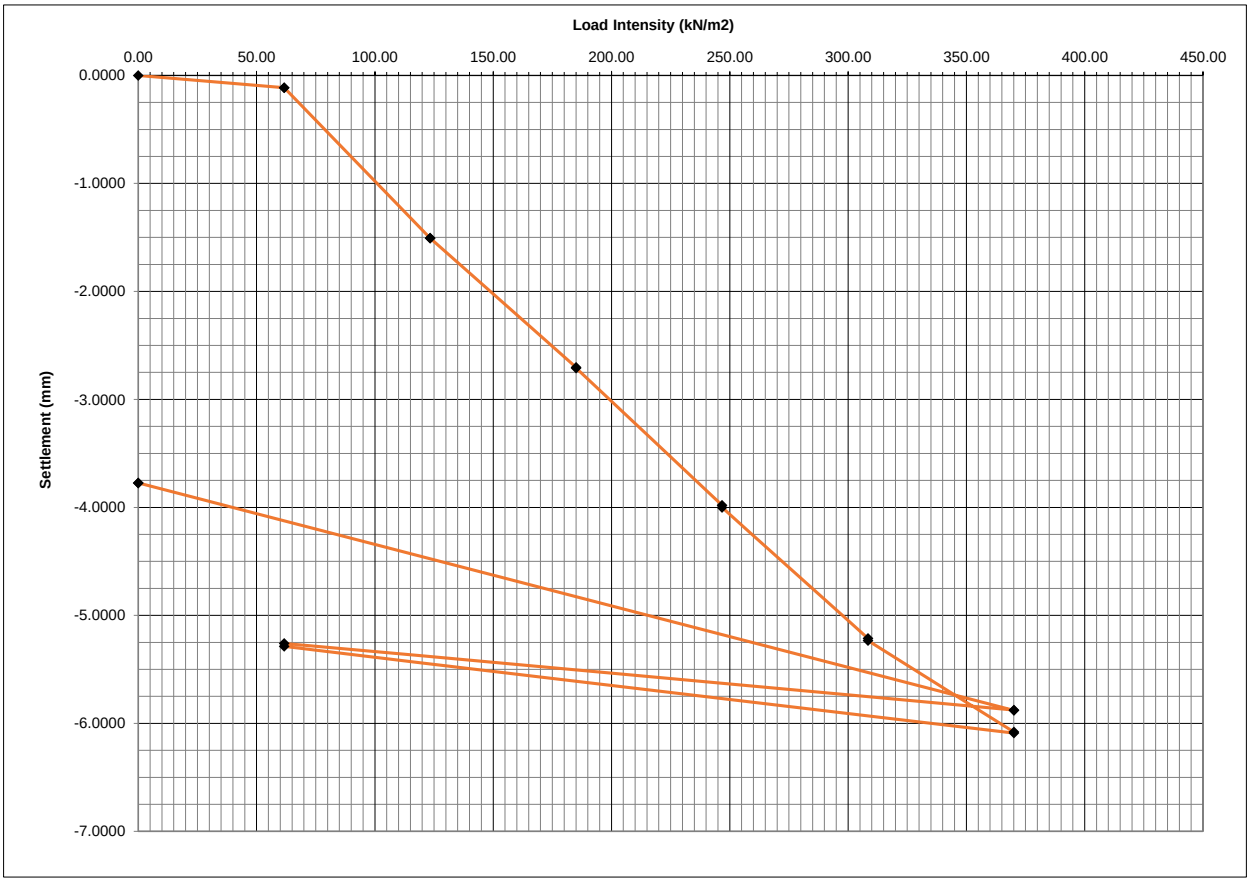
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	11/11/2024	R. Walker	25/11/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Rd2 + 120m***
Site Ref:	*15-974*	**Test Date:**	*23/10/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL mbgl*
Plate Diameter:	*450 mm*	**Easting:**	*386288*
Max Applied Pressure:	*370.09 kN/m2*	**Northing:**	*396962*
Max Deformation:	*-6.09 mm*	**W3W:**	*///lung.dads.improving*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 11%

Max Deformation of -6.09 mm

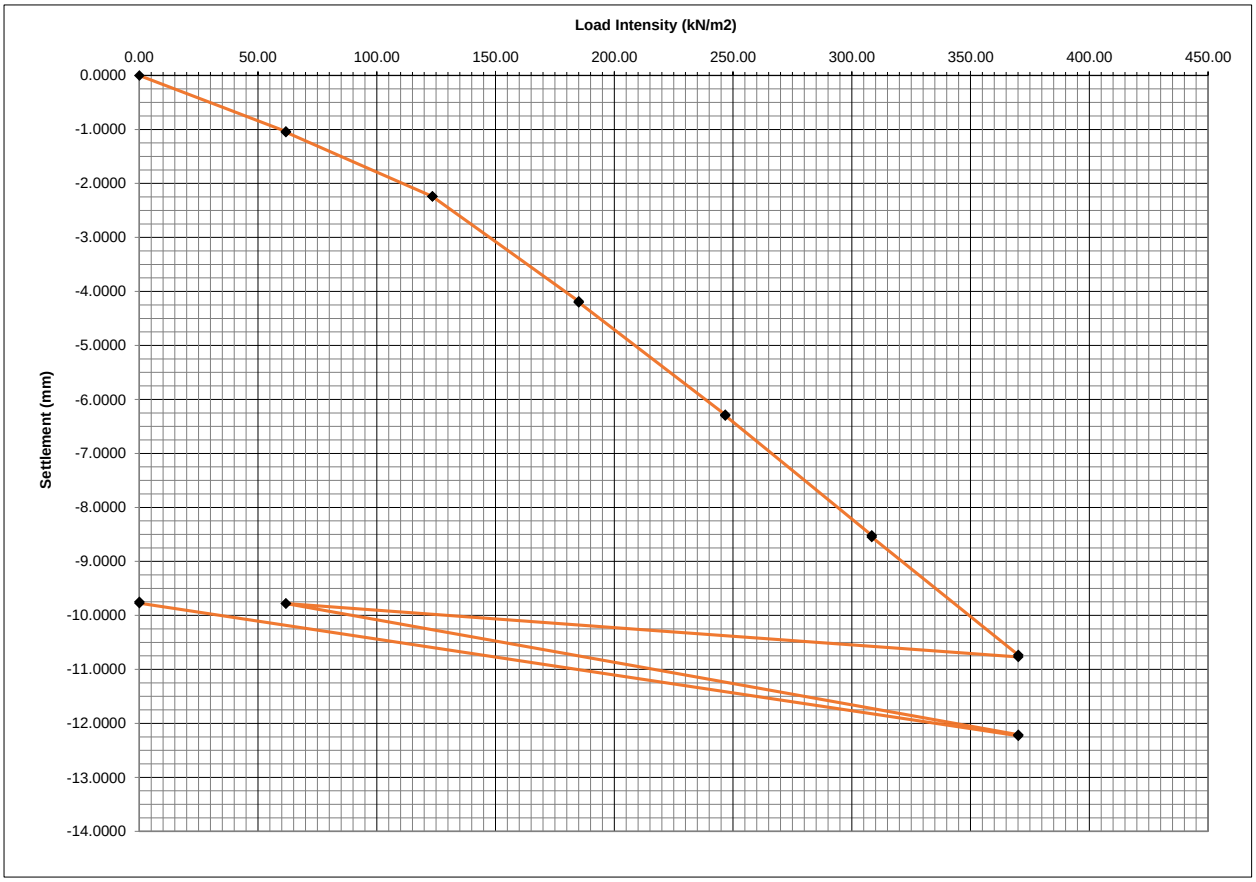
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	11/11/2024	R. Walker	25/11/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*	**Test No.:**	***Rd2 + 110m***
Site Ref:	*15-974*	**Test Date:**	*07/11/2024*
Type of Kentledge:	*16T Excavator*	**Test Depth:**	*GL* *mbgl*
Plate Diameter:	*450* *mm*	**Easting:**	*386297*
Max Applied Pressure:	*370.09* *kN/m2*	**Northing:**	*396970*
Max Deformation:	*-12.23* *mm*	**W3W:**	*///daring.glass.teach*
Strata Description:	*Recycled Aggregate*	**Weather:**	*Dry*

Comments:



Equivalent CBR Value of 5%

Max Deformation of -12.23 mm

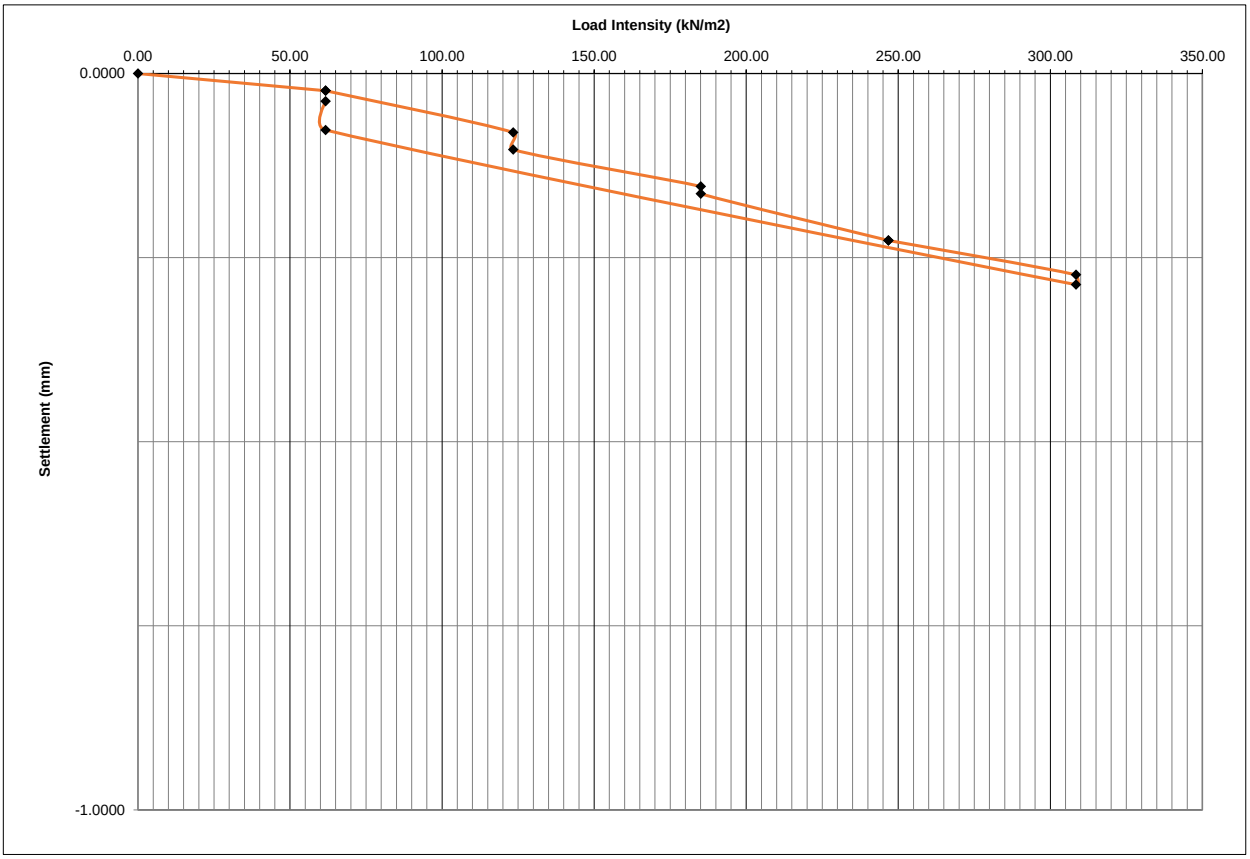
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	11/11/2024	R. Walker	25/11/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Rd2 + 100m***	
Site Ref:	*15-974*		**Test Date:**	*23/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386303*	
Max Applied Pressure:	*308.41*	*kN/m2*	**Northing:**	*396976*	
Max Deformation:	*-0.29*	*mm*	**W3W:**	*'//horn.assume.models*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of >62%

Max Deformation of -0.29 mm

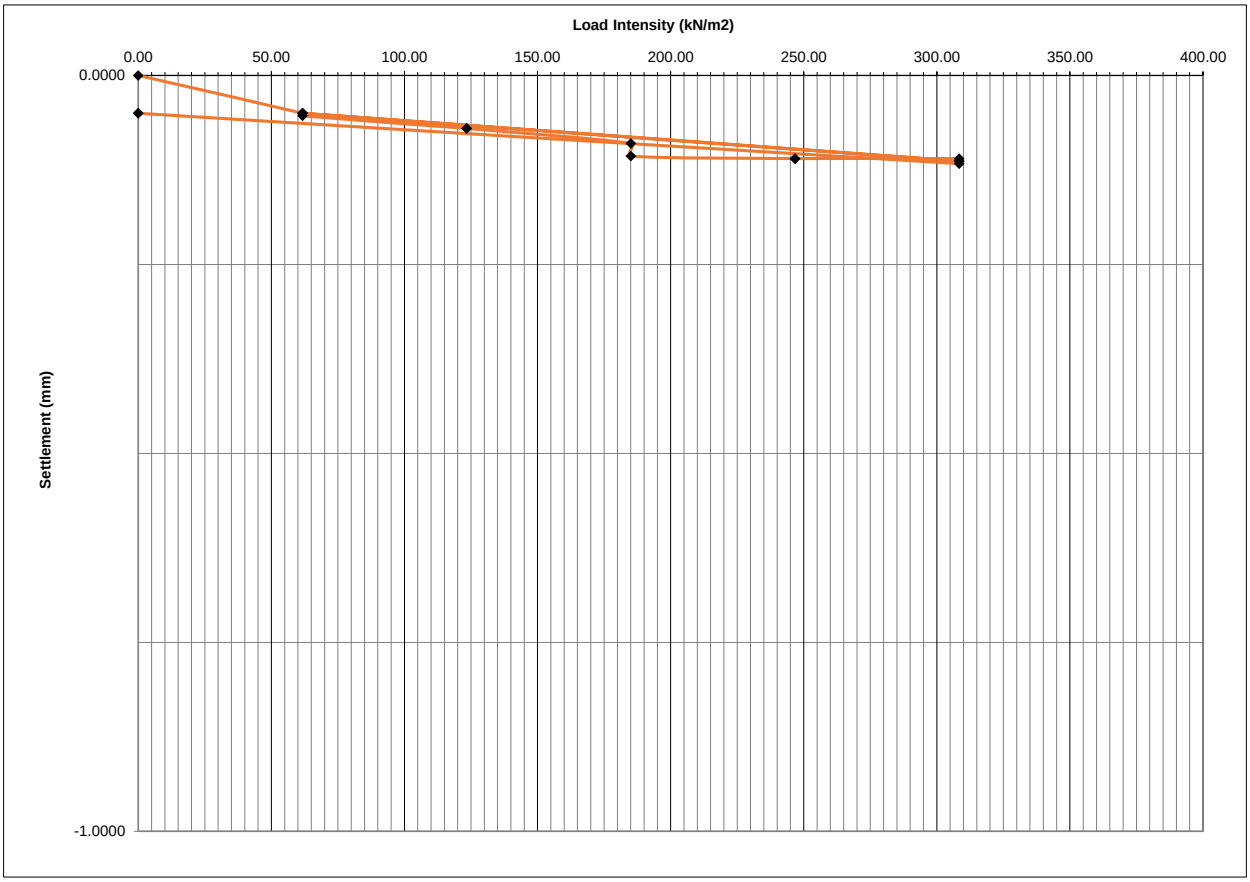
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	11/11/2024	R. Walker	25/11/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Rd2 + 90m***	
Site Ref:	*15-974*		**Test Date:**	*23/10/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386308*	
Max Applied Pressure:	*308.41*	*kN/m2*	**Northing:**	*396981*	
Max Deformation:	*-0.12*	*mm*	**W3W:**	*///union.vocal.oven*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of >62%

Max Deformation of -0.12 mm

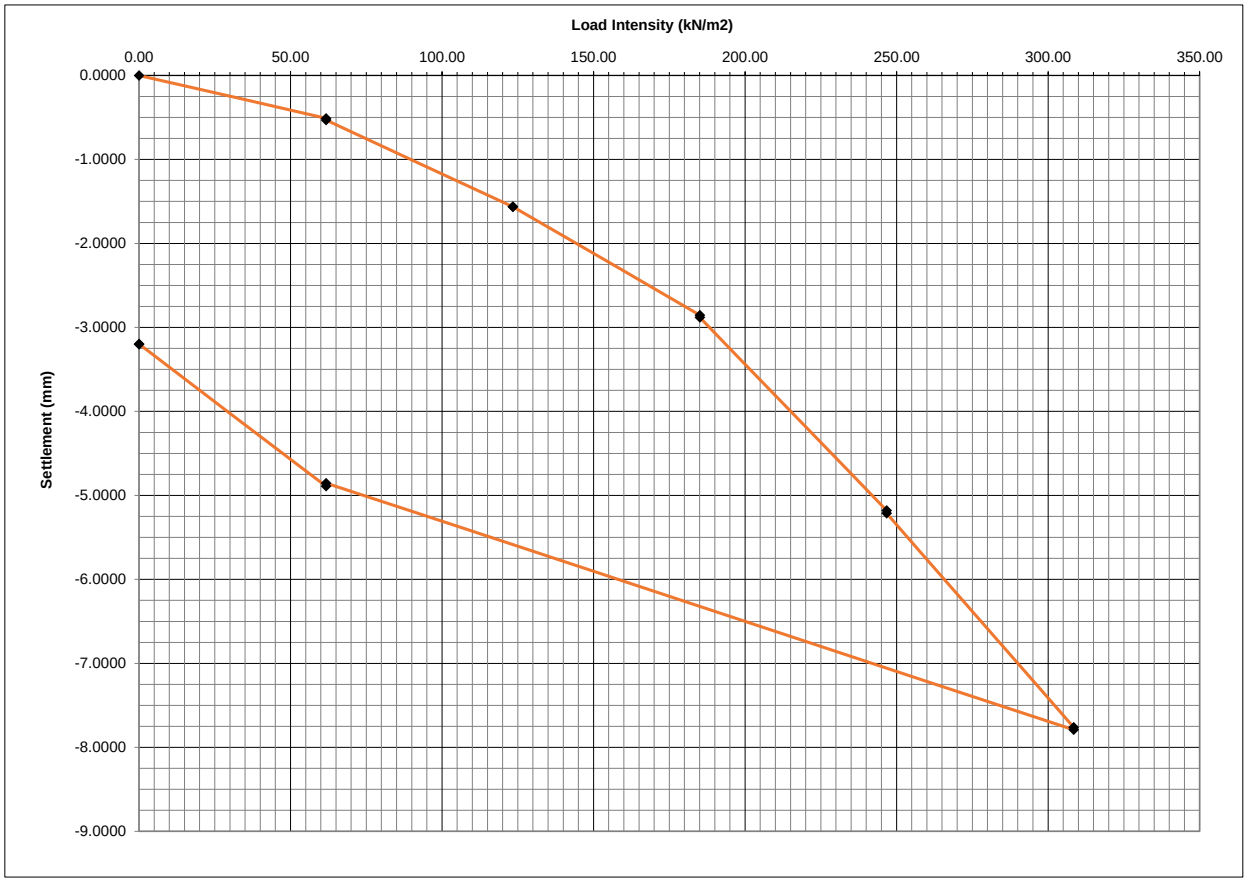
Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	11/11/2024	R. Walker	25/11/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	*Bennett Street*		**Test No.:**	***Plot 29/30***	
Site Ref:	*15-974*		**Test Date:**	*07/11/2024*	
Type of Kentledge:	*16T Excavator*		**Test Depth:**	*GL*	*mbgl*
Plate Diameter:	*450*	*mm*	**Easting:**	*386313*	
Max Applied Pressure:	*308.41*	*kN/m2*	**Northing:**	*396973*	
Max Deformation:	*-7.79*	*mm*	**W3W:**	*desk.income.assist*	
Strata Description:	*Recycled Aggregate*		**Weather:**	*Dry*	

Comments:



Equivalent CBR Value of 9%

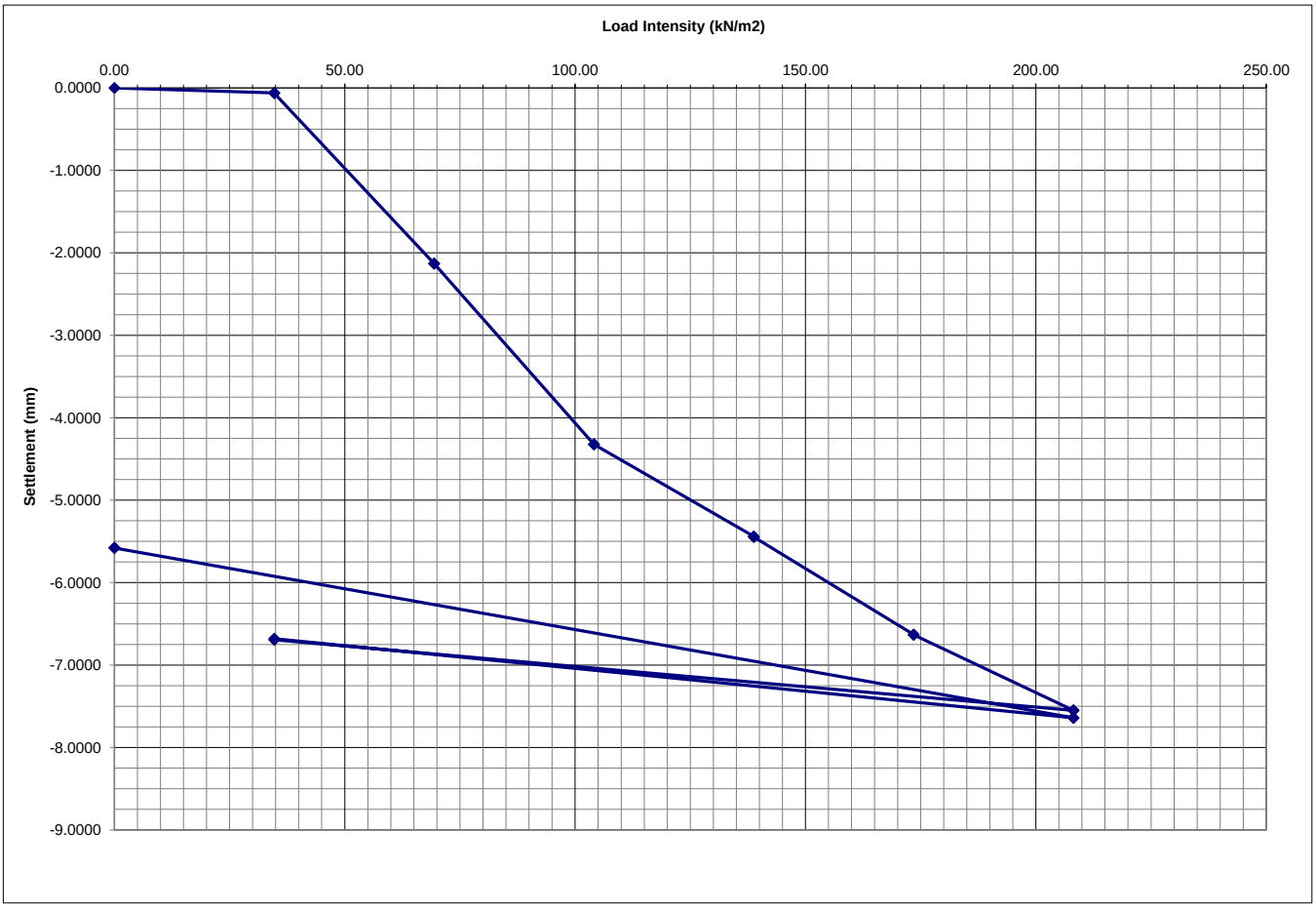
Max Deformation of -7.79 mm

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	M. Dee	11/11/2024	R. Walker	25/11/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Bennett Street**	**Test Date:**	13/11/2023
Site Ref:	15-974	**Type of Kentledge:**	32 Tonne Excavator
Test No.:	CBR101	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	600	**Easting:**	0
Maximum Applied Pressure (kN/m2):	208.17	**Northing:**	0
Maximum Deformation (mm):	-7.64	**Weather:**	Dry
Strata Description:	Piling Mat (6F5)		



Equivalent CBR Value of 5%

Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
B. Whalley	M. Dee	13/11/2023	D. Cox	13/11/2023

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

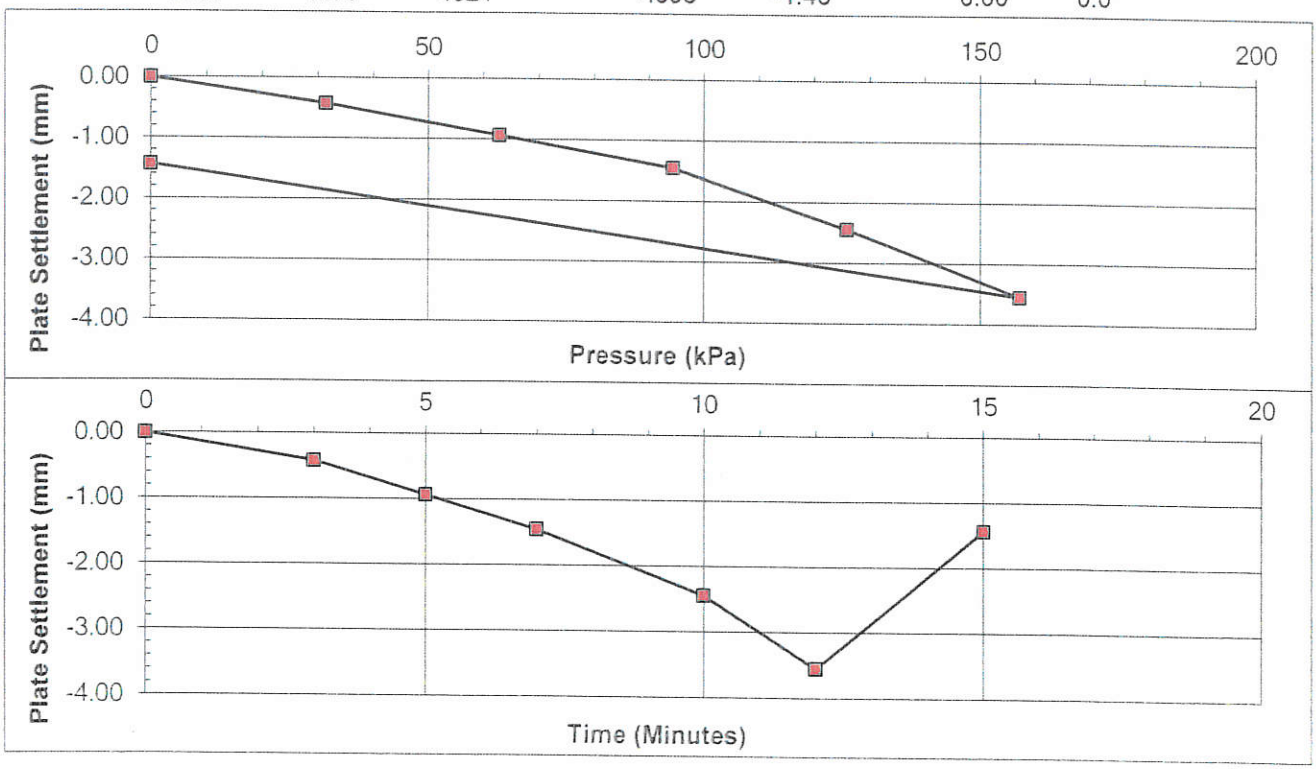
UKAS TESTING 1580

TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST
BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Total Controlled Demolition				
SITE	Kellen Homes Site, Bennett Street, Manchester, M12 5NL				
JOB NUMBER	MRN 24096/4				
TEST LOCATION	Test 01 Road 7.01	LOADING DEVICE	20 Tonne Enerpac Jack		
TEST DATE	16-Feb-24	PLATE SIZE (mm)	450 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4671	4497	4451	4540	0.00	0.00	0.0
4617	4453	4422	4497	-0.42	5.00	31.4
4570	4400	4368	4446	-0.94	10.00	62.9
4526	4340	4318	4395	-1.45	15.00	94.3
4430	4249	4206	4295	-2.45	20.00	125.8
4311	4156	4087	4185	-3.55	25.00	157.2
4489	4379	4321	4396	-1.43	0.00	0.0



Pressure at 1.25 mm deflexion =	82 kPa
Modulus of subgrade reaction (k) =	66 MPa/m
Equivalent 762 mm plate reaction =	41 MPa/m
Equivalent CBR =	6.0 %

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

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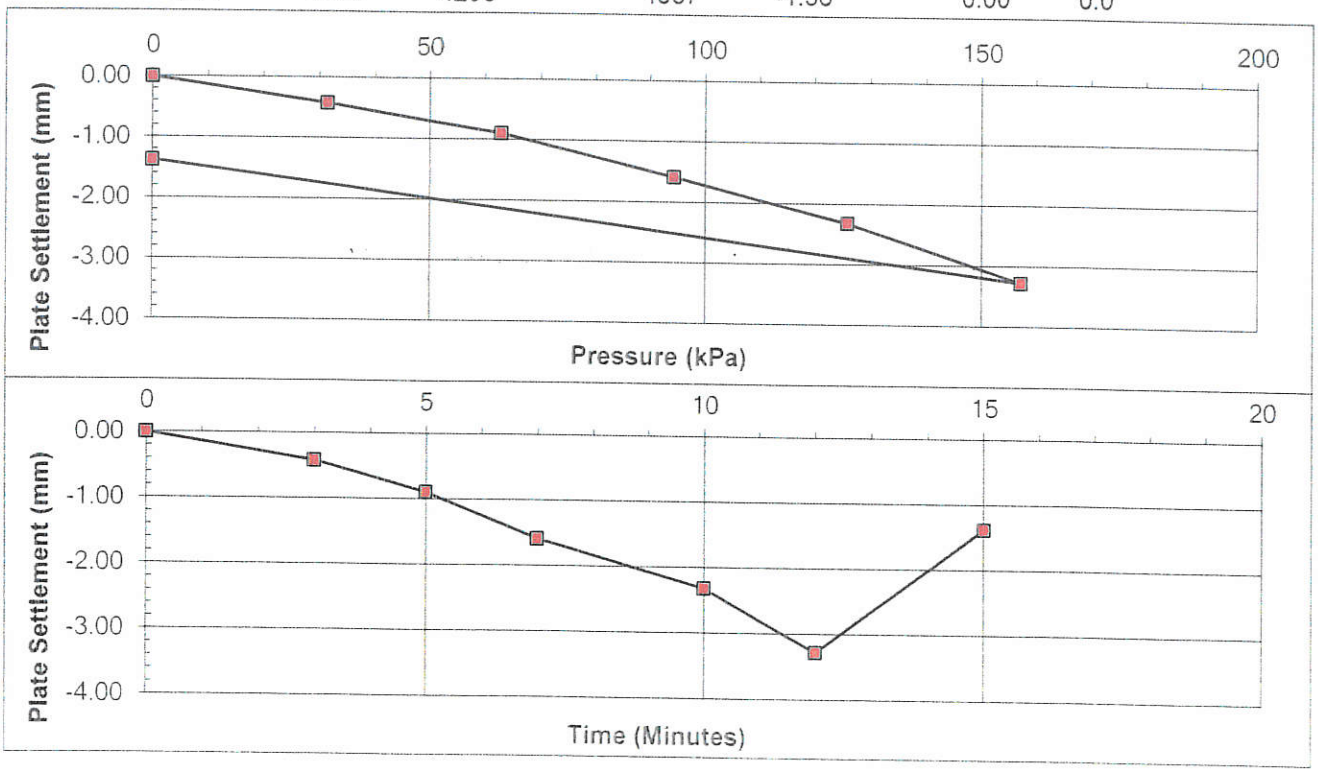
UKAS TESTING 1580

TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST
BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Total Controlled Demolition		
SITE	Kellen Homes Site, Bennett Street, Manchester, M12 5NL		
JOB NUMBER	MRN 24096/4		
TEST LOCATION	Test 02 Road 6.01	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	16-Feb-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4641	4488	4446	4525	0.00	0.00	0.0
4612	4430	4406	4483	-0.42	5.00	31.4
4566	4384	4356	4435	-0.90	10.00	62.9
4510	4311	4277	4366	-1.59	15.00	94.3
4437	4241	4201	4293	-2.32	20.00	125.8
4354	4127	4110	4197	-3.28	25.00	157.2
4517	4346	4298	4387	-1.38	0.00	0.0



Pressure at 1.25 mm deflexion =	79 kPa
Modulus of subgrade reaction (k) =	63 MPa/m
Equivalent 762 mm plate reaction =	39 MPa/m
Equivalent CBR =	5.6 %

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

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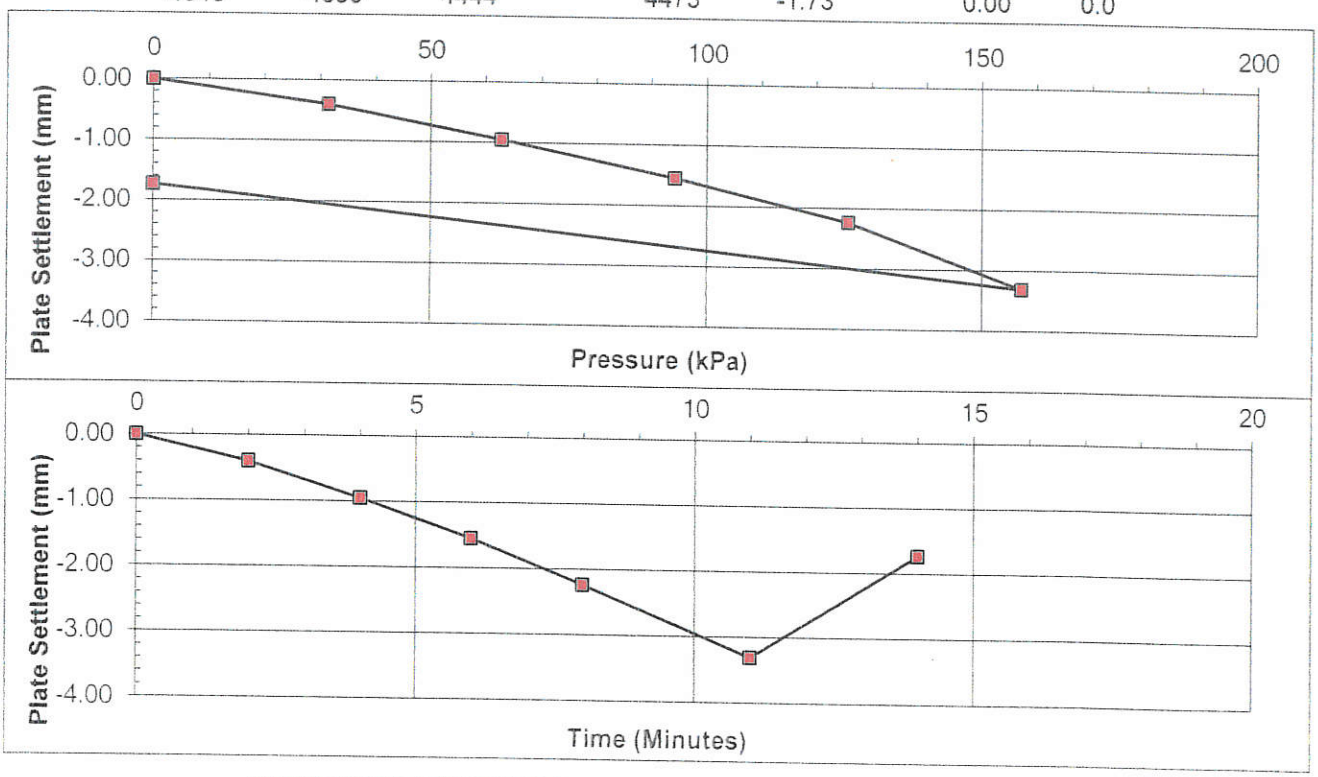
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Total Controlled Demolition				
SITE	Kellen Homes Site, Bennett Street, Manchester, M12 5NL				
JOB NUMBER	MRN 24096/4				
TEST LOCATION	Test 03 Road 6.02	LOADING DEVICE	20 Tonne Enerpac Jack		
TEST DATE	16-Feb-24	PLATE SIZE (mm)	450 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4795	4524	4620	4646	0.00	0.00	0.0
4753	4477	4589	4606	-0.40	5.00	31.4
4702	4422	4530	4551	-0.95	10.00	62.9
4654	4364	4457	4492	-1.55	15.00	94.3
4606	4291	4372	4423	-2.23	20.00	125.8
4501	4156	4289	4315	-3.31	25.00	157.2
4645	4330	4444	4473	-1.73	0.00	0.0



Pressure at 1.25 mm deflexion =	79 kPa
Modulus of subgrade reaction (k) =	63 MPa/m
Equivalent 762 mm plate reaction =	39 MPa/m
Equivalent CBR =	5.6 %

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client Total Controlled Demolition

Address Riverside House
Park Road
Stalybridge
Cheshire
SK15 1TA

Contract Kellen Homes Site
Bennett Street, Manchester, M12 5NL

Job Number MRN 24096/1
Date of Issue 07 February 2024

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

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

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

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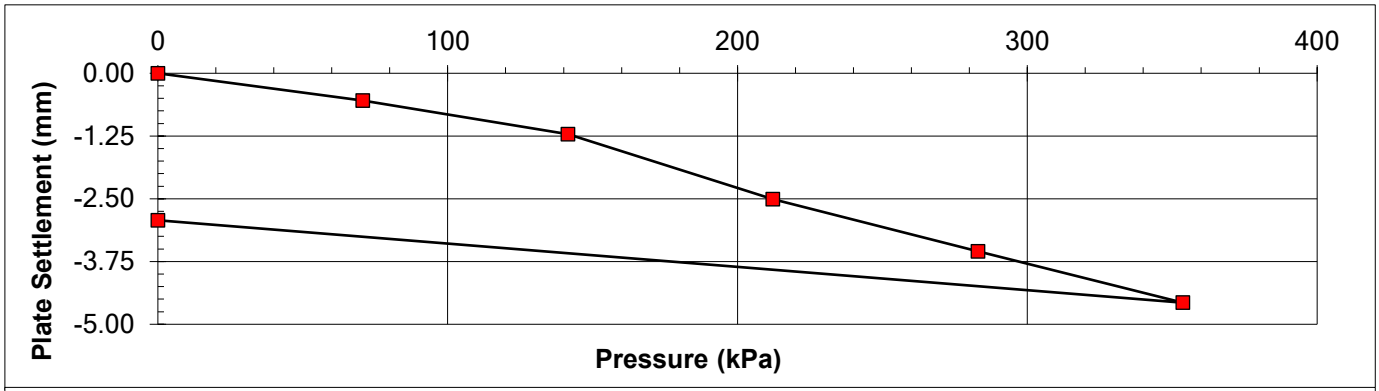
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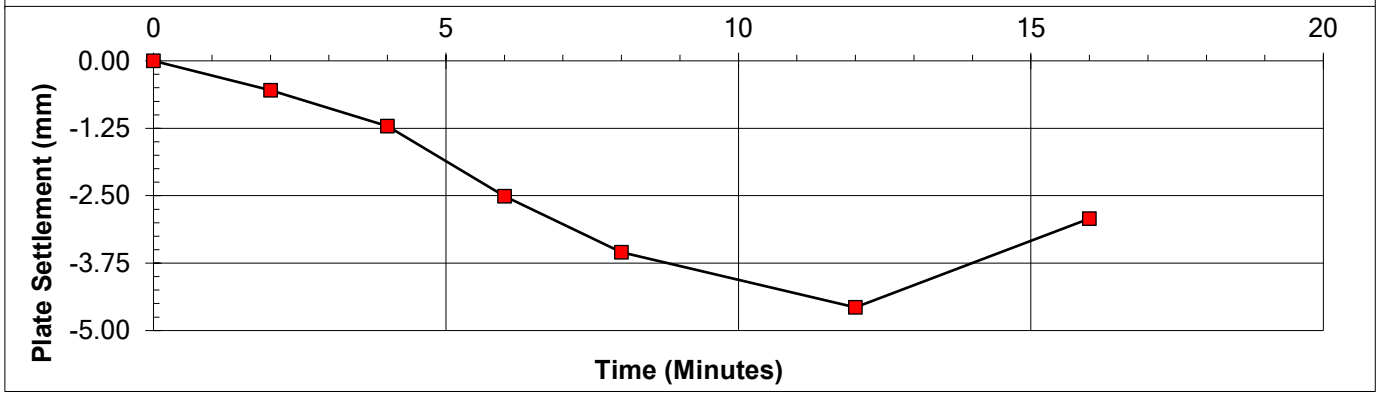
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST
BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Total Controlled Demolition		
SITE	Kellen Homes Site, Bennett Street, Manchester, M12 5NL		
JOB NUMBER	MRN 24096/1		
TEST LOCATION	Plot 136	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	06-Feb-24	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3135	4238	3473	3615	0.00	0.00	0.0
3081	4181	3421	3561	-0.54	5.00	70.7
2991	4071	3421	3494	-1.21	10.00	141.5
2871	4011	3212	3365	-2.51	15.00	212.2
2761	3911	3110	3261	-3.55	20.00	282.9
2643	3801	3031	3158	-4.57	25.00	353.7
2811	3965	3192	3323	-2.93	0.00	0.0





Pressure at 1.25 mm deflexion =	144	kPa
Modulus of subgrade reaction (k) =	115	MPa/m
Equivalent 762 mm plate reaction =	51	MPa/m
Equivalent CBR =	8.7	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 07-Feb-24

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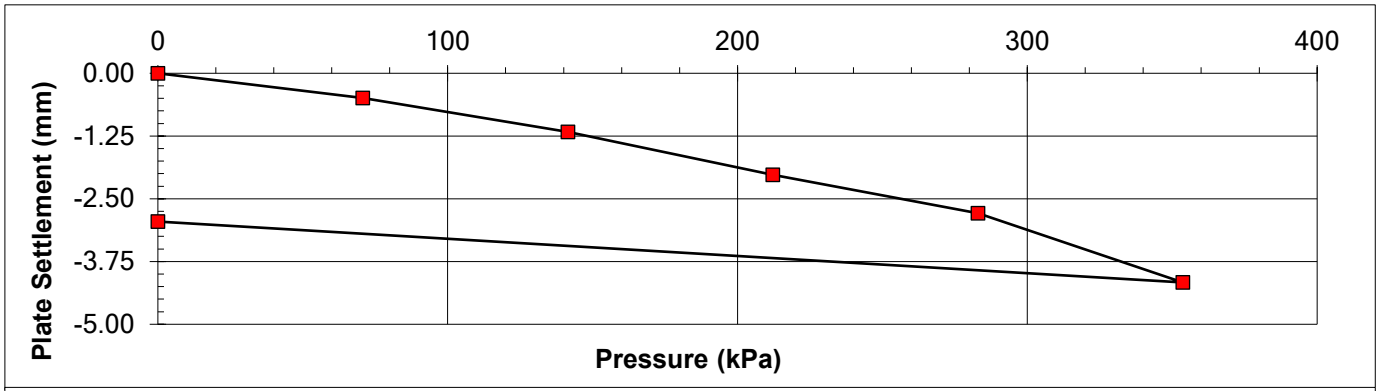
UKAS TESTING 1580

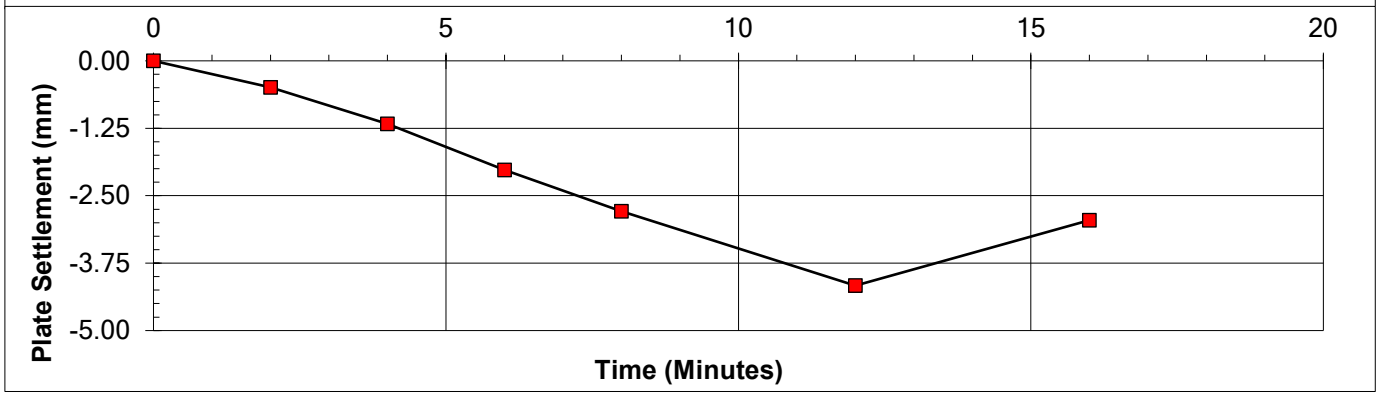
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST
BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Total Controlled Demolition		
SITE	Kellen Homes Site, Bennett Street, Manchester, M12 5NL		
JOB NUMBER	MRN 24096/1		
TEST LOCATION	Plot 137	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	06-Feb-24	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
3138	2245	2538	2640	0.00	0.00	0.0
3081	2192	2501	2591	-0.49	5.00	70.7
3018	2131	2421	2523	-1.17	10.00	141.5
2931	2042	2341	2438	-2.02	15.00	212.2
2842	1961	2281	2361	-2.79	20.00	282.9
2712	1821	2138	2224	-4.17	25.00	353.7
2892	1871	2272	2345	-2.95	0.00	0.0





Pressure at 1.25 mm deflexion =	148	kPa
Modulus of subgrade reaction (k) =	118	MPa/m
Equivalent 762 mm plate reaction =	52	MPa/m
Equivalent CBR =	9.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 07-Feb-24

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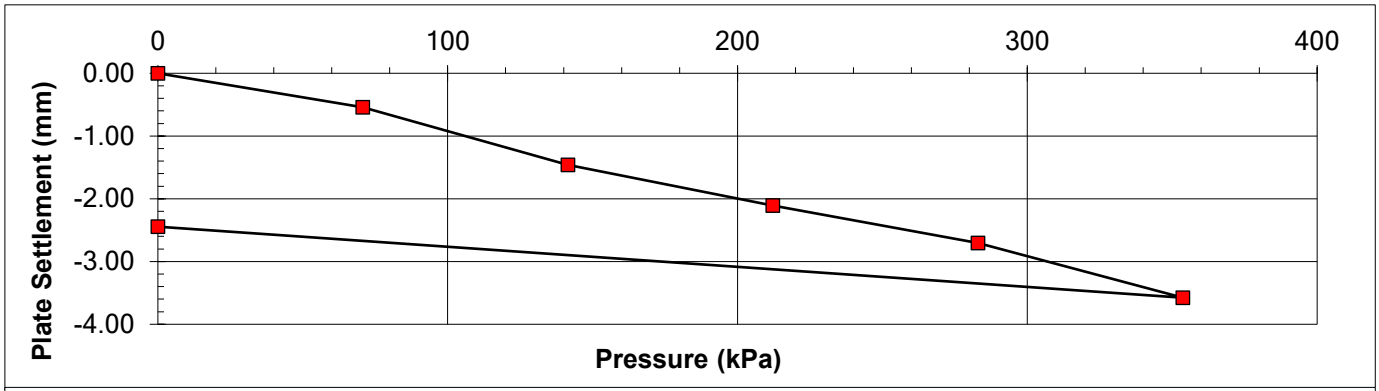
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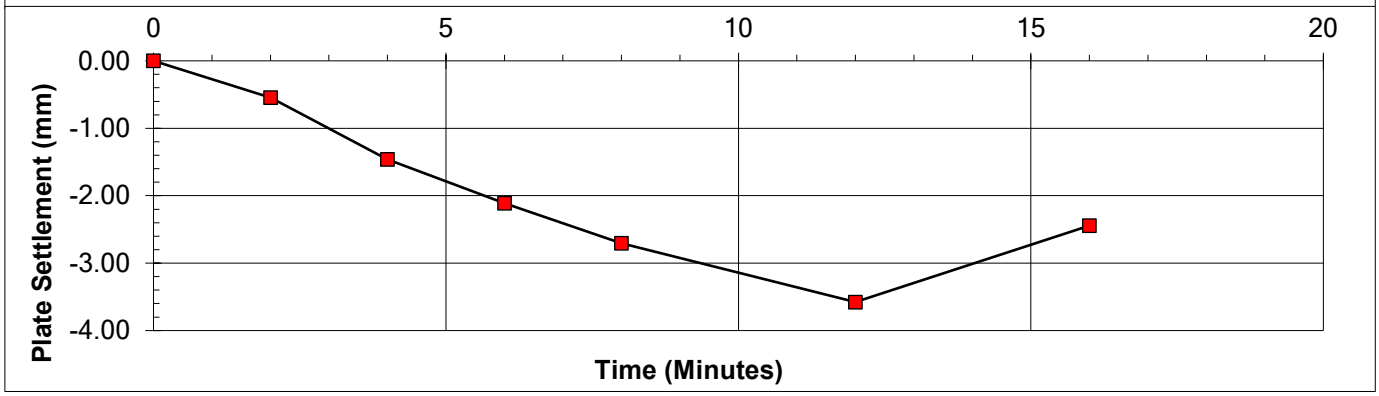
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST
BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Total Controlled Demolition		
SITE	Kellen Homes Site, Bennett Street, Manchester, M12 5NL		
JOB NUMBER	MRN 24096/1		
TEST LOCATION	Plot 138	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	06-Feb-24	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
2243	2636	3527	2802	0.00	0.00	0.0
2192	2583	3468	2748	-0.54	5.00	70.7
2095	2481	3392	2656	-1.46	10.00	141.5
2061	2401	3311	2591	-2.11	15.00	212.2
2001	2372	3221	2531	-2.71	20.00	282.9
1921	2261	3151	2444	-3.58	25.00	353.7
2012	2365	3295	2557	-2.45	0.00	0.0





Pressure at 1.25 mm deflexion =	125	kPa
Modulus of subgrade reaction (k) =	100	MPa/m
Equivalent 762 mm plate reaction =	44	MPa/m
Equivalent CBR =	6.9	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 07-Feb-24

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client Total Controlled Demolition

Address Riverside House
Park Road
Stalybridge
Cheshire
SK15 1TA

Contract Kellen Homes Site
Bennett Street, Manchester, M12 5NL

Job Number MRN 24096/4
Date of Issue 28 February 2024

Approved Signatories

S J Hutchings, O P Davies

Notes

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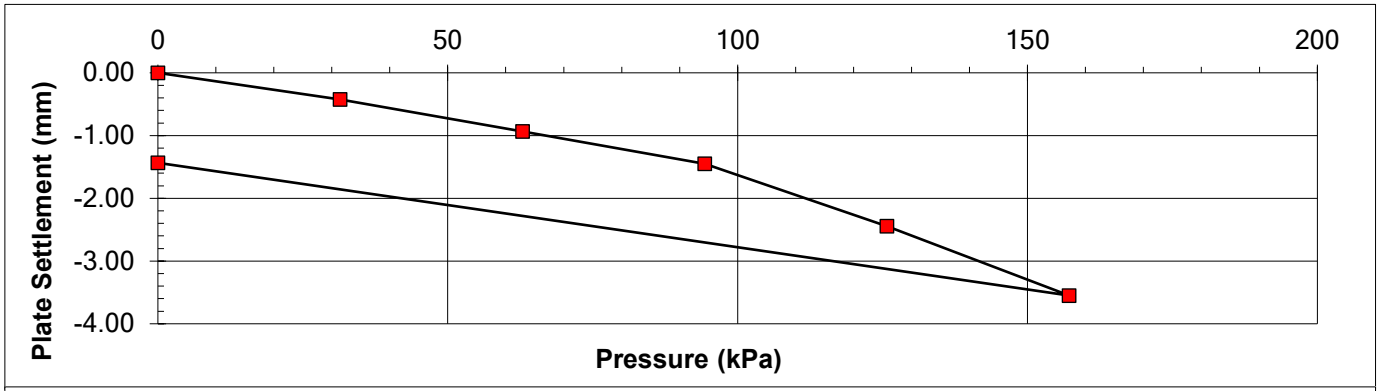
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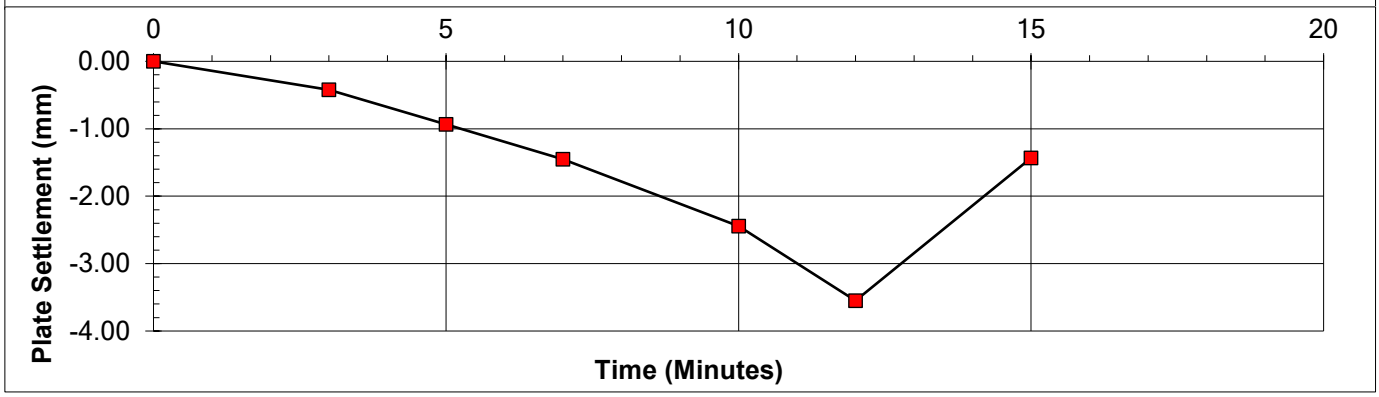
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Total Controlled Demolition		
SITE	Kellen Homes Site, Bennett Street, Manchester, M12 5NL		
JOB NUMBER	MRN 24096/4		
TEST LOCATION	Test 01 Plot 123-124	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Feb-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4671	4497	4451	4540	0.00	0.00	0.0
4617	4453	4422	4497	-0.42	5.00	31.4
4570	4400	4368	4446	-0.94	10.00	62.9
4526	4340	4318	4395	-1.45	15.00	94.3
4430	4249	4206	4295	-2.45	20.00	125.8
4311	4156	4087	4185	-3.55	25.00	157.2
4489	4379	4321	4396	-1.43	0.00	0.0





Pressure at 1.25 mm deflexion =	82	kPa
Modulus of subgrade reaction (k) =	66	MPa/m
Equivalent 762 mm plate reaction =	41	MPa/m
Equivalent CBR =	6.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 28-Feb-24

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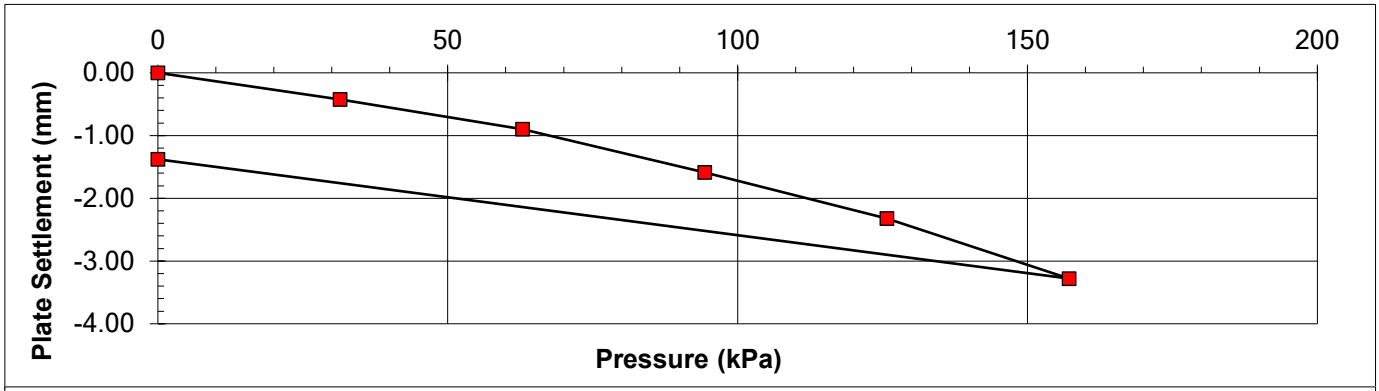
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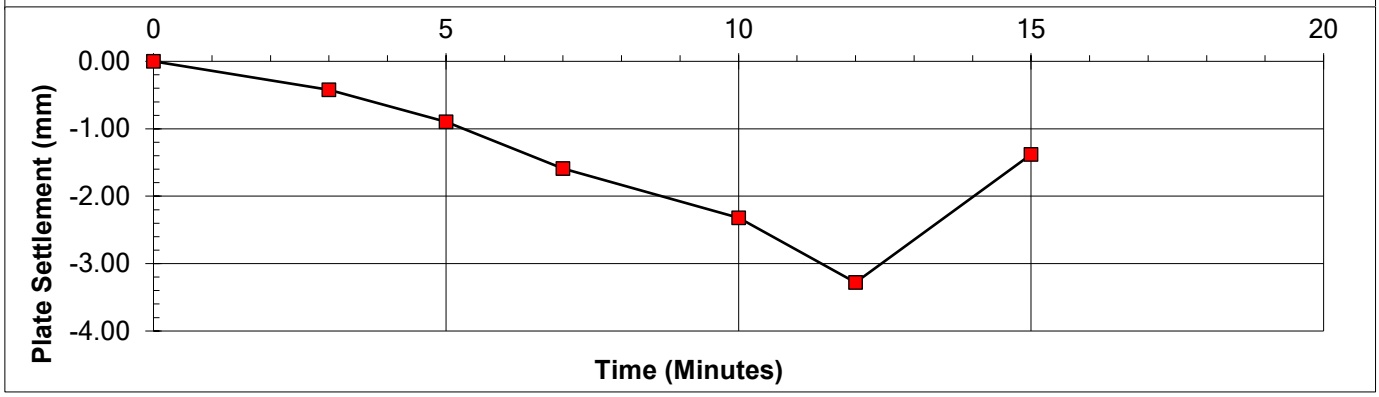
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Total Controlled Demolition		
SITE	Kellen Homes Site, Bennett Street, Manchester, M12 5NL		
JOB NUMBER	MRN 24096/4		
TEST LOCATION	Test 02 Plot 126	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Feb-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4641	4488	4446	4525	0.00	0.00	0.0
4612	4430	4406	4483	-0.42	5.00	31.4
4566	4384	4356	4435	-0.90	10.00	62.9
4510	4311	4277	4366	-1.59	15.00	94.3
4437	4241	4201	4293	-2.32	20.00	125.8
4354	4127	4110	4197	-3.28	25.00	157.2
4517	4346	4298	4387	-1.38	0.00	0.0





Pressure at 1.25 mm deflexion =	79	kPa
Modulus of subgrade reaction (k) =	63	MPa/m
Equivalent 762 mm plate reaction =	39	MPa/m
Equivalent CBR =	5.6	%

REMARKS

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DATE 28-Feb-24

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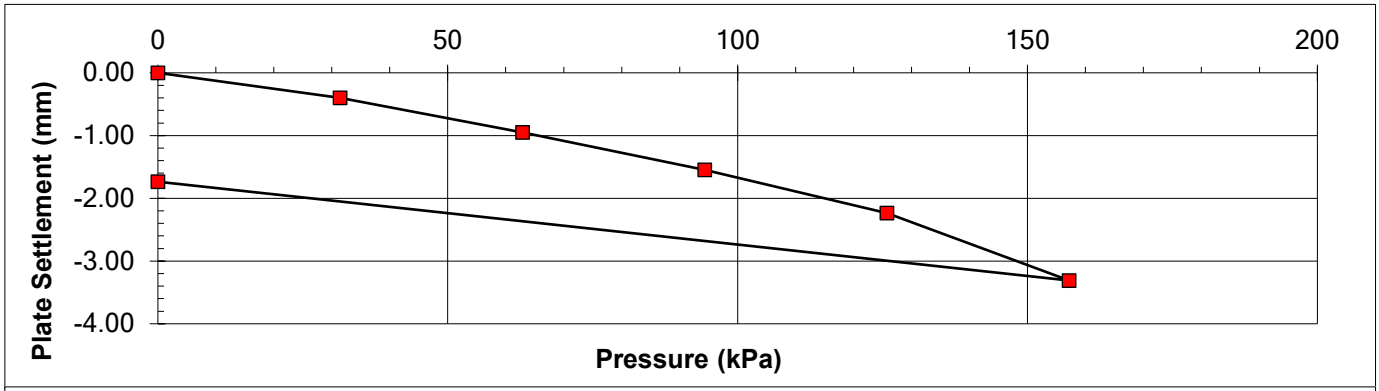
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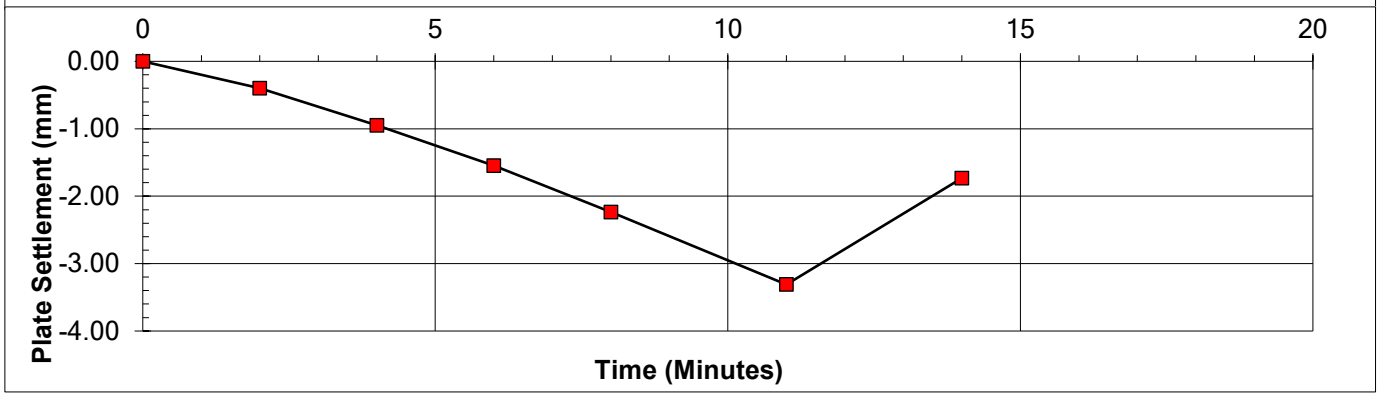
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Total Controlled Demolition		
SITE	Kellen Homes Site, Bennett Street, Manchester, M12 5NL		
JOB NUMBER	MRN 24096/4		
TEST LOCATION	Test 03 Plot 130-131	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Feb-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4795	4524	4620	4646	0.00	0.00	0.0
4753	4477	4589	4606	-0.40	5.00	31.4
4702	4422	4530	4551	-0.95	10.00	62.9
4654	4364	4457	4492	-1.55	15.00	94.3
4606	4291	4372	4423	-2.23	20.00	125.8
4501	4156	4289	4315	-3.31	25.00	157.2
4645	4330	4444	4473	-1.73	0.00	0.0





Pressure at 1.25 mm deflexion =	79	kPa
Modulus of subgrade reaction (k) =	63	MPa/m
Equivalent 762 mm plate reaction =	39	MPa/m
Equivalent CBR =	5.6	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 28-Feb-24

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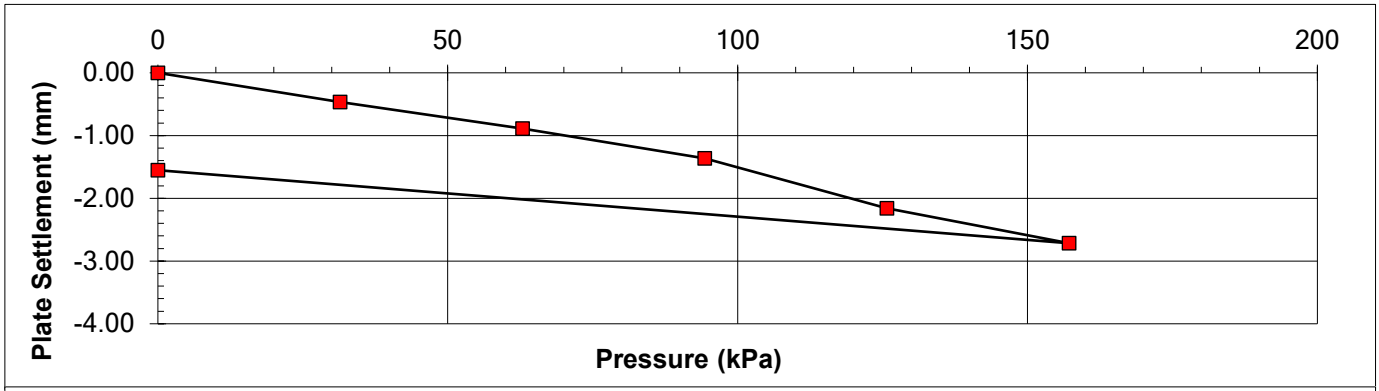
TEST CERTIFICATE

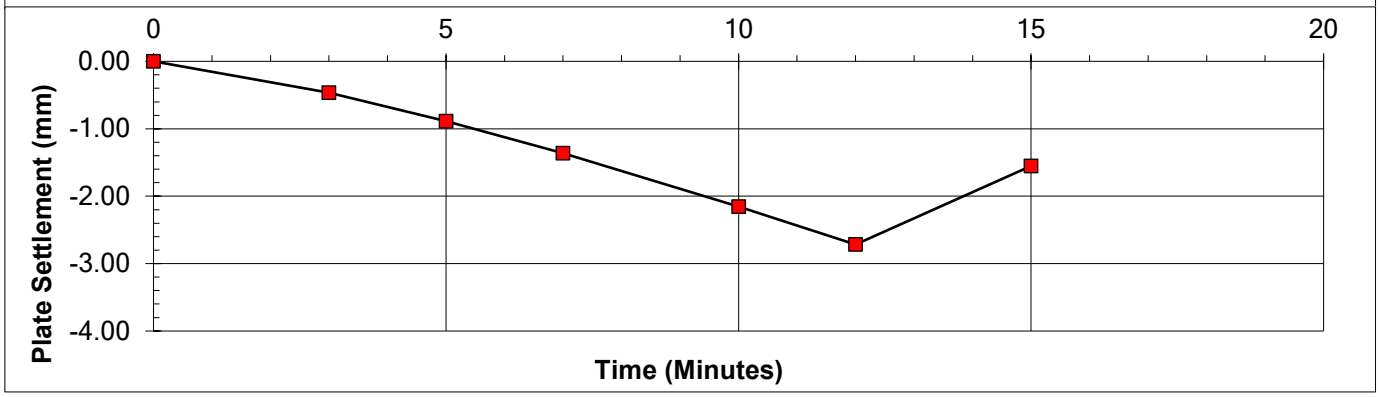
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	Total Controlled Demolition		
SITE	Kellen Homes Site, Bennett Street, Manchester, M12 5NL		
JOB NUMBER	MRN 24096/4		
TEST LOCATION	Test 04 Plot 132-133	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Feb-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4756	4643	4596	4665	0.00	0.00	0.0
4722	4588	4546	4619	-0.46	5.00	31.4
4677	4545	4507	4576	-0.89	10.00	62.9
4635	4496	4455	4529	-1.36	15.00	94.3
4573	4406	4369	4449	-2.16	20.00	125.8
4531	4345	4304	4393	-2.72	25.00	157.2
4618	4463	4449	4510	-1.55	0.00	0.0





Pressure at 1.25 mm deflexion =	87	kPa
Modulus of subgrade reaction (k) =	69	MPa/m
Equivalent 762 mm plate reaction =	43	MPa/m
Equivalent CBR =	6.6	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 28-Feb-24

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF IN-SITU BULK DENSITY AND IN-SITU MOISTURE DENSITY
BY THE NUCLEAR METHOD
BS 1377-9: Clause 2.5: 1990

CLIENT	Total Controlled Demolition
SITE	MRN 24096/4

DATE	27-Feb-24	**JOB NUMBER**	MRN 24096/4
MATERIAL	General Fill		
NDG MODEL	Troxler 3440	**SERIAL NUMBER**	22848
MODE OF OPERATION	Direct Transmission	**MEASUREMENT APPLICATION**	Compliance tests for compacted material

Test No.	Test Chainage / Location	Test Depth (mm)	Wet Density (Mg/m3)	Dry Density (Mg/m3)	Moisture Content (%)	Percentage Compaction (%)	Air Voids (%)
1	Plot 115/116	250	2.05	1.68	22.3	96.3	N/A
2	Plot 99/100	250	2.08	1.68	23	96.8	N/A
3	Plot 98/97	250	1.86	1.38	35	79.6	N/A

Maximum Dry Density (Mg/m3)	1.74	(Advised by client)
Particle Density (Mg/m3)	N/A	(Not Advised)
Results corrected for NDG calibration/correlation to site materials	Yes	

REMARKS/ABNORMALITIES

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 28-Feb-24

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Bennett Street

Job Number MRN 4588/87
Date of Issue 14 August 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

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ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

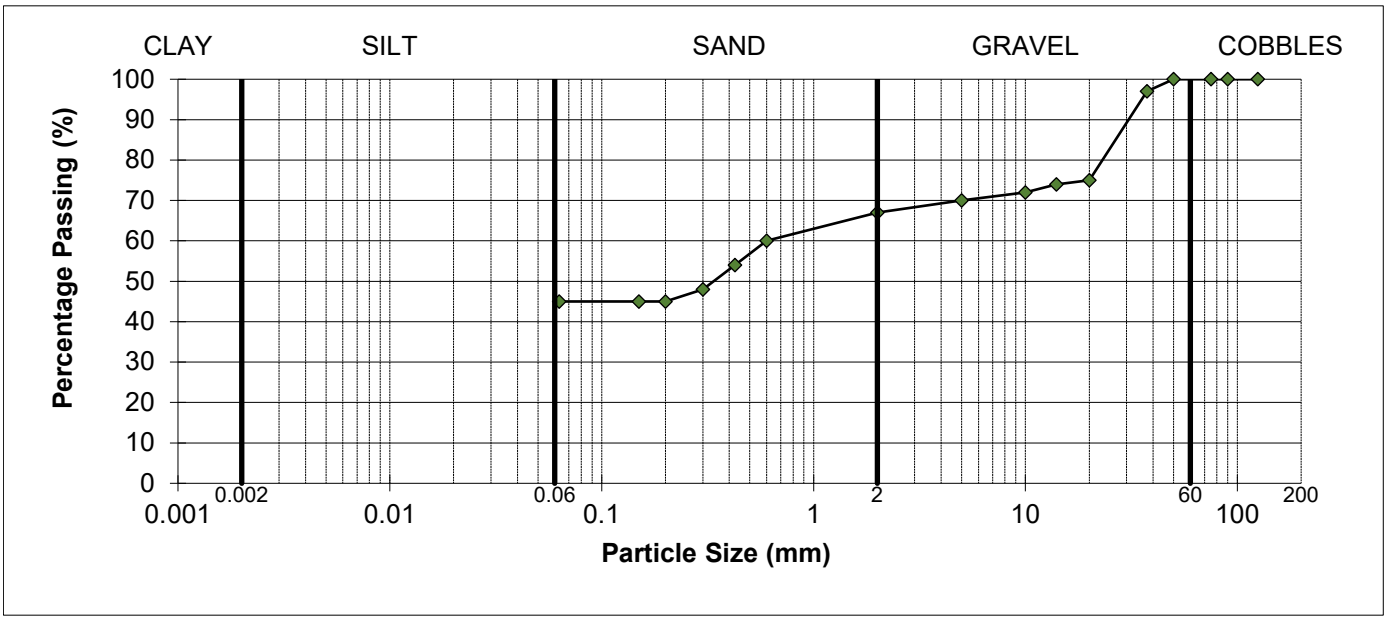
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 4588/87

SAMPLE LABEL	SW-MG-001	DATE SAMPLED	06-Jul-23
LAB SAMPLE No	128399	DATE RECEIVED	12-Jul-23
DATE TESTED	17-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	70	
90	100		2	67	15-80
75	100		0.6	60	
50	100		0.425	54	
37.5	97		0.3	48	
20	75		0.2	45	
14	74		0.15	45	
10	72		0.063	45	15-80



REMARKS
As received water content = 25.5%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Aug-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

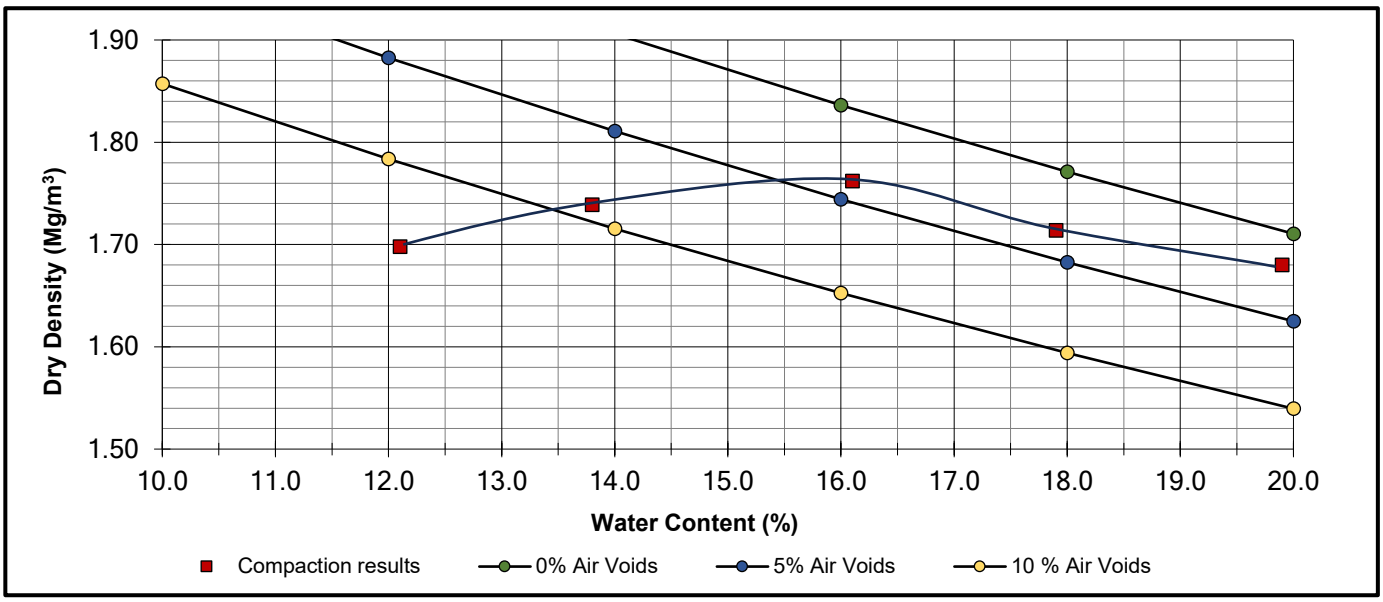
CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 4588/87

SAMPLE LABEL	SW-MG-001	DATE SAMPLED	06-Jul-23
SAMPLE NUMBER	128399	DATE RECEIVED	12-Jul-23
DATE TESTED	17-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	3 %	GRADING ZONE	Zone 5
RETAINED 20mm	25 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	12.1	1.698
2	13.8	1.739
3	16.1	1.762
4	17.9	1.714
5	19.9	1.680



OPTIMUM WATER CONTENT	**16**	(%)
MAXIMUM DRY DENSITY	**1.76**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 14-Aug-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

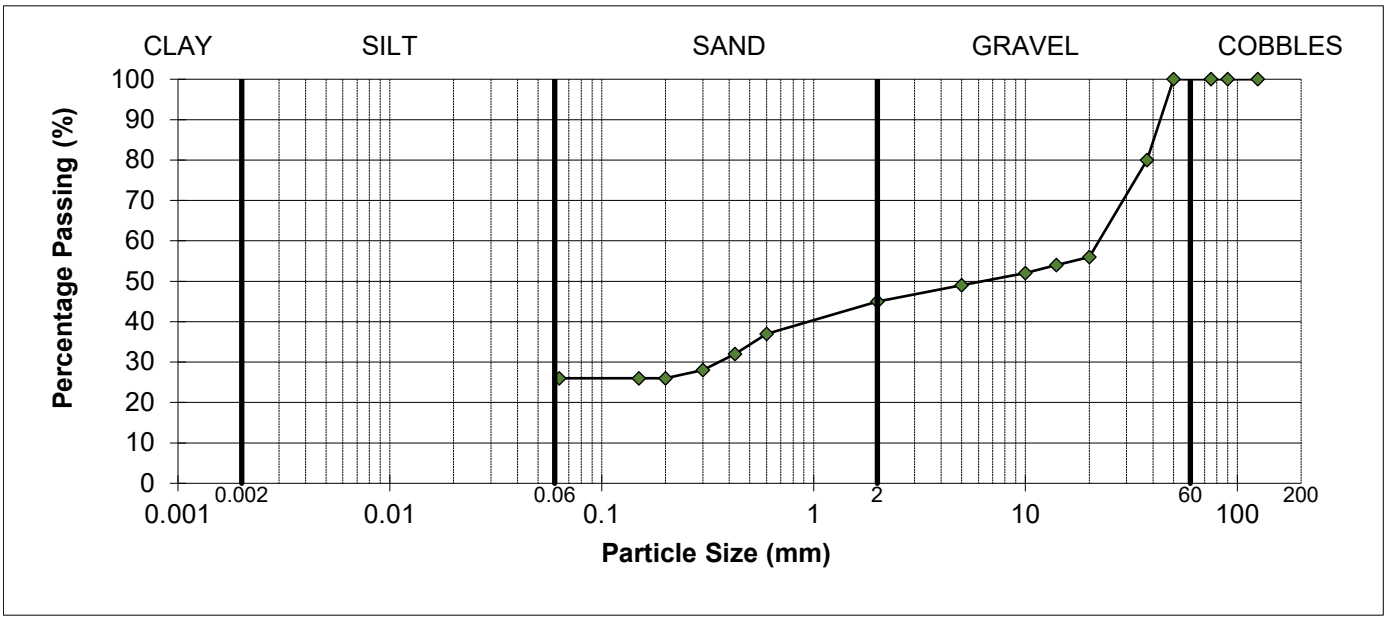
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 4588/87

SAMPLE LABEL	SW-MG-002	DATE SAMPLED	06-Jul-23
LAB SAMPLE No	128400	DATE RECEIVED	12-Jul-23
DATE TESTED	17-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	49	
90	100		2	45	15-80
75	100		0.6	37	
50	100		0.425	32	
37.5	80		0.3	28	
20	56		0.2	26	
14	54		0.15	26	
10	52		0.063	26	15-80



REMARKS
As received water content = 21.3%
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Aug-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

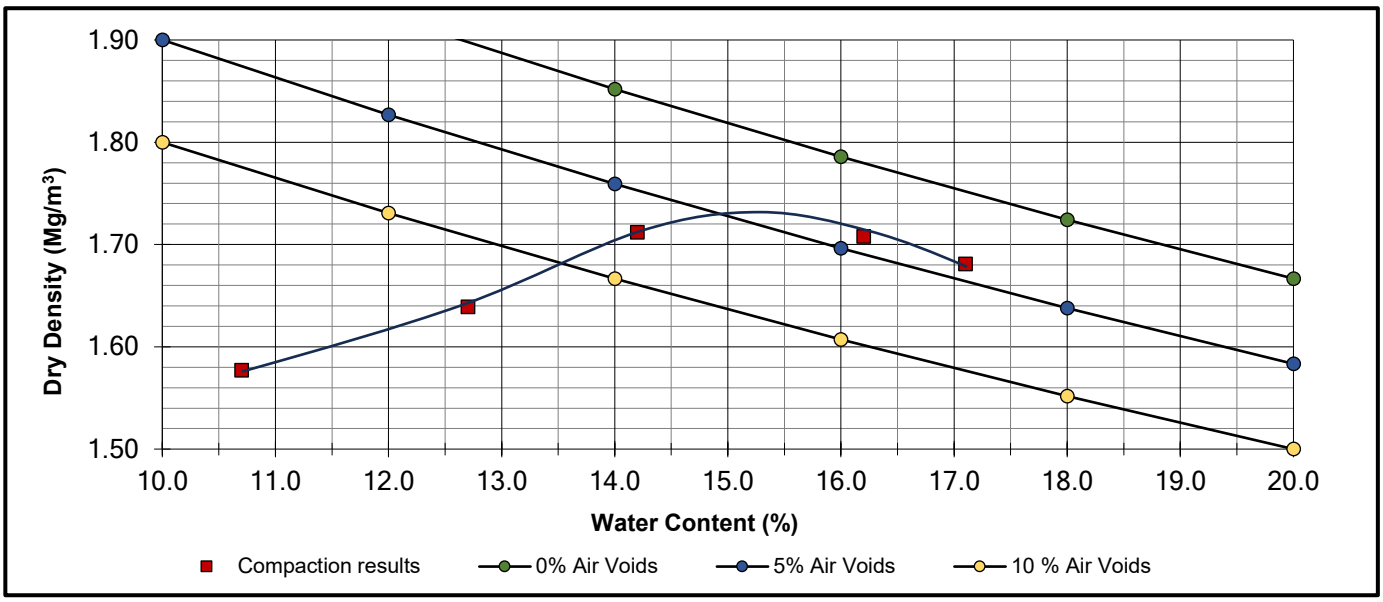
CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 4588/87

SAMPLE LABEL	SW-MG-002	DATE SAMPLED	06-Jul-23
SAMPLE NUMBER	128400	DATE RECEIVED	12-Jul-23
DATE TESTED	17-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	20 %	GRADING ZONE	Zone X
RETAINED 20mm	44 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	10.7	1.577
2	12.7	1.639
3	14.2	1.712
4	16.2	1.708
5	17.1	1.681



OPTIMUM WATER CONTENT	**15**	(%)
MAXIMUM DRY DENSITY	**1.73**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 14-Aug-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Bennett Street

Job Number MRN 4588/90
Date of Issue 14 August 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

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ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

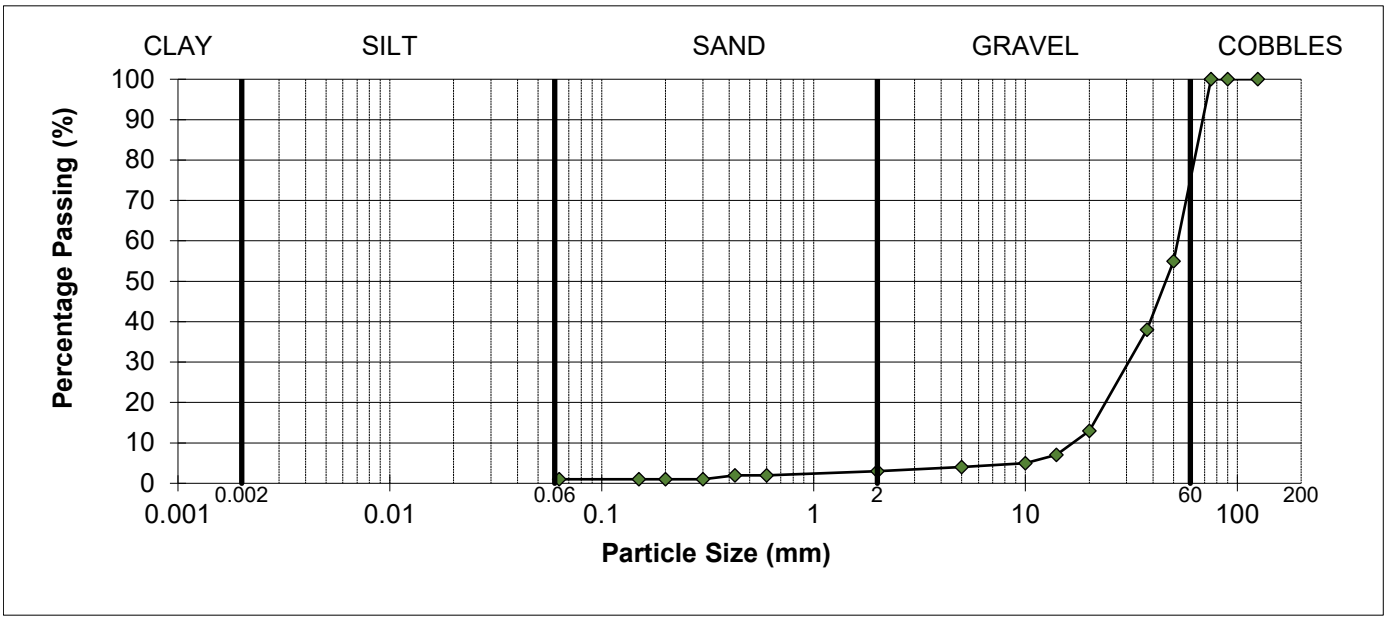
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 4588/90

SAMPLE LABEL	SW-CRUSH	DATE SAMPLED	13-Jul-23
LAB SAMPLE No	128880	DATE RECEIVED	24-Jul-23
DATE TESTED	24-Jul-23	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	4	10-45
90	100	80-100	2	3	
75	100	65-100	0.6	2	0-25
50	55		0.425	2	
37.5	38	45-100	0.3	1	
20	13		0.2	1	
14	7		0.15	1	
10	5	15-60	0.063	1	0-12



REMARKS

Sample fails to comply with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Aug-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Bennett Street

Job Number MRN 4588/91
Date of Issue 15 August 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

Murray Rix is the trading name of Murray Rix (Northern) Limited. Registered in England 2878361

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

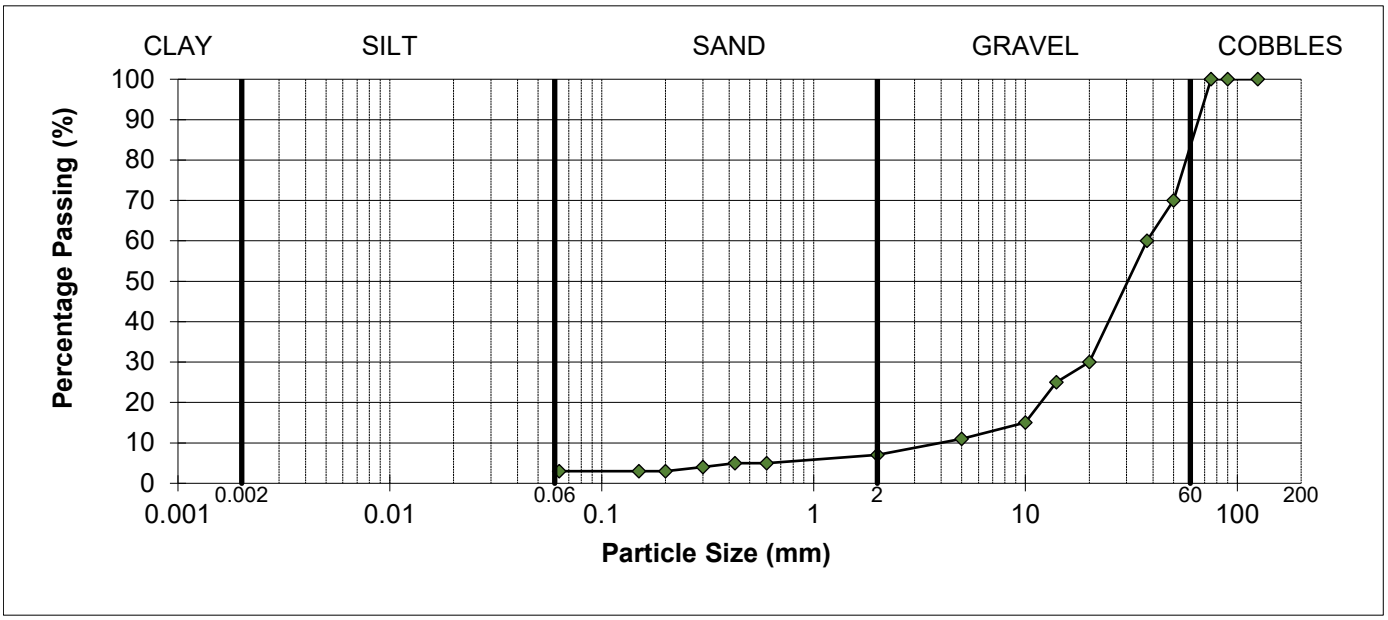
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 4588/91

SAMPLE LABEL	CRUSH-002	DATE SAMPLED	24-Jul-23
LAB SAMPLE No	129044	DATE RECEIVED	27-Jul-23
DATE TESTED	01-Aug-23	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	11	10-45
90	100	80-100	2	7	
75	100	65-100	0.6	5	0-25
50	70		0.425	5	
37.5	60	45-100	0.3	4	
20	30		0.2	3	
14	25		0.15	3	
10	15	15-60	0.063	3	0-12



REMARKS

Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 15-Aug-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Bennett Street

Job Number MRN 4588/97
Date of Issue 31 August 2023

Approved Signatories

S J Hutchings, O P Davies

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Also at: London: 020 8523 1999

UKAS TESTING 1580

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M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

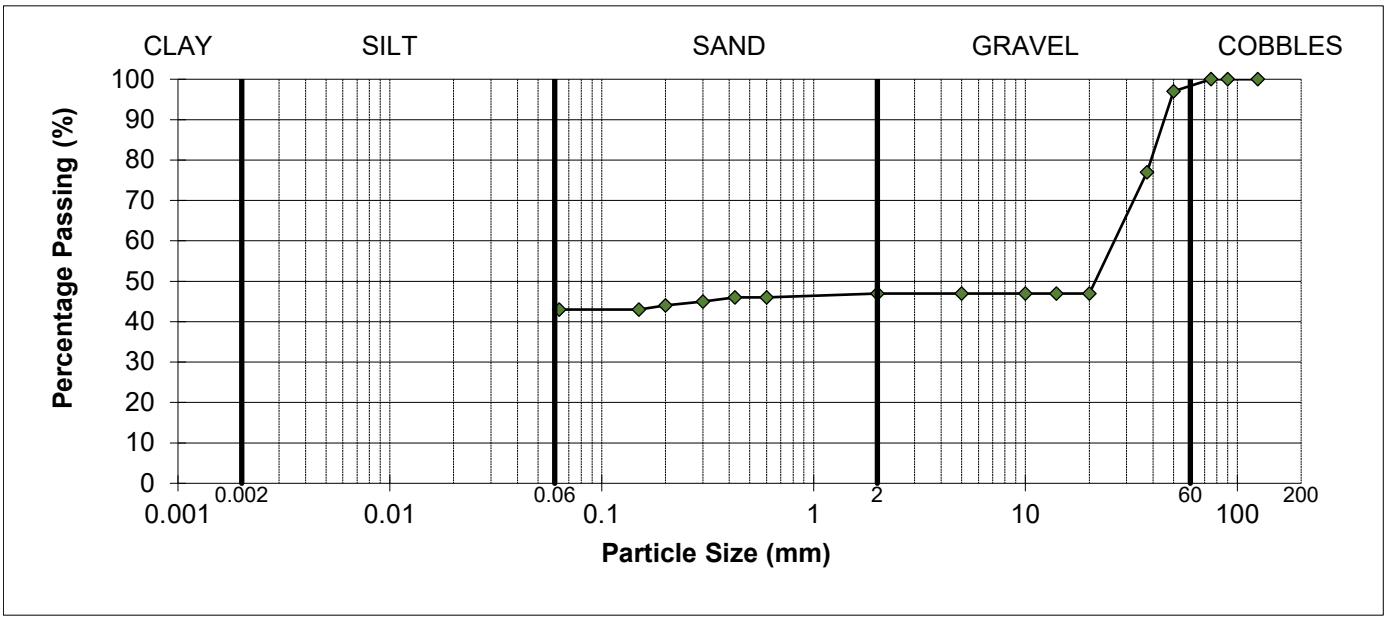
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 4588/97

SAMPLE LABEL	CLAY 001	DATE SAMPLED	03-Aug-23
LAB SAMPLE No	129562	DATE RECEIVED	14-Aug-23
DATE TESTED	16-Aug-23	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy gravelly CLAY
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	47	
90	100		2	47	15-80
75	100		0.6	46	
50	97		0.425	46	
37.5	77		0.3	45	
20	47		0.2	44	
14	47		0.15	43	
10	47		0.063	43	15-80



REMARKS
Sample complies with the advised grading specifcation for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 31-Aug-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

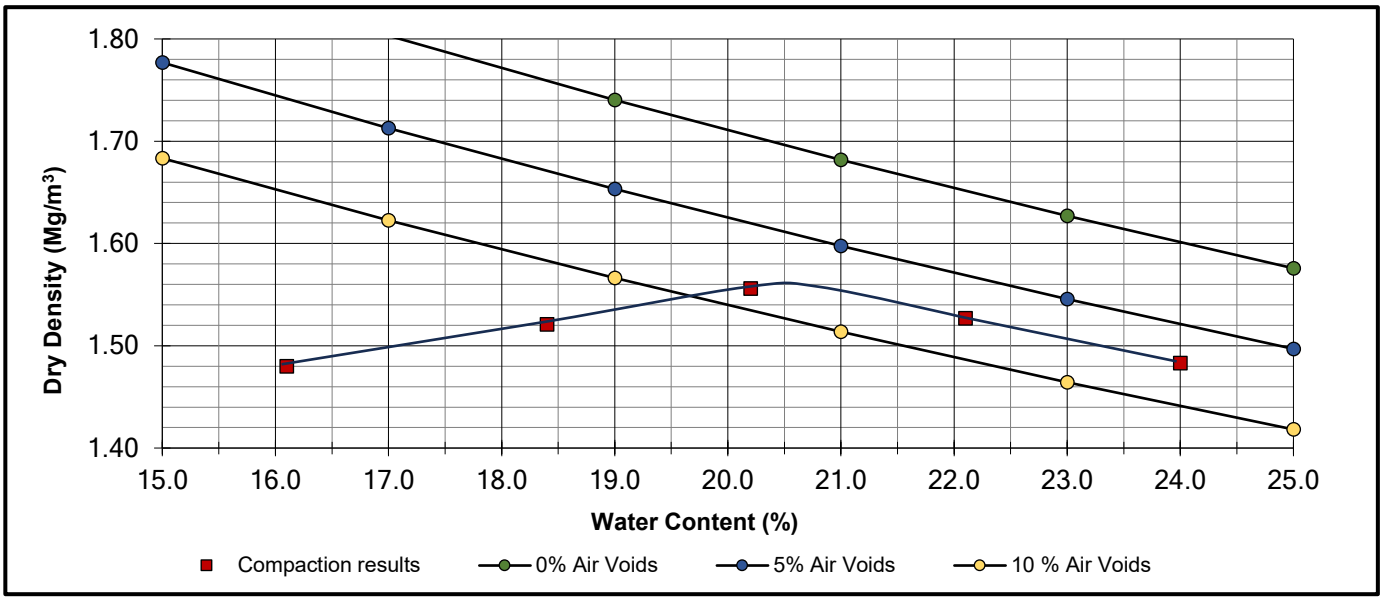
CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 4588/97

SAMPLE LABEL	CLAY 001	DATE SAMPLED	03-Aug-23
SAMPLE NUMBER	129562	DATE RECEIVED	14-Aug-23
DATE TESTED	16-Aug-23	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy gravelly CLAY
ADVISED SOURCE	Site Investigation Sample
PRE TREATMENT	Air Dried / Single Sample

RETAINED 37.5mm	23 %	GRADING ZONE	Zone 5
RETAINED 20mm	53 %	PARTICLE DENSITY	2.6 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	16.1	1.480
2	18.4	1.521
3	20.2	1.556
4	22.1	1.527
5	24.0	1.483



OPTIMUM WATER CONTENT	**21**	(%)
MAXIMUM DRY DENSITY	**1.56**	(Mg/m^3)

REMARKS
As received water content = 29.9%

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 31-Aug-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Bennet Street,
Manchester

Job Number MRN 4588/146
Date of Issue 14 November 2023
Page 1 of 4

Approved Signatories

S J Hutchings, O P Davies

Notes

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M U R R A Y R I X

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

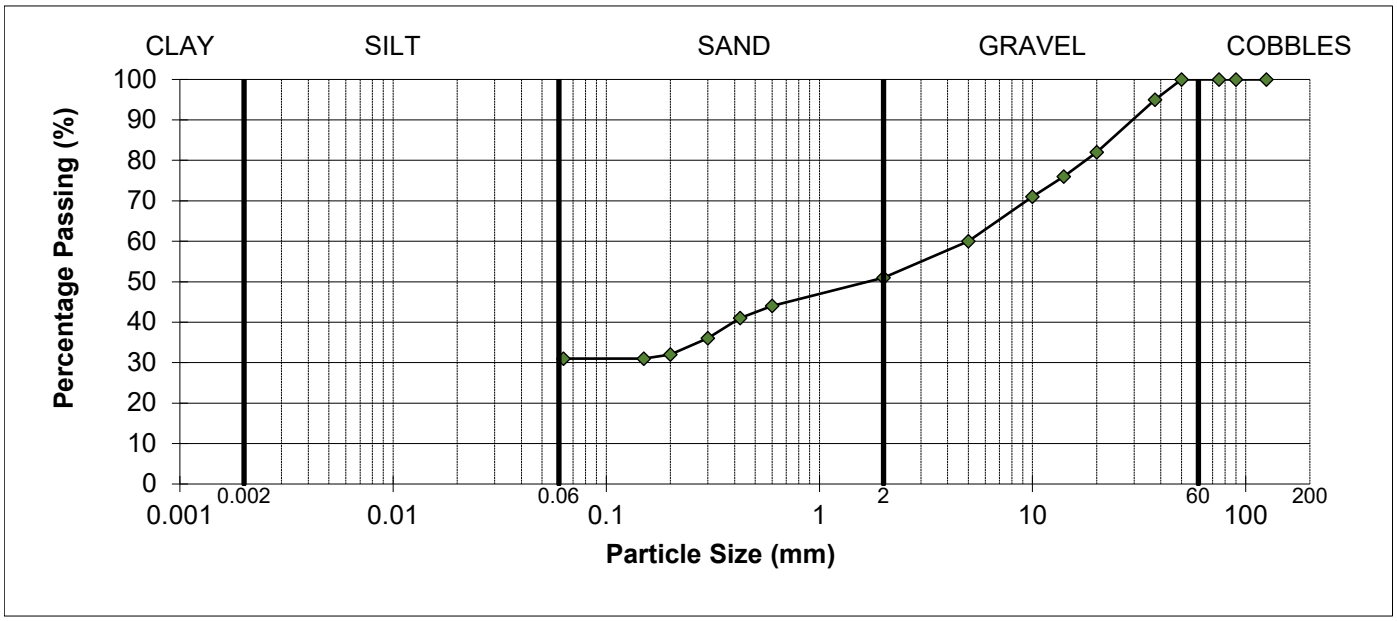
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennet Street, Manchester
JOB NUMBER	MRN 4588/146

SAMPLE LABEL	SW-MG-004	DATE SAMPLED	17-Oct-23
LAB SAMPLE No	133386	DATE RECEIVED	31-Oct-23
DATE TESTED	01-Nov-23	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	60	
90	100		2	51	15-80
75	100		0.6	44	
50	100		0.425	41	
37.5	95		0.3	36	
20	82		0.2	32	
14	76		0.15	31	
10	71		0.063	31	15-80



SOIL FRACTIONS			
COBBLES	0%	SAND	20%
GRAVEL	49%	SILT / CLAY	31%

REMARKS
Sample complies with the advised grading specification for a 2C material (SHW 2016)
As received water content = 20.9%

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Nov-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

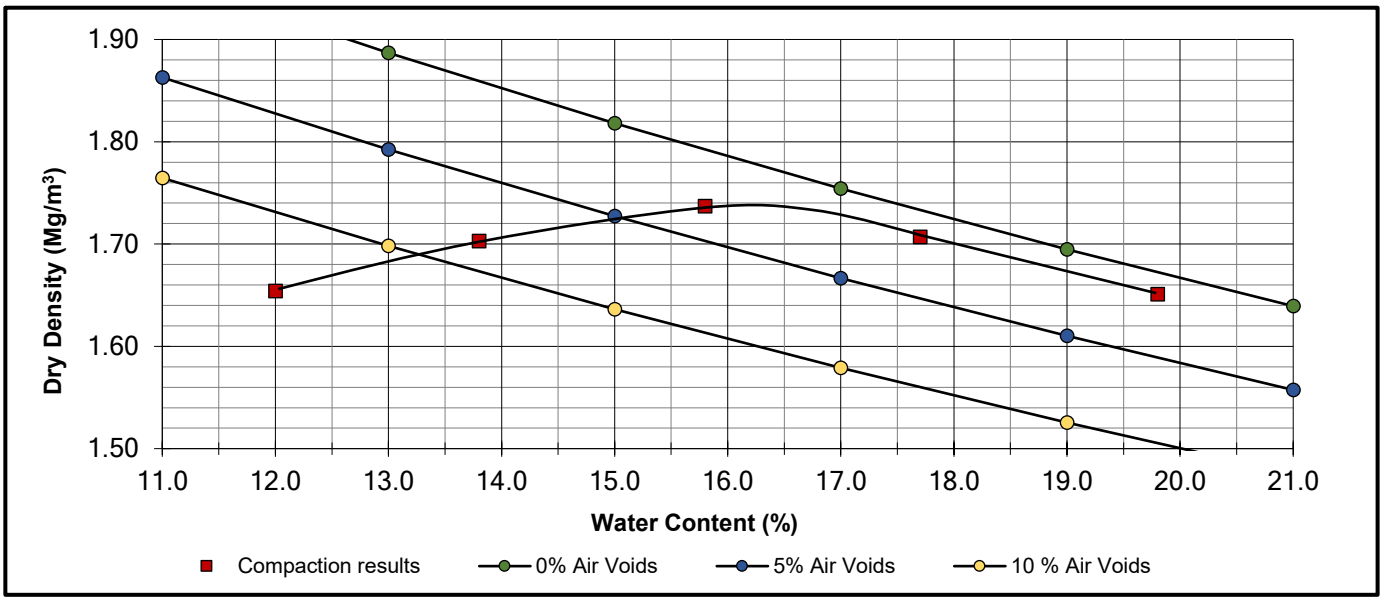
CLIENT	e3p
SITE	Bennet Street, Manchester
JOB NUMBER	MRN 4588/146

SAMPLE LABEL	SW-MG-004	DATE SAMPLED	17-Oct-23
SAMPLE NUMBER	133386	DATE RECEIVED	31-Oct-23
DATE TESTED	01-Nov-23	SAMPLED BY	#REF!

MATERIAL	Made Ground
ADVISED SOURCE	As client and site above
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	5 %	GRADING ZONE	Zone 4
RETAINED 20mm	18 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	12.0	1.654
2	13.8	1.703
3	15.8	1.737
4	17.7	1.707
5	19.8	1.651



OPTIMUM WATER CONTENT	**16**	(%)
MAXIMUM DRY DENSITY	**1.73**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 14-Nov-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

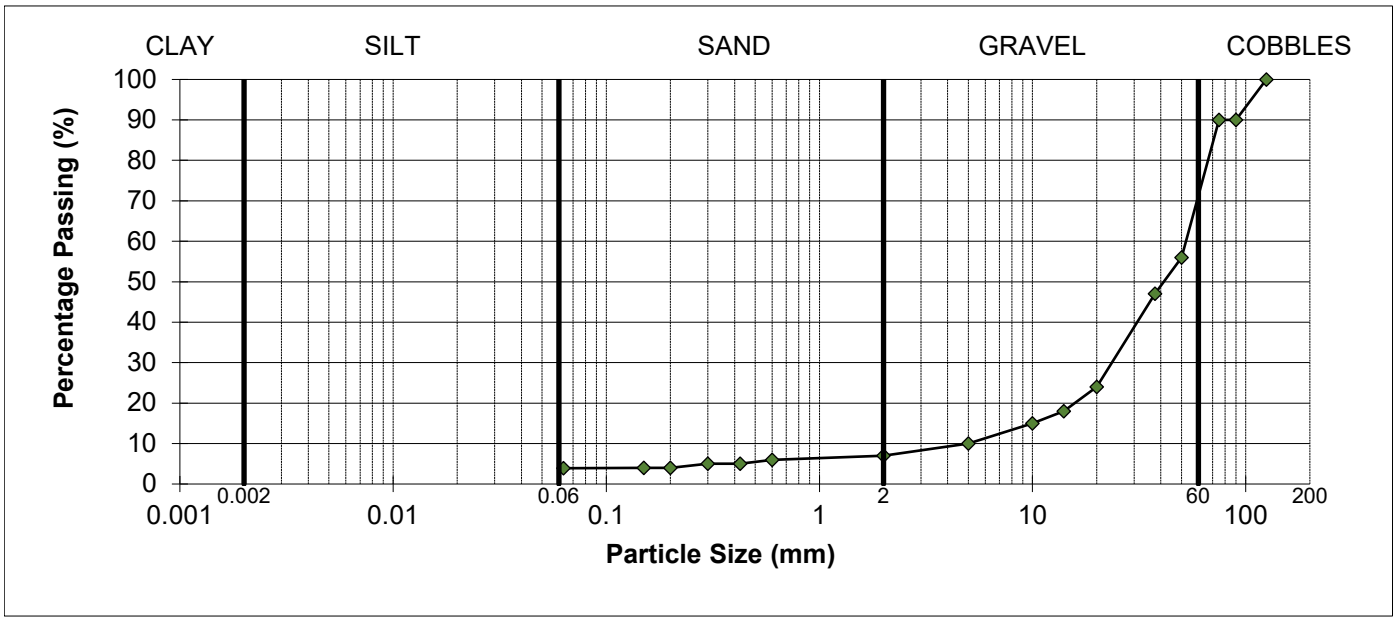
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennet Street, Manchester
JOB NUMBER	MRN 4588/146

SAMPLE LABEL	Crush-004	DATE SAMPLED	30-Oct-23
LAB SAMPLE No	133387	DATE RECEIVED	31-Oct-23
DATE TESTED	01-Nov-23	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	95-100	5	10	
90	90		2	7	
75	90		0.6	6	
50	56		0.425	5	
37.5	47		0.3	5	
20	24		0.2	4	
14	18		0.15	4	
10	15		0.063	4	0-15



SOIL FRACTIONS			
COBBLES	27%	SAND	3%
GRAVEL	66%	SILT / CLAY	4%

REMARKS

Sample complies with the advised grading specification for a 1A material (SHW 2016), Uniformity Coefficient >10
As received water content = 10.3%

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 14-Nov-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Bennett Street

Job Number MRN 24005/29
Date of Issue 07 March 2024

Approved Signatories

S J Hutchings, O P Davies

Notes

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Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

Murray Rix is the trading name of Murray Rix (Northern) Limited. Registered in England 2878361

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

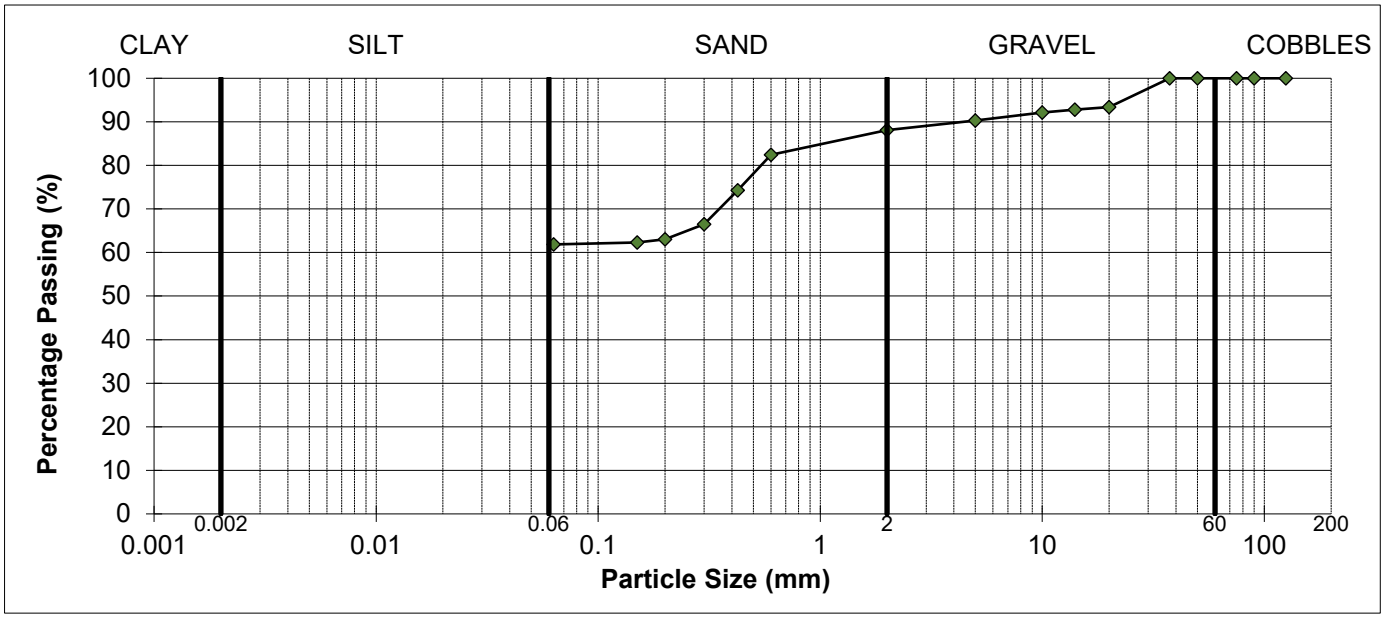
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/29

SAMPLE LABEL	Clay Upfill	DATE SAMPLED	31-Jan-24
LAB SAMPLE No	421101	DATE RECEIVED	07-Feb-24
DATE TESTED	12-Feb-24	SAMPLED BY	Client

MATERIAL	Clay
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	90	
90	100		2	88	15-80
75	100		0.6	82	
50	100		0.425	74	
37.5	100		0.3	67	
20	93		0.2	63	
14	93		0.15	62	
10	92		0.063	62	15-80



SOIL FRACTIONS			
COBBLES	0%	SAND	26%
GRAVEL	12%	SILT / CLAY	62%

As received water content	31.6%

REMARKS

Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 07-Mar-24

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

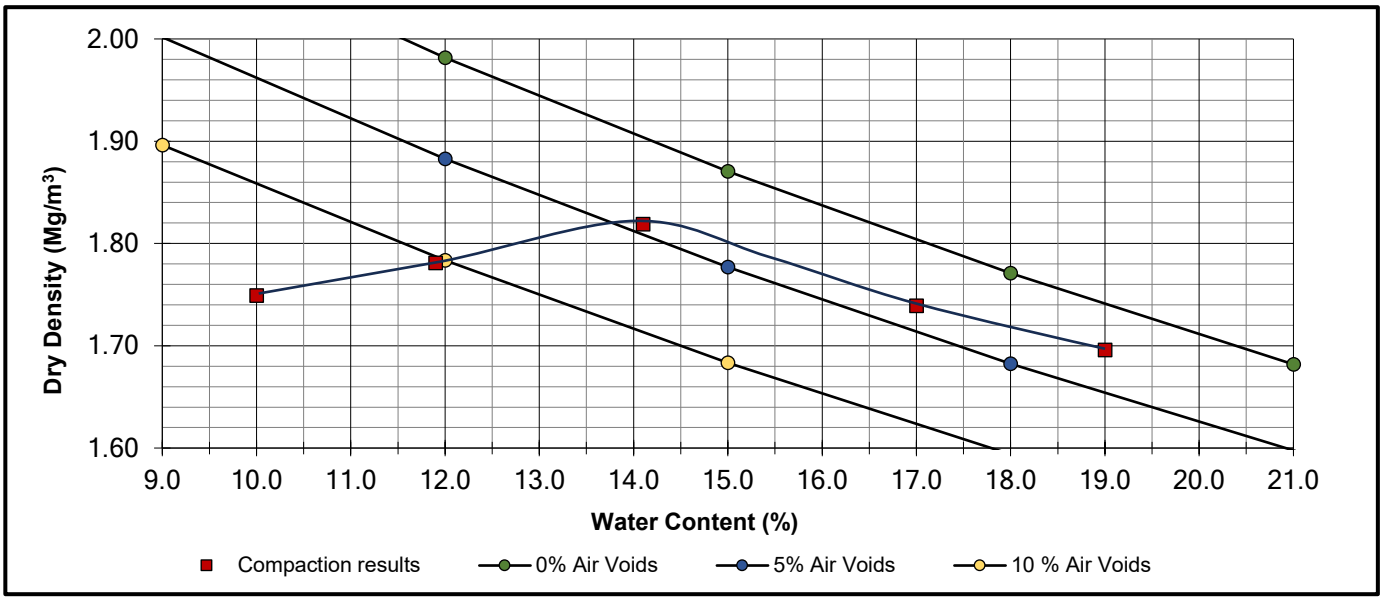
CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/29

SAMPLE LABEL	Clay Upfill	DATE SAMPLED	31-Jan-24
SAMPLE NUMBER	421101	DATE RECEIVED	07-Feb-24
DATE TESTED	12-Feb-24	SAMPLED BY	Client

MATERIAL	Clay
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 3
RETAINED 20mm	7 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	10.0	1.749
2	11.9	1.781
3	14.1	1.819
4	17.0	1.739
5	19.0	1.696



OPTIMUM WATER CONTENT	**14**	(%)
MAXIMUM DRY DENSITY	**1.82**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

SIGNED

DATE 07-Mar-24

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Bennett Street

Job Number MRN 24005/77
Date of Issue 11 May 2024

Approved Signatories

S J Hutchings, O P Davies

Notes

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UKAS TESTING 1580

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M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

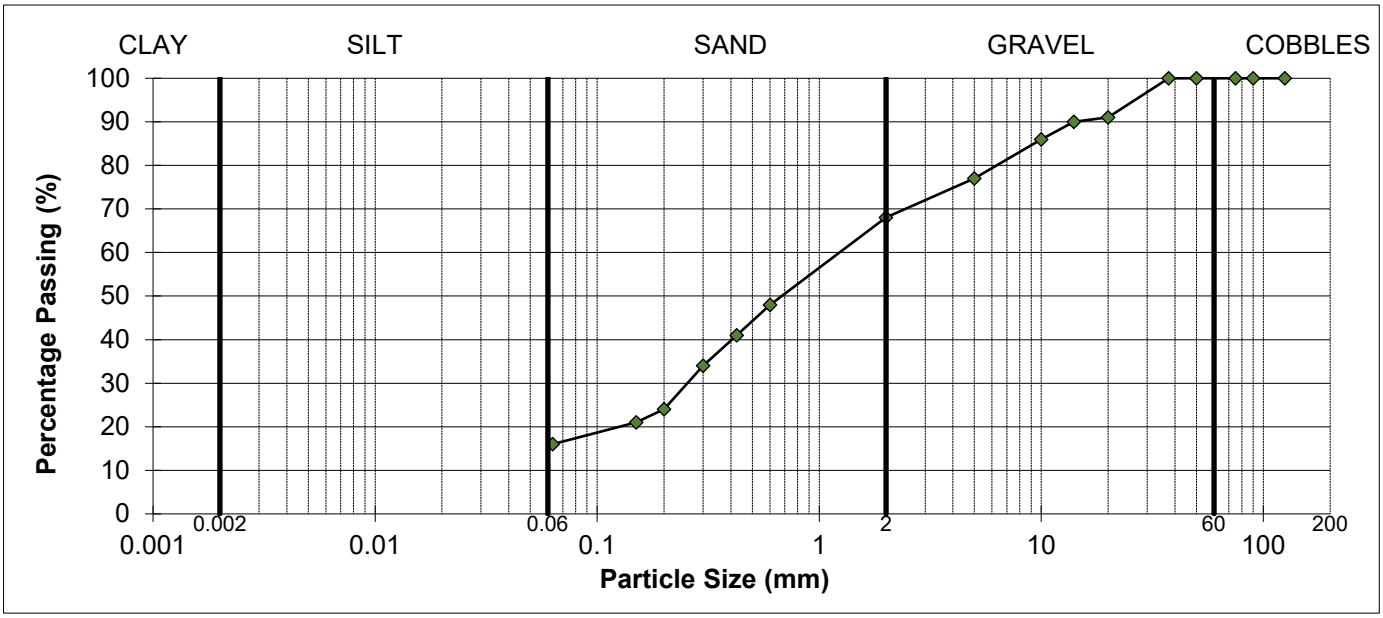
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/77

SAMPLE LABEL	SW-MG-005	DATE SAMPLED	05-Apr-24
LAB SAMPLE No	452501	DATE RECEIVED	10-Apr-24
DATE TESTED	11-Apr-24	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	77	
90	100		2	68	15-80
75	100		0.6	48	
50	100		0.425	41	
37.5	100		0.3	34	
20	91		0.2	24	
14	90		0.15	21	
10	86		0.063	16	15-80



SOIL FRACTIONS			
COBBLES	0%	SAND	52%
GRAVEL	32%	SILT / CLAY	16%

As received water content	27.7%

REMARKS

Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 11-May-24

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

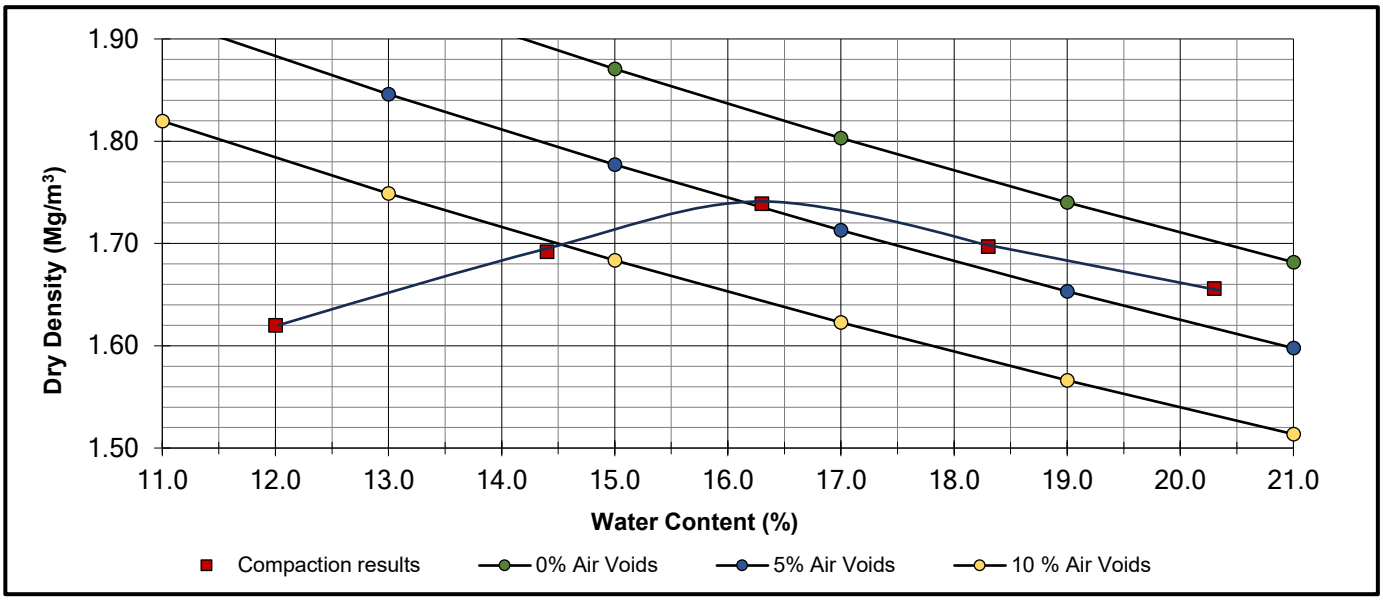
CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/77

SAMPLE LABEL	SW-MG-005	DATE SAMPLED	05-Apr-24
SAMPLE NUMBER	452501	DATE RECEIVED	10-Apr-24
DATE TESTED	18-Apr-24	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 3
RETAINED 20mm	9 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	12.0	1.620
2	14.4	1.692
3	16.3	1.739
4	18.3	1.697
5	20.3	1.656



OPTIMUM WATER CONTENT	**16**	(%)
MAXIMUM DRY DENSITY	**1.74**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 11-May-24

M U R R A Y R I X

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

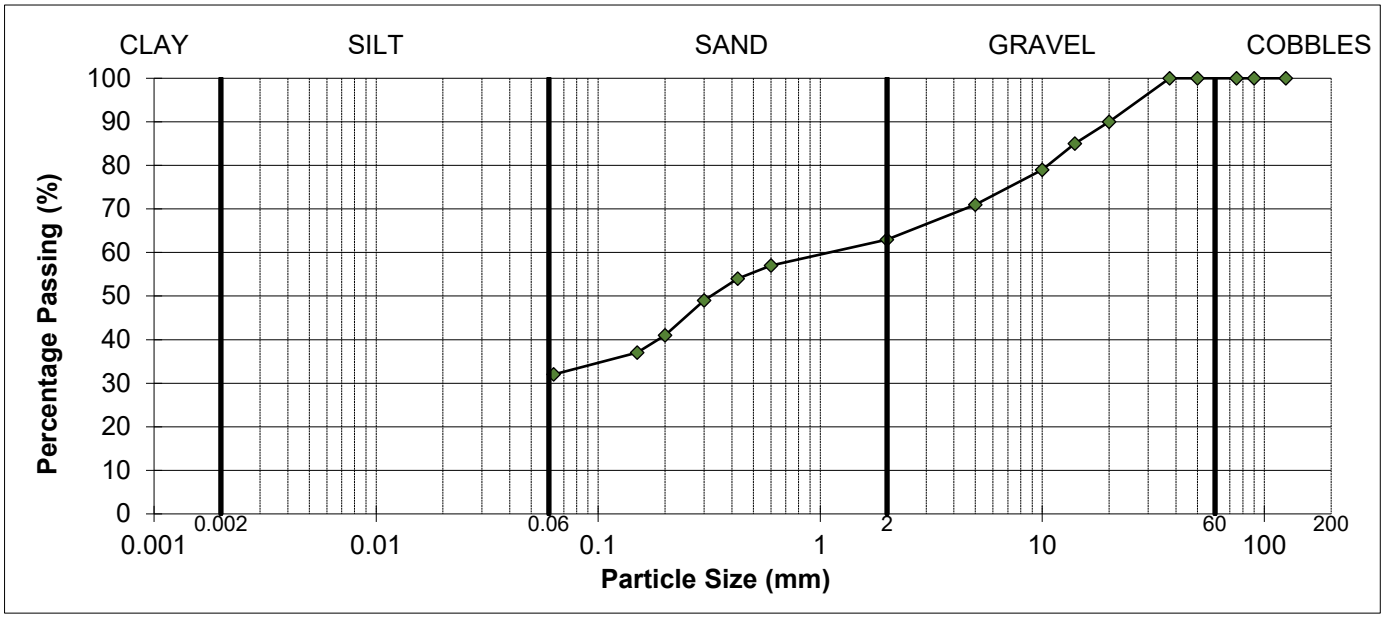
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/77

SAMPLE LABEL	SW-MG-006	DATE SAMPLED	05-Apr-24
LAB SAMPLE No	452502	DATE RECEIVED	10-Apr-24
DATE TESTED	11-Apr-24	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	71	
90	100		2	63	15-80
75	100		0.6	57	
50	100		0.425	54	
37.5	100		0.3	49	
20	90		0.2	41	
14	85		0.15	37	
10	79		0.063	32	15-80



SOIL FRACTIONS			
COBBLES	0%	SAND	31%
GRAVEL	37%	SILT / CLAY	32%

As received water content	24.1%

REMARKS
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 11-May-24

MURRAY RIX

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TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

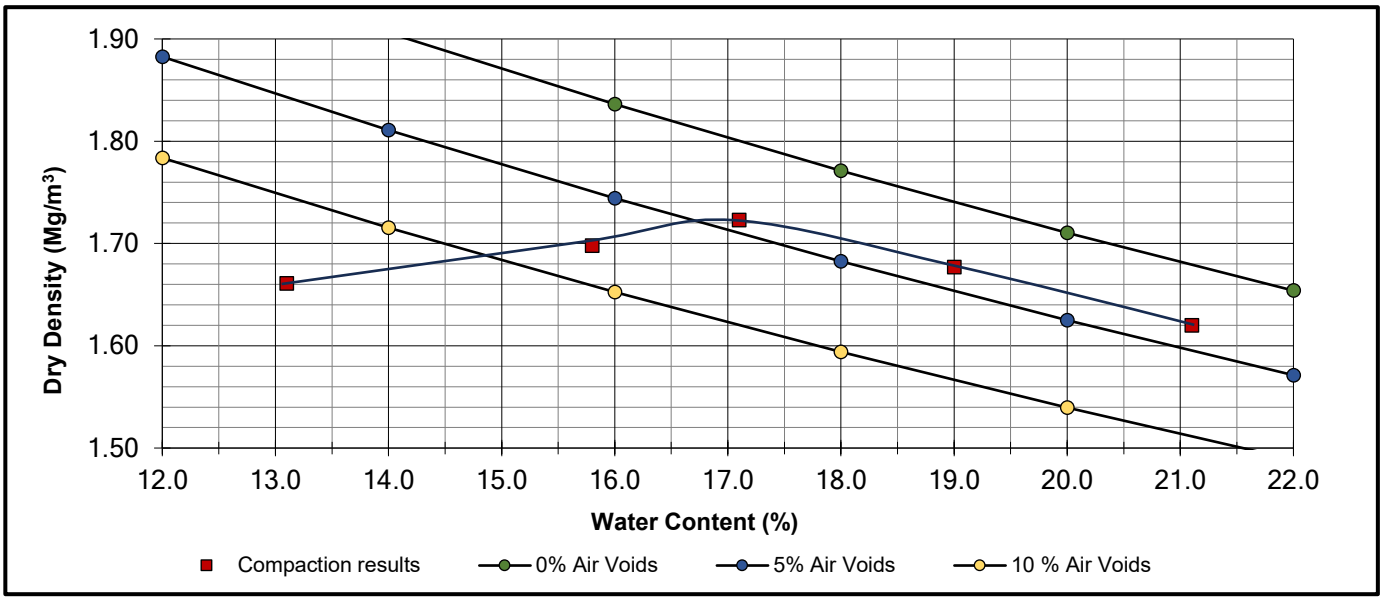
CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/77

SAMPLE LABEL	SW-MG-006	DATE SAMPLED	05-Apr-24
SAMPLE NUMBER	452502	DATE RECEIVED	10-Apr-24
DATE TESTED	18-Apr-24	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 3
RETAINED 20mm	10 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	13.1	1.661
2	15.8	1.698
3	17.1	1.723
4	19.0	1.677
5	21.1	1.620



OPTIMUM WATER CONTENT	**17**	(%)
MAXIMUM DRY DENSITY	**1.72**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 11-May-24

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Bennett Street

Job Number MRN 24005/78
Date of Issue 12 May 2024

Approved Signatories

S J Hutchings, O P Davies

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TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

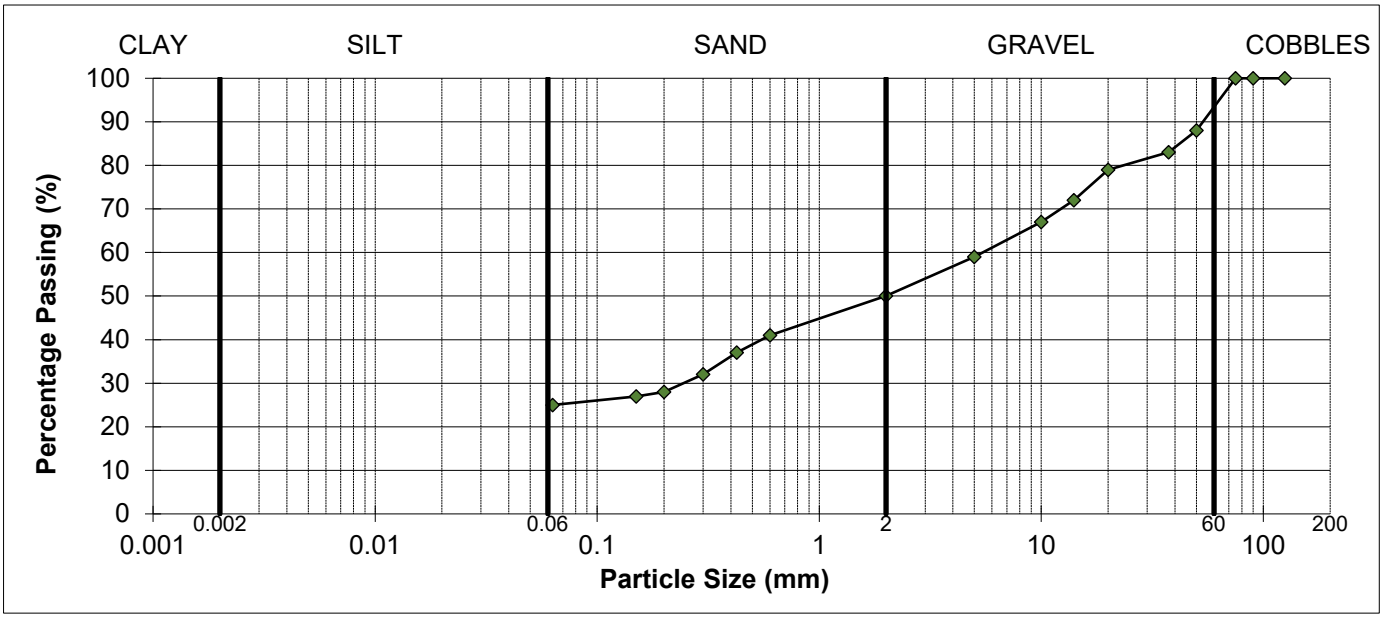
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/78

SAMPLE LABEL	SP07	DATE SAMPLED	23-Apr-24
LAB SAMPLE No	460701	DATE RECEIVED	24-Apr-24
DATE TESTED	25-Apr-24	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	59	
90	100		2	50	15-80
75	100		0.6	41	
50	88		0.425	37	
37.5	83		0.3	32	
20	79		0.2	28	
14	72		0.15	27	
10	67		0.063	25	15-80



SOIL FRACTIONS			
COBBLES	6%	SAND	25%
GRAVEL	44%	SILT / CLAY	25%

As received water content	16.7%

REMARKS

Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 12-May-24

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

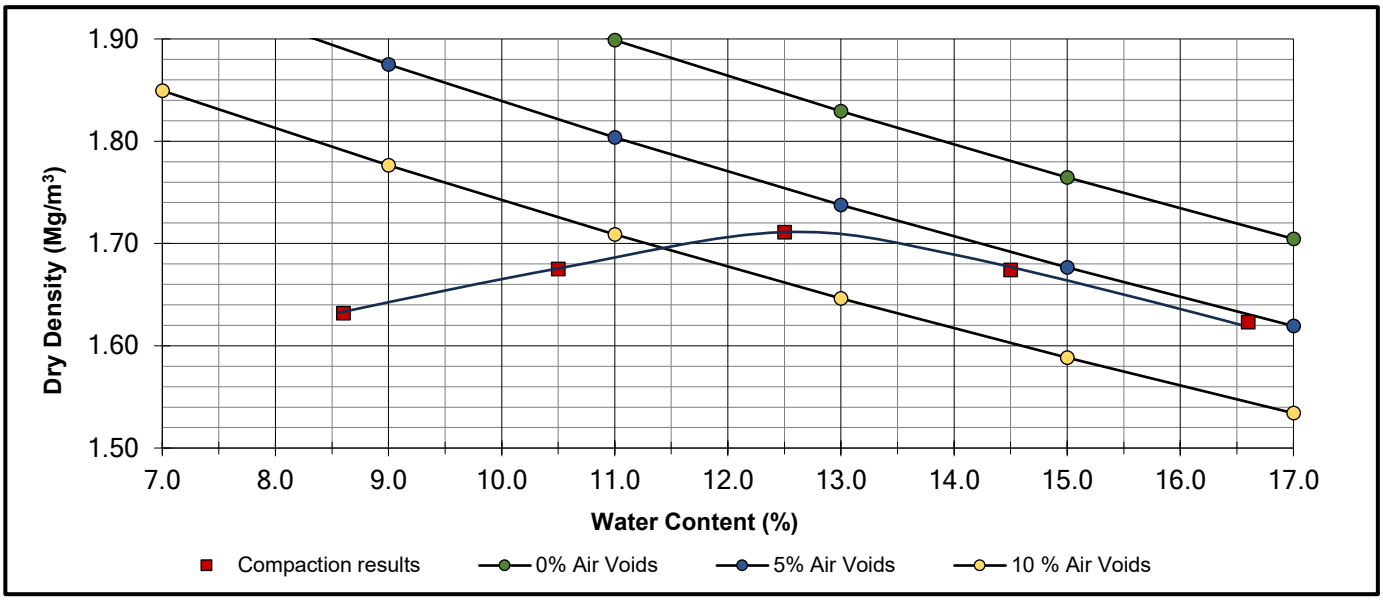
CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/78

SAMPLE LABEL	SP07	DATE SAMPLED	23-Apr-24
SAMPLE NUMBER	460701	DATE RECEIVED	24-Apr-24
DATE TESTED	02-May-24	SAMPLED BY	Client

MATERIAL	General Fill
ADVISED SOURCE	Site won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	17 %	GRADING ZONE	Zone X
RETAINED 20mm	21 %	PARTICLE DENSITY	2.40 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	8.6	1.632
2	10.5	1.675
3	12.5	1.711
4	14.5	1.674
5	16.6	1.623



OPTIMUM WATER CONTENT	**13**	(%)
MAXIMUM DRY DENSITY	**1.71**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 12-May-24

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Bennett Street

Job Number MRN 24005/211
Date of Issue 16 September 2024

Approved Signatories

S J Hutchings, O P Davies

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UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

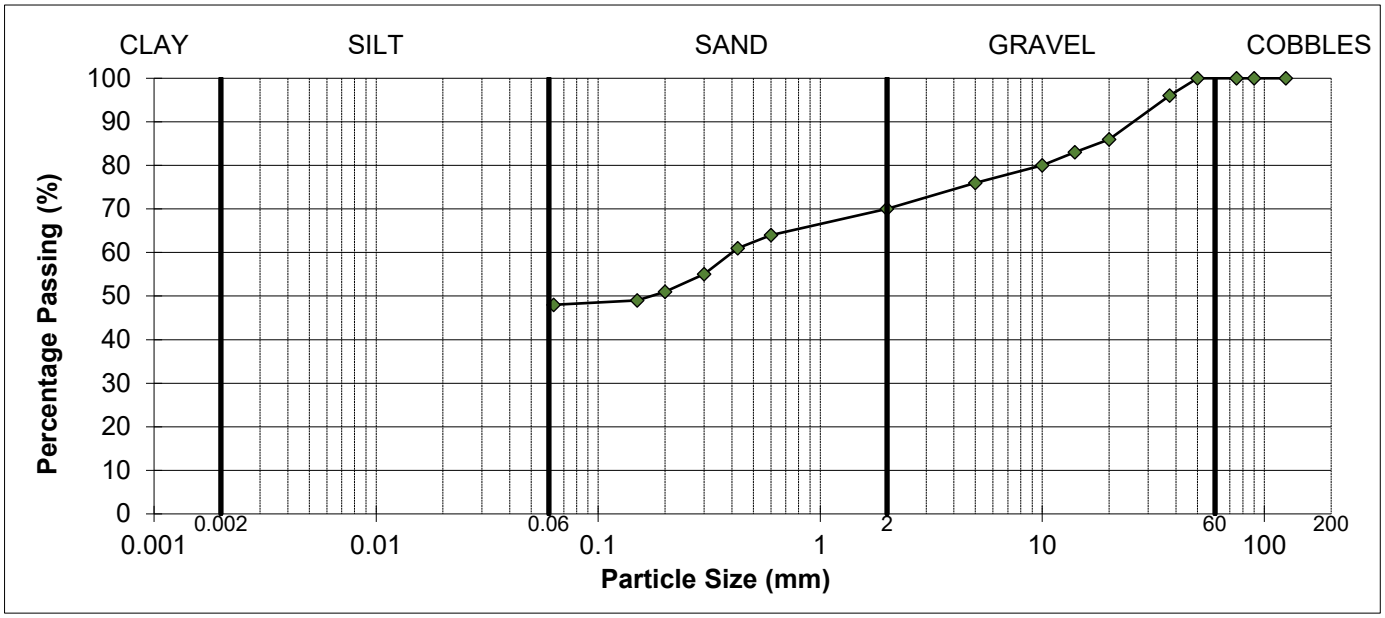
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-007	DATE SAMPLED	22-Aug-24
LAB SAMPLE No	543301	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	76	
90	100		2	70	15-80
75	100		0.6	64	
50	100		0.425	61	
37.5	96		0.3	55	
20	86		0.2	51	
14	83		0.15	49	
10	80		0.063	48	15-80



SOIL FRACTIONS			
COBBLES	0%	SAND	22%
GRAVEL	30%	SILT / CLAY	48%

As received water content	15.5%

REMARKS
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 16-Sep-24

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

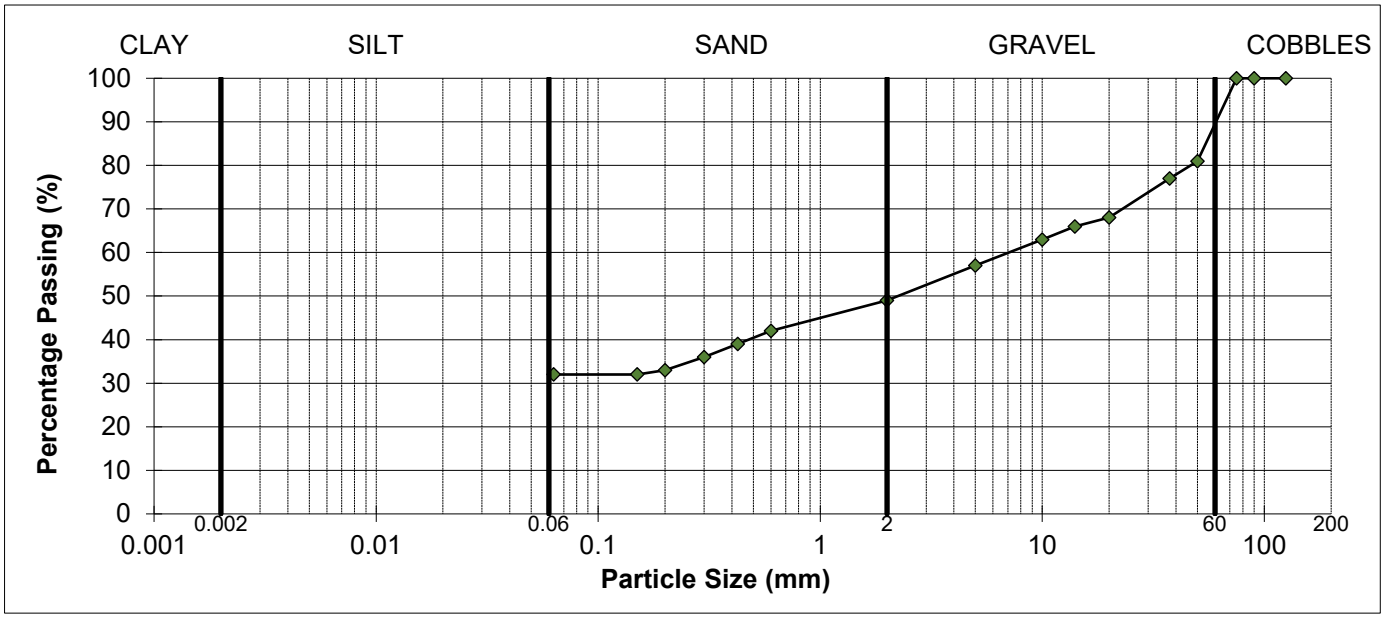
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-008	DATE SAMPLED	22-Aug-24
LAB SAMPLE No	543302	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	57	
90	100		2	49	15-80
75	100		0.6	42	
50	81		0.425	39	
37.5	77		0.3	36	
20	68		0.2	33	
14	66		0.15	32	
10	63		0.063	32	15-80



SOIL FRACTIONS			
COBBLES	10%	SAND	17%
GRAVEL	42%	SILT / CLAY	32%

As received water content	15.5%

REMARKS
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 16-Sep-24

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

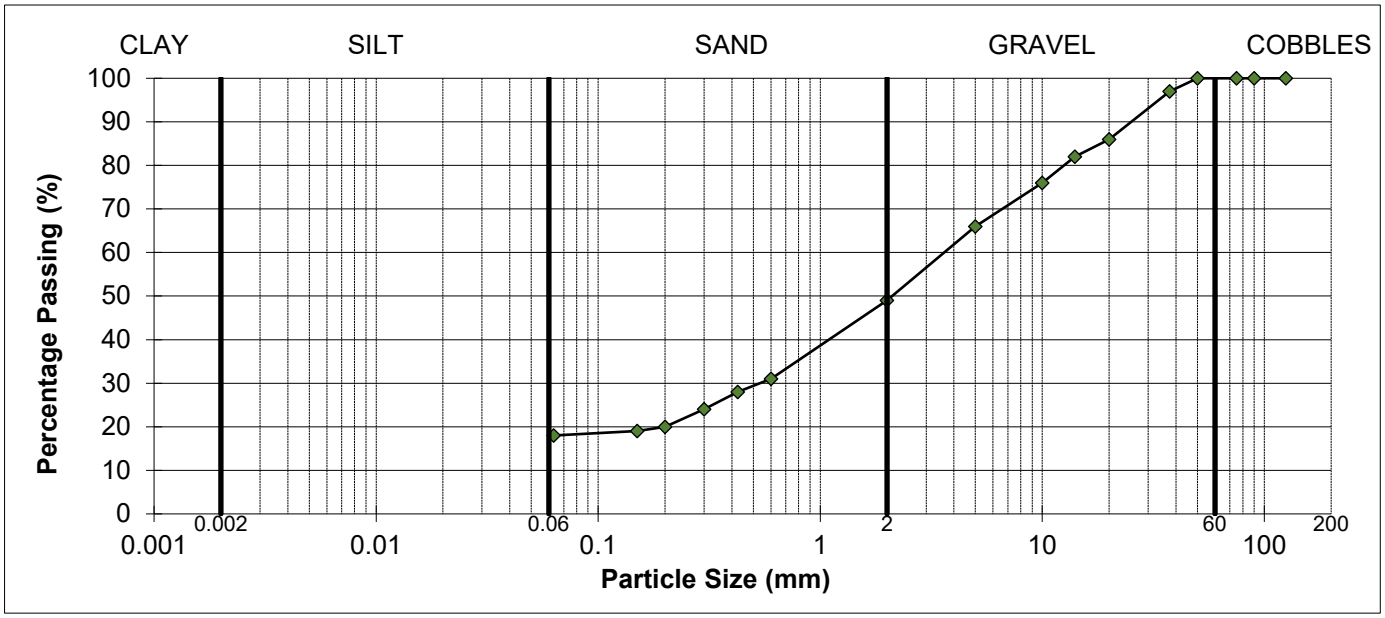
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-009	DATE SAMPLED	22-Aug-24
LAB SAMPLE No	543303	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	66	
90	100		2	49	15-80
75	100		0.6	31	
50	100		0.425	28	
37.5	97		0.3	24	
20	86		0.2	20	
14	82		0.15	19	
10	76		0.063	18	15-80



SOIL FRACTIONS			
COBBLES	0%	SAND	31%
GRAVEL	51%	SILT / CLAY	18%

As received water content	10.4%

REMARKS
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 16-Sep-24

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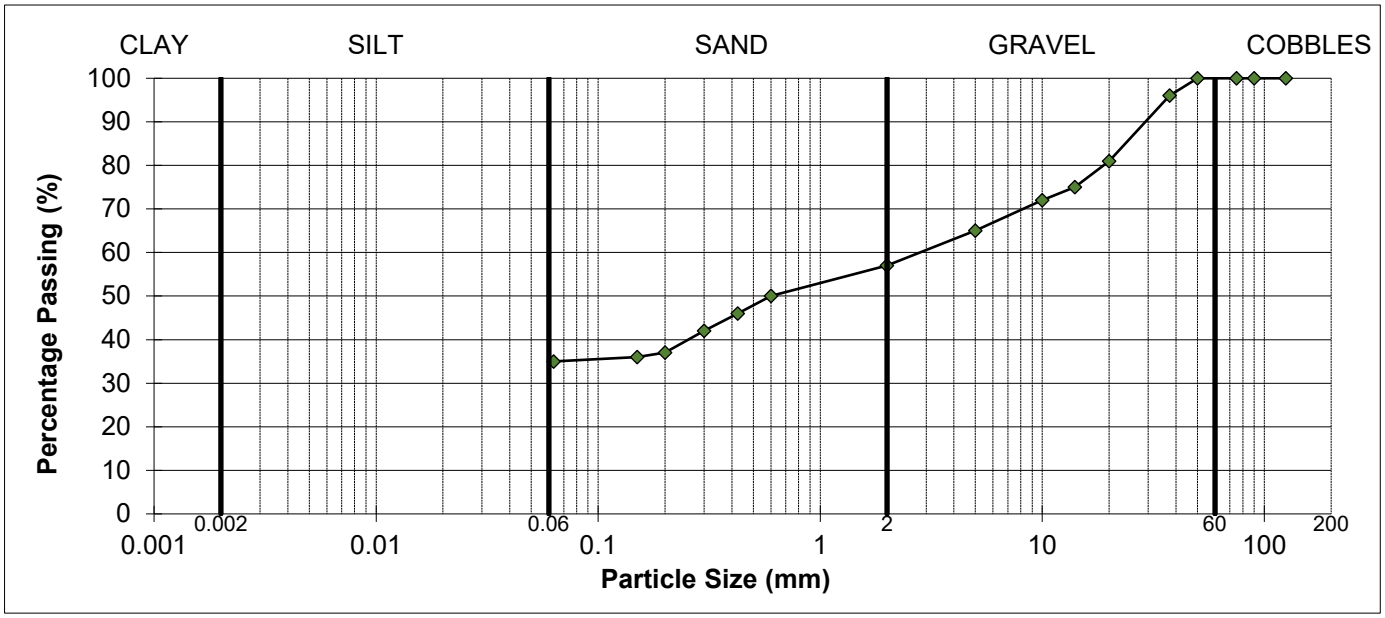
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-010	DATE SAMPLED	22-Aug-24
LAB SAMPLE No	543304	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	65	
90	100		2	57	15-80
75	100		0.6	50	
50	100		0.425	46	
37.5	96		0.3	42	
20	81		0.2	37	
14	75		0.15	36	
10	72		0.063	35	15-80



SOIL FRACTIONS			
COBBLES	0%	SAND	22%
GRAVEL	43%	SILT / CLAY	35%

As received water content	12.3%

REMARKS
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 16-Sep-24

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PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

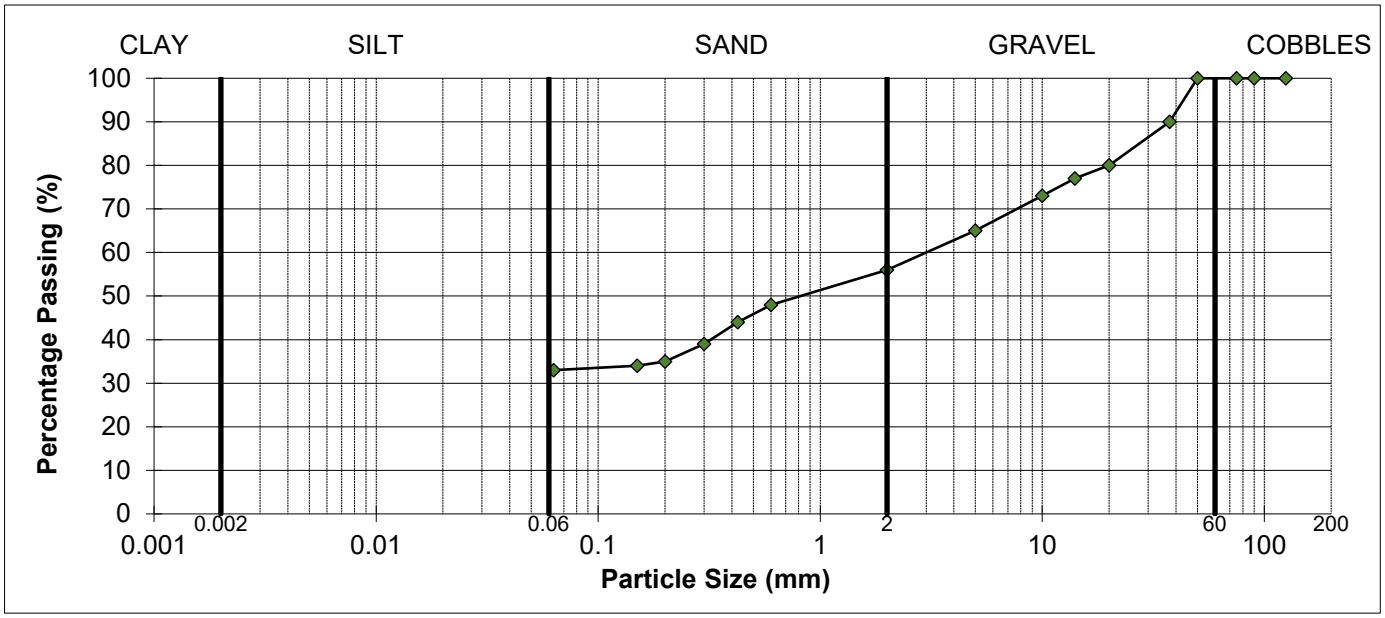
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-011	DATE SAMPLED	22-Aug-24
LAB SAMPLE No	543305	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	65	
90	100		2	56	15-80
75	100		0.6	48	
50	100		0.425	44	
37.5	90		0.3	39	
20	80		0.2	35	
14	77		0.15	34	
10	73		0.063	33	15-80



SOIL FRACTIONS			
COBBLES	0%	SAND	23%
GRAVEL	44%	SILT / CLAY	33%

As received water content	15.0%

REMARKS
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 16-Sep-24

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PARTICLE SIZE DISTRIBUTION

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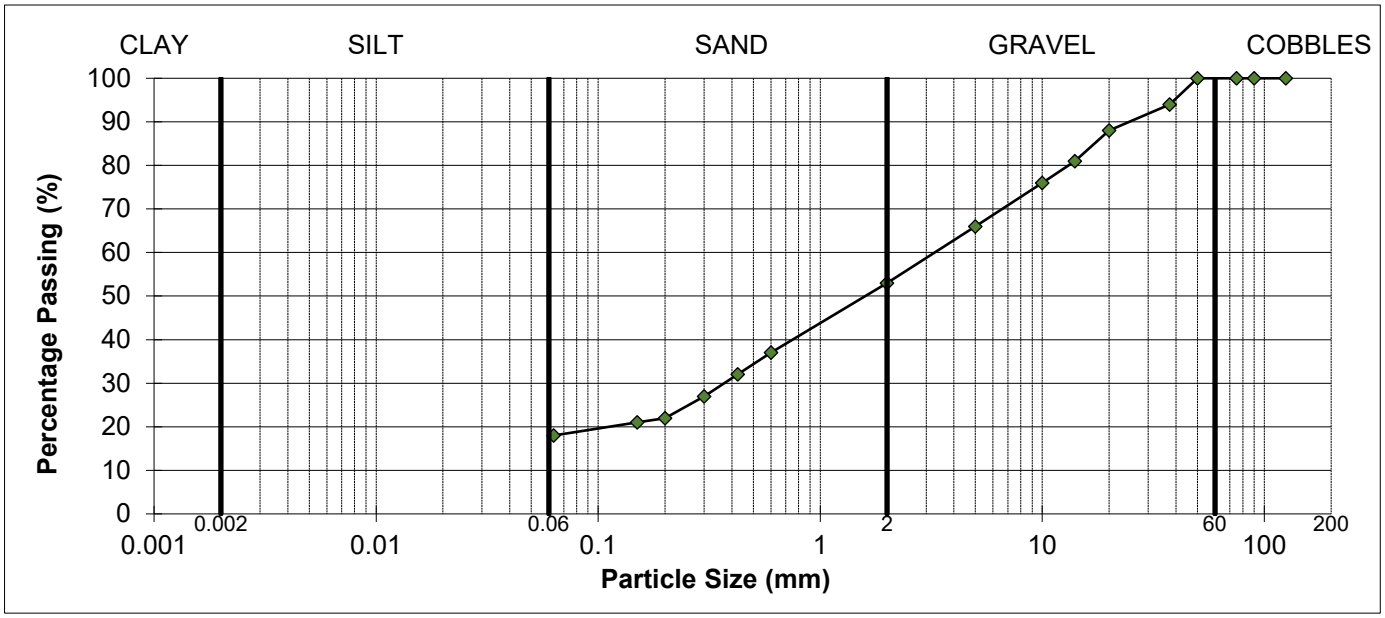
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-012	DATE SAMPLED	22-Aug-24
LAB SAMPLE No	543306	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	66	
90	100		2	53	15-80
75	100		0.6	37	
50	100		0.425	32	
37.5	94		0.3	27	
20	88		0.2	22	
14	81		0.15	21	
10	76		0.063	18	15-80



SOIL FRACTIONS			
COBBLES	0%	SAND	35%
GRAVEL	47%	SILT / CLAY	18%

As received water content	7.8%

REMARKS
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 16-Sep-24

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TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

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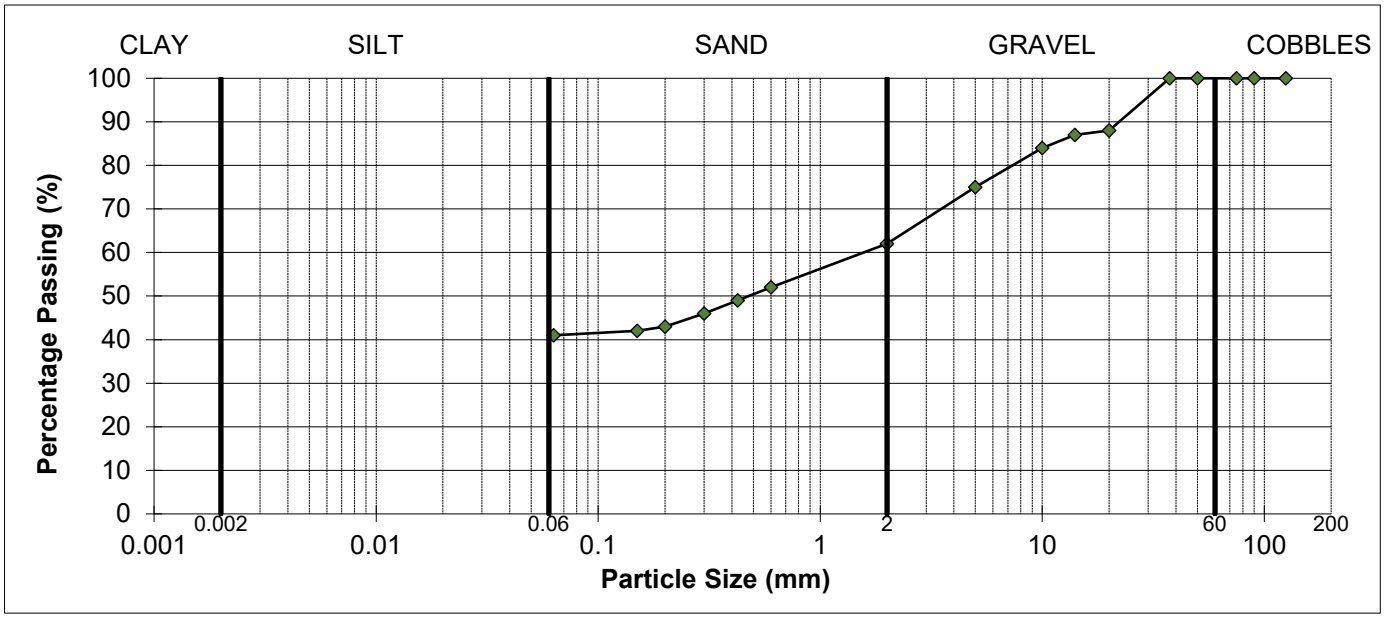
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-013	DATE SAMPLED	22-Aug-24
LAB SAMPLE No	543307	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	75	
90	100		2	62	15-80
75	100		0.6	52	
50	100		0.425	49	
37.5	100		0.3	46	
20	88		0.2	43	
14	87		0.15	42	
10	84		0.063	41	15-80



SOIL FRACTIONS			
COBBLES	0%	SAND	21%
GRAVEL	38%	SILT / CLAY	41%

As received water content	15.4%

REMARKS
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 16-Sep-24

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PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

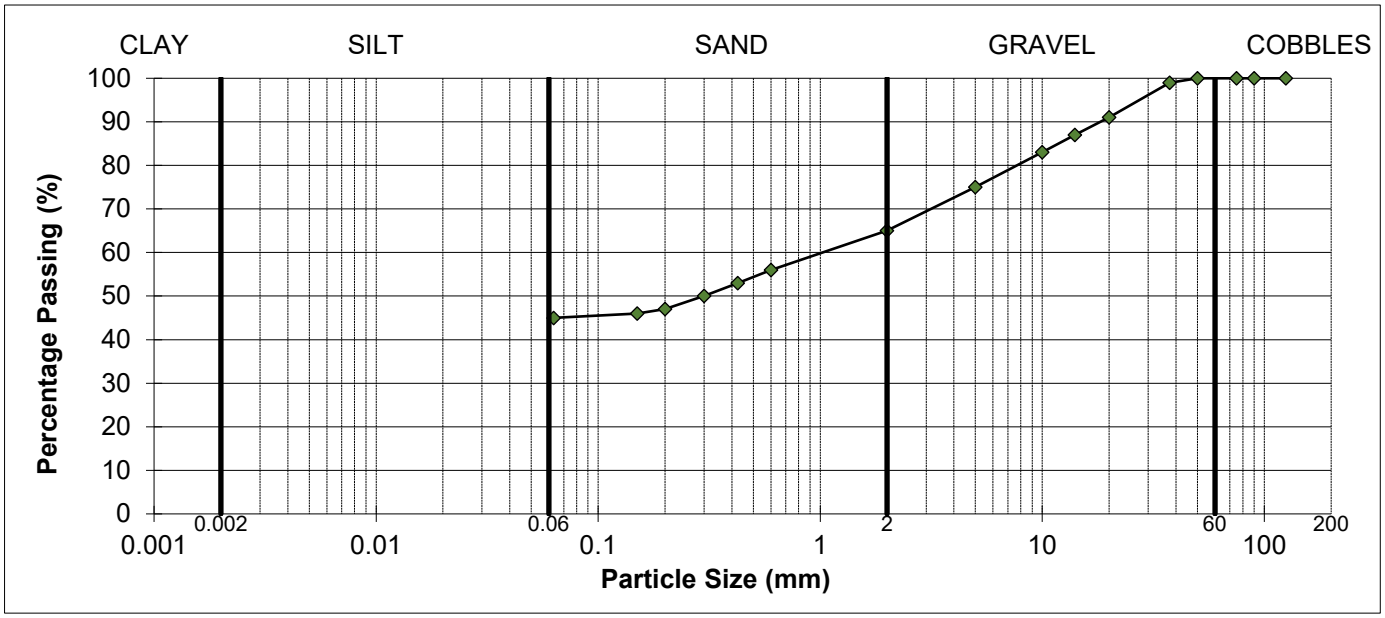
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-014	DATE SAMPLED	22-Aug-24
LAB SAMPLE No	543308	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	75	
90	100		2	65	15-80
75	100		0.6	56	
50	100		0.425	53	
37.5	99		0.3	50	
20	91		0.2	47	
14	87		0.15	46	
10	83		0.063	45	15-80



SOIL FRACTIONS			
COBBLES	0%	SAND	20%
GRAVEL	35%	SILT / CLAY	45%

As received water content	14.4%

REMARKS
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 16-Sep-24

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TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

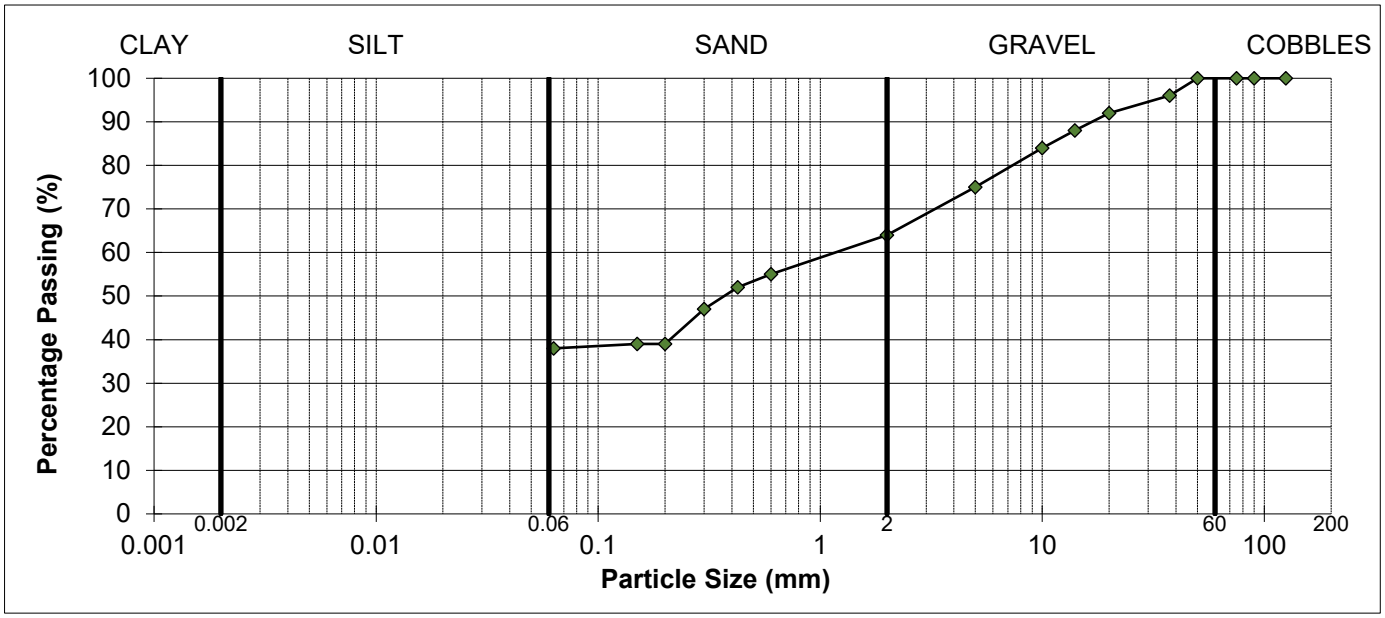
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-015	DATE SAMPLED	22-Aug-24
LAB SAMPLE No	543309	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	75	
90	100		2	64	15-80
75	100		0.6	55	
50	100		0.425	52	
37.5	96		0.3	47	
20	92		0.2	39	
14	88		0.15	39	
10	84		0.063	38	15-80



SOIL FRACTIONS			
COBBLES	0%	SAND	26%
GRAVEL	36%	SILT / CLAY	38%

As received water content	12.4%

REMARKS
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 16-Sep-24

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

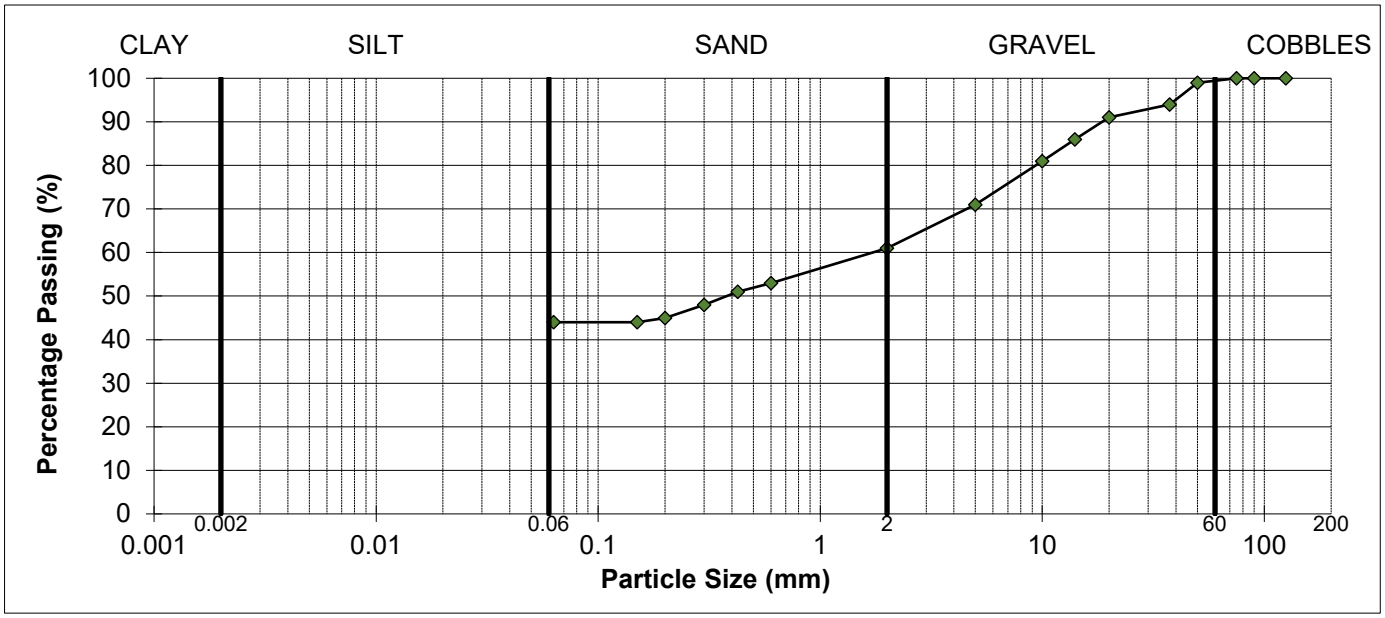
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-016	DATE SAMPLED	22-Aug-24
LAB SAMPLE No	543310	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	71	
90	100		2	61	15-80
75	100		0.6	53	
50	99		0.425	51	
37.5	94		0.3	48	
20	91		0.2	45	
14	86		0.15	44	
10	81		0.063	44	15-80



SOIL FRACTIONS			
COBBLES	1%	SAND	17%
GRAVEL	39%	SILT / CLAY	44%

As received water content	11.8%

REMARKS
Sample complies with the advised grading specification for a 2C material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 16-Sep-24

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

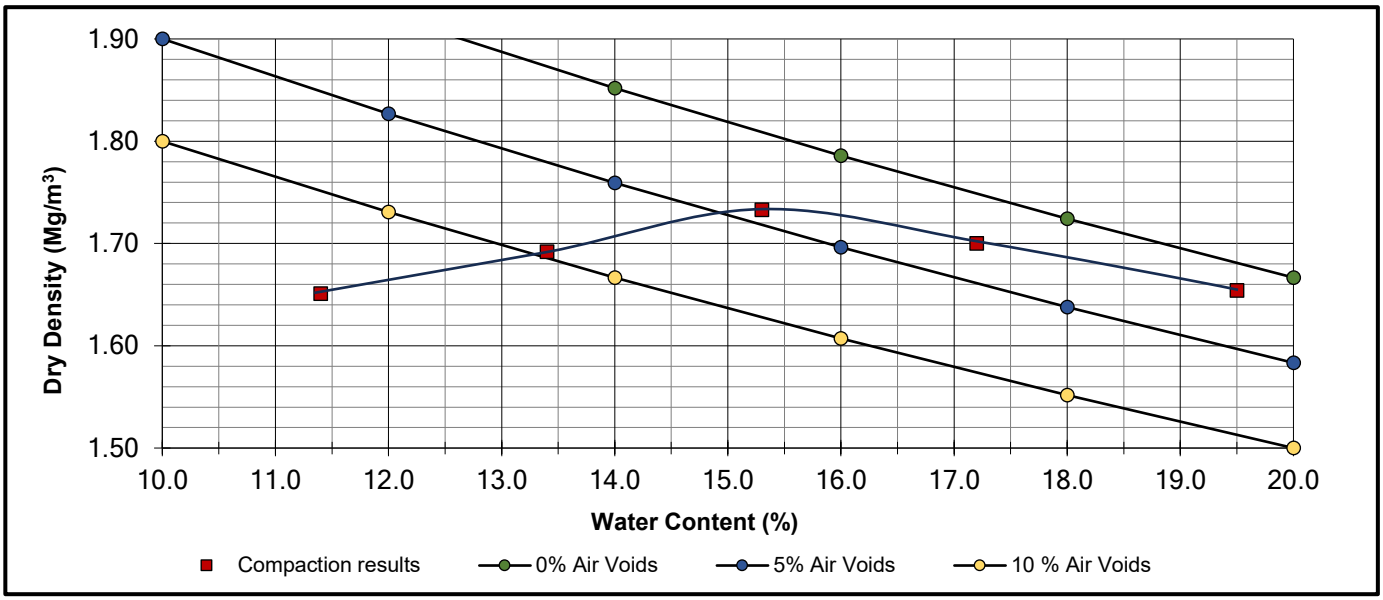
CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-007	DATE SAMPLED	22-Aug-24
SAMPLE NUMBER	543301	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	4 %	GRADING ZONE	Zone 4
RETAINED 20mm	14 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	11.4	1.651
2	13.4	1.692
3	15.3	1.733
4	17.2	1.700
5	19.5	1.654



OPTIMUM WATER CONTENT	**15**	(%)
MAXIMUM DRY DENSITY	**1.73**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) SIGNED DATE 16-Sep-24
(Director / Head of Laboratory)

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

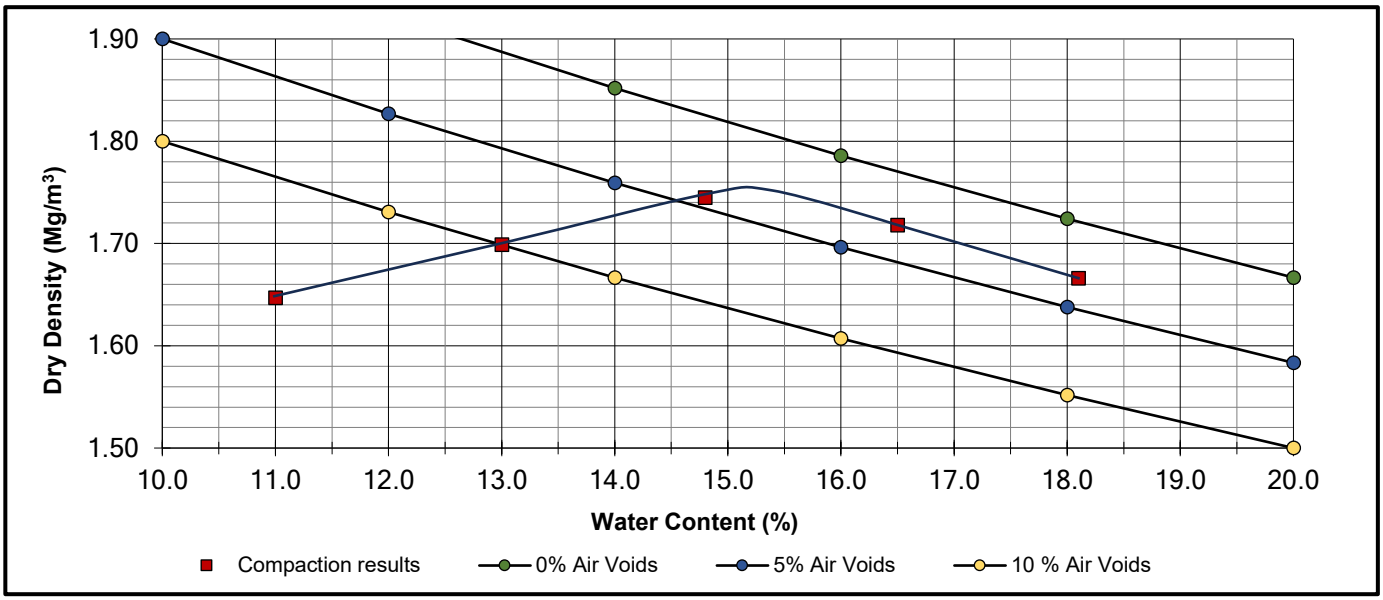
CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-008	DATE SAMPLED	22-Aug-24
SAMPLE NUMBER	543302	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	23 %	GRADING ZONE	Zone X
RETAINED 20mm	32 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	11.0	1.647
2	13.0	1.699
3	14.8	1.745
4	16.5	1.718
5	18.1	1.666



OPTIMUM WATER CONTENT	**15**	(%)
MAXIMUM DRY DENSITY	**1.75**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) SIGNED DATE 16-Sep-24
(Director / Head of Laboratory)

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
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TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

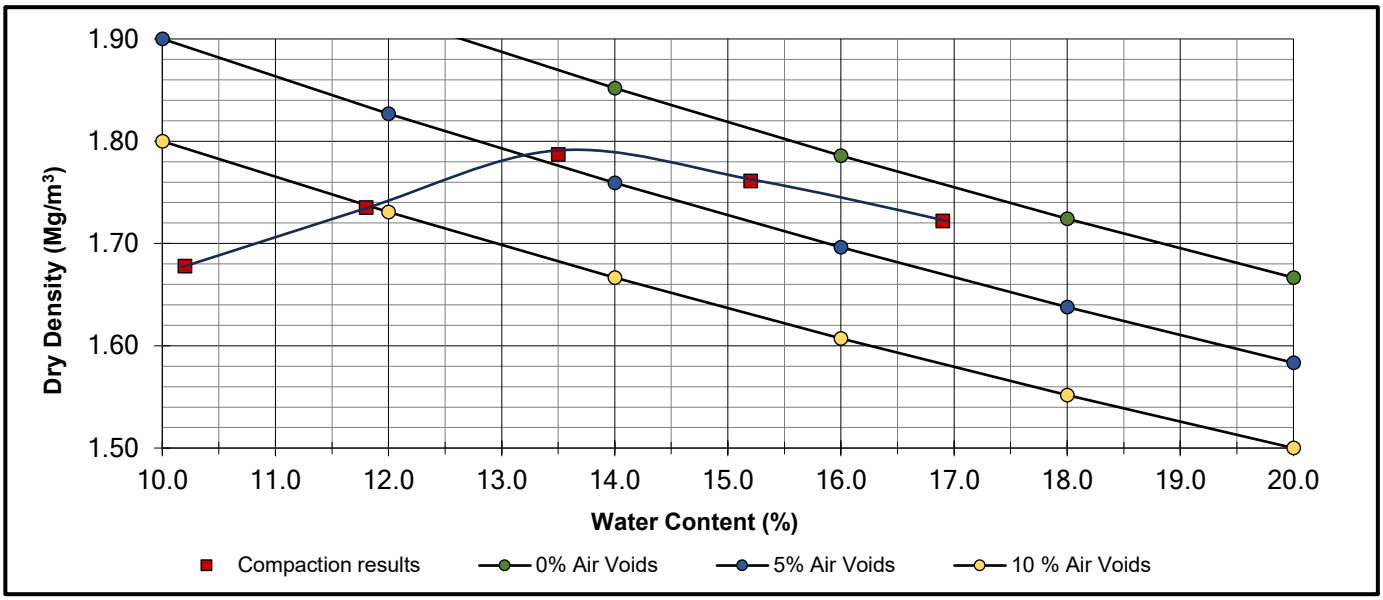
CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/211

SAMPLE LABEL	SW-MG-009	DATE SAMPLED	22-Aug-24
SAMPLE NUMBER	543303	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Made Ground
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	3 %	GRADING ZONE	Zone 4
RETAINED 20mm	14 %	PARTICLE DENSITY	2.50 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	10.2	1.678
2	11.8	1.735
3	13.5	1.787
4	15.2	1.761
5	16.9	1.722



OPTIMUM WATER CONTENT	**14**	(%)
MAXIMUM DRY DENSITY	**1.79**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) SIGNED DATE 16-Sep-24
(Director / Head of Laboratory)

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Bennett Street

Job Number MRN 24005/219
Date of Issue 21 September 2024

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

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

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

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PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

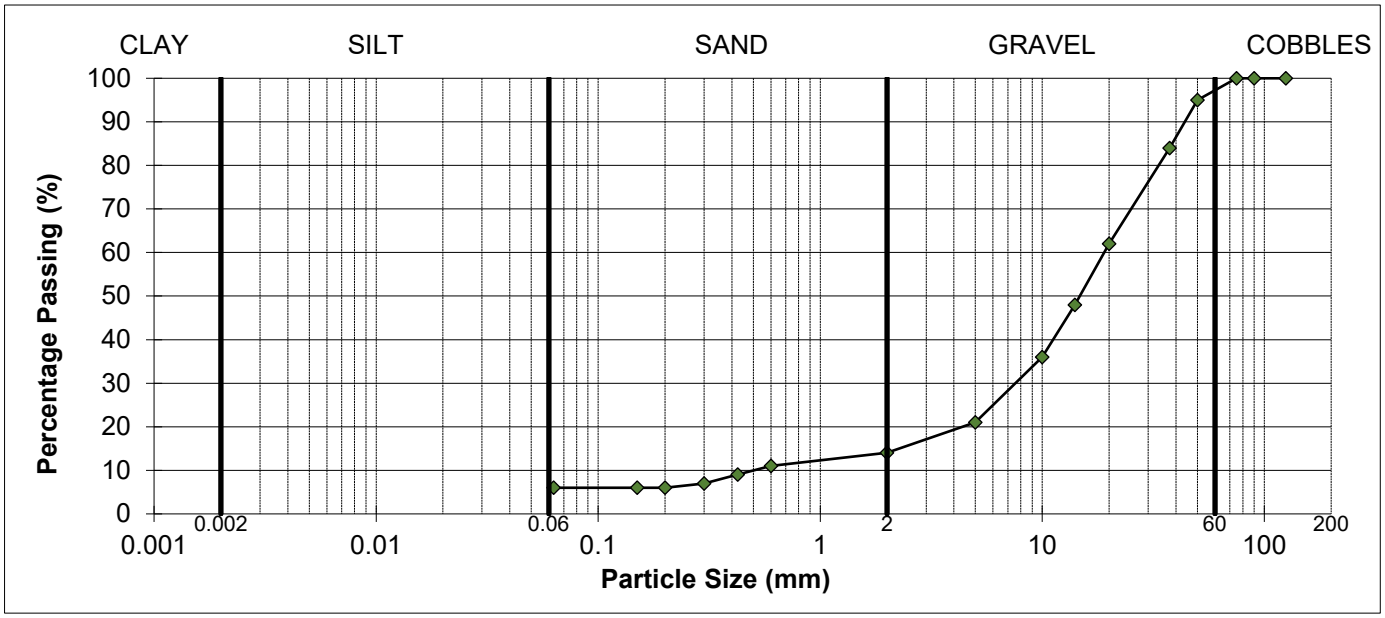
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/219

SAMPLE LABEL	SW-CRUSH-005	DATE SAMPLED	22-Aug-24
LAB SAMPLE No	543301	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	21	10-45
90	100	80-100	2	14	
75	100	65-100	0.6	11	0-25
50	95		0.425	9	
37.5	84	45-100	0.3	7	
20	62		0.2	6	
14	48		0.15	6	
10	36	15-60	0.063	6	0-12



SOIL FRACTIONS			
COBBLES	3%	SAND	8%
GRAVEL	84%	SILT / CLAY	6%

As received water content	7.4%

REMARKS

Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 21-Sep-24

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
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PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

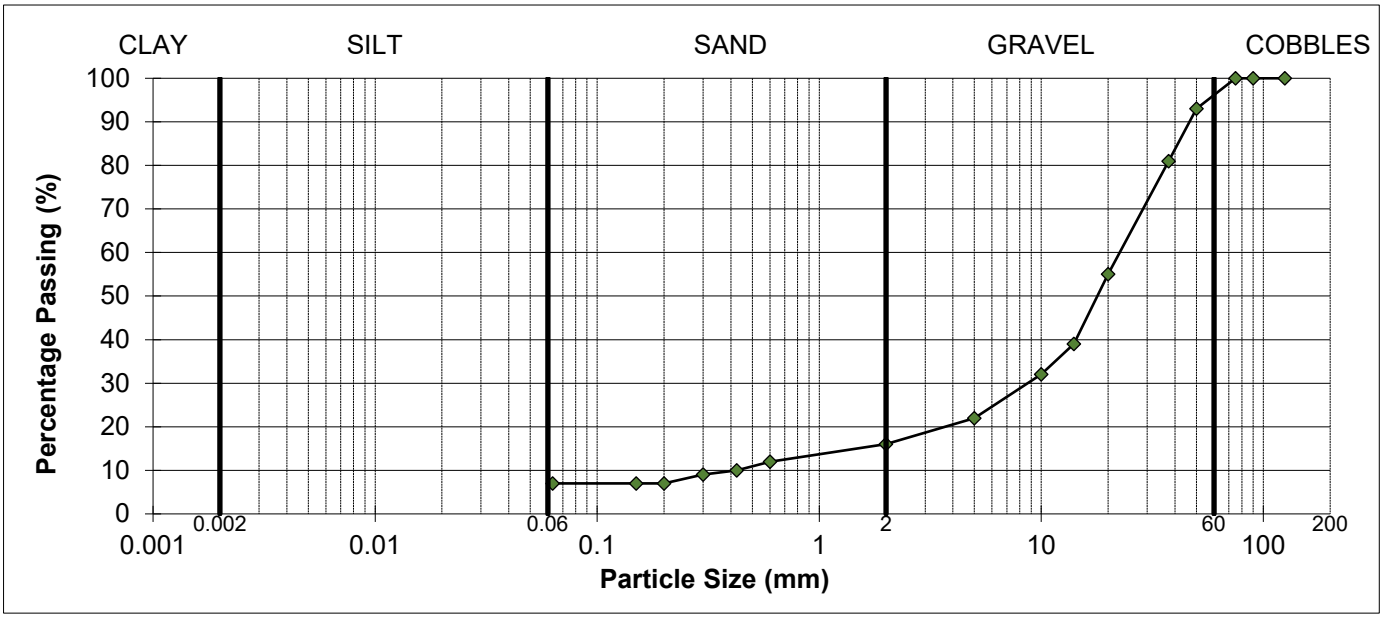
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/219

SAMPLE LABEL	SW-CRUSH-006	DATE SAMPLED	22-Aug-24
LAB SAMPLE No	543402	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	22	10-45
90	100	80-100	2	16	
75	100	65-100	0.6	12	0-25
50	93		0.425	10	
37.5	81	45-100	0.3	9	
20	55		0.2	7	
14	39		0.15	7	
10	32	15-60	0.063	7	0-12



SOIL FRACTIONS			
COBBLES	4%	SAND	9%
GRAVEL	81%	SILT / CLAY	7%

As received water content	6.1%

REMARKS
Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 21-Sep-24

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

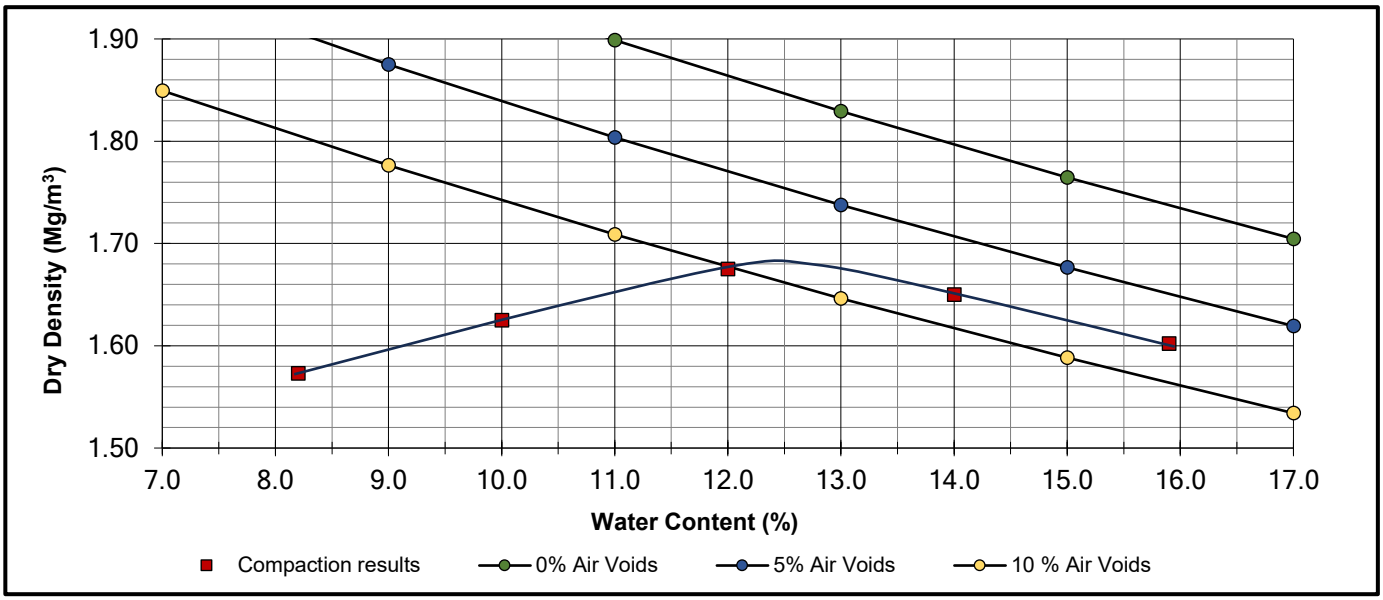
CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/219

SAMPLE LABEL	SW-CRUSH-005	DATE SAMPLED	22-Aug-24
SAMPLE NUMBER	543301	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	16 %	GRADING ZONE	Zone X
RETAINED 20mm	38 %	PARTICLE DENSITY	2.40 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	8.2	1.573
2	10.0	1.625
3	12.0	1.675
4	14.0	1.650
5	15.9	1.602



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.68**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) SIGNED DATE 21-Sep-24
(Director / Head of Laboratory)

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DRY DENSITY/WATER CONTENT RELATIONSHIP 4.5kg RAMMER
BS 1377-2:2022 Cl.11
PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

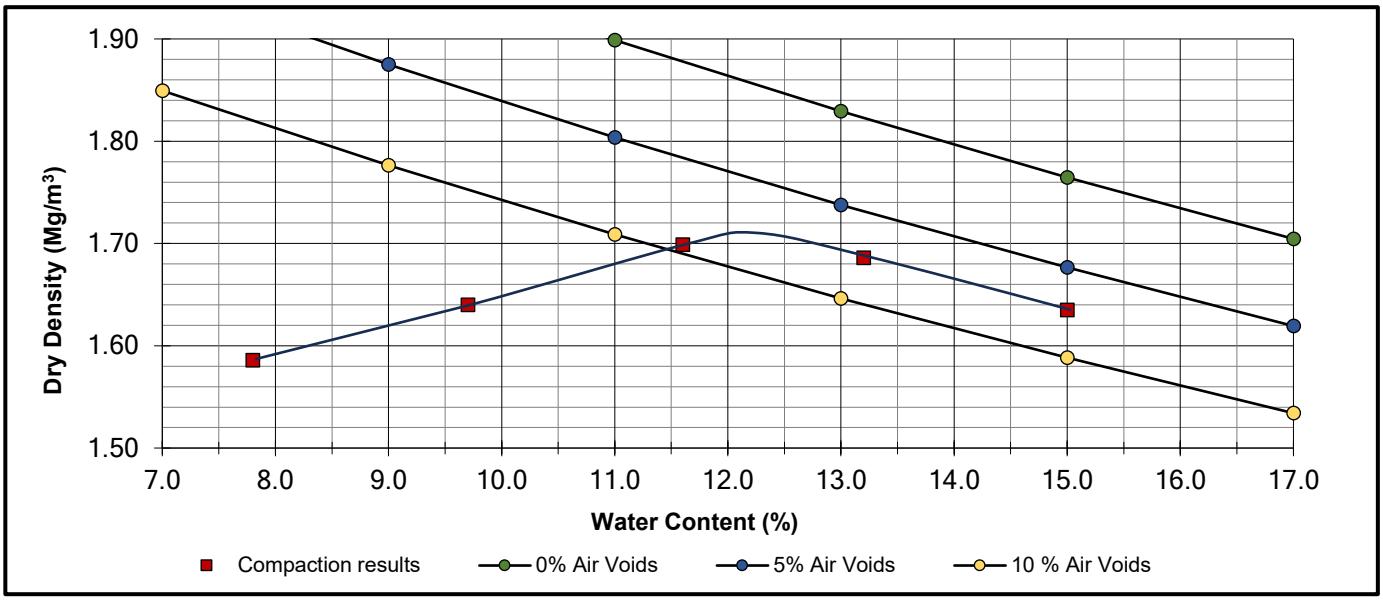
CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/219

SAMPLE LABEL	SW-CRUSH-006	DATE SAMPLED	22-Aug-24
SAMPLE NUMBER	543402	DATE RECEIVED	28-Aug-24
DATE TESTED	29-Aug-24	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site Won
PRE TREATMENT	Air Dried / Separate Batches

RETAINED 37.5mm	19 %	GRADING ZONE	Zone X
RETAINED 20mm	45 %	PARTICLE DENSITY	2.40 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m^3)
1	7.8	1.586
2	9.7	1.640
3	11.6	1.699
4	13.2	1.686
5	15.0	1.635



OPTIMUM WATER CONTENT	**12**	(%)
MAXIMUM DRY DENSITY	**1.71**	(Mg/m^3)

REMARKS

NAME O.P. Davies BA (Hons) SIGNED DATE 21-Sep-24
(Director / Head of Laboratory)

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client E3P

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Bennett Street, Manchester M12 5NZ

Job Number MRN 24005/232
Date of Issue 30 September 2024

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

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

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

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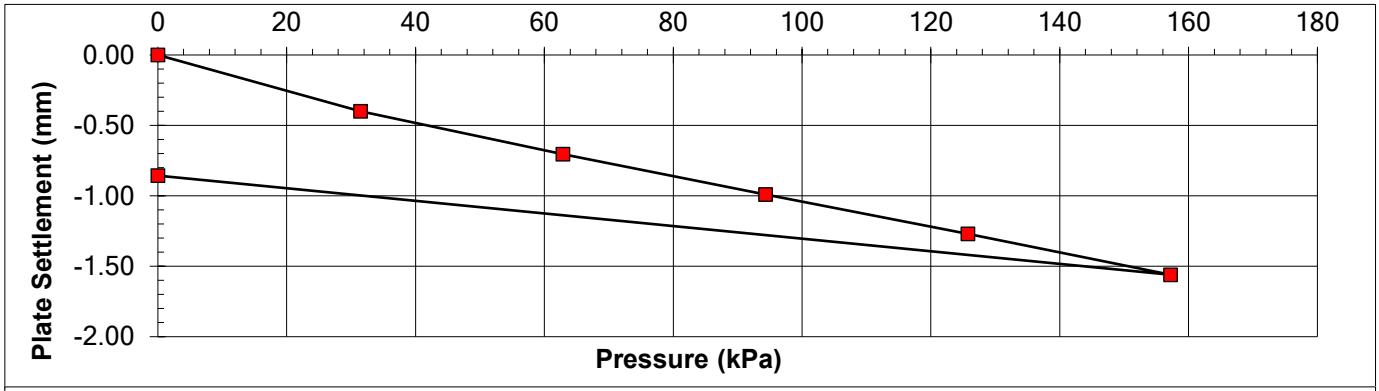
TEST CERTIFICATE

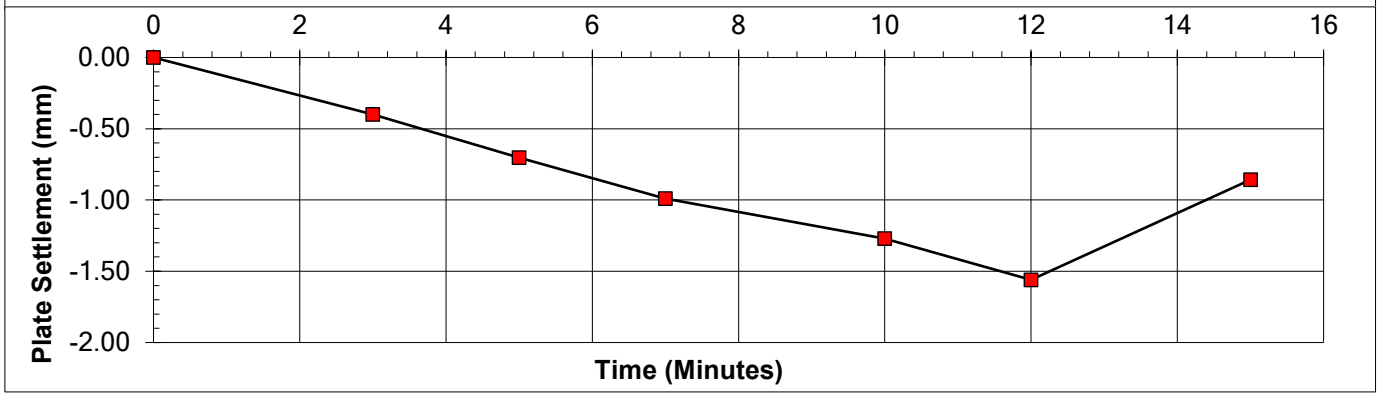
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P				
SITE	Bennett Street, Mcr				
JOB NUMBER	MRN 24005/232				
TEST LOCATION	1 Plot 164		LOADING DEVICE	20 Tonne Enerpac Jack	
TEST DATE	27-Sep-24		PLATE SIZE (mm)	450 diameter	
TEST DEPTH	Surface		REACTION LOAD USED	Site Plant	
MATERIAL UNDER TEST	Crush		MOISTURE CONTENT	Not Required	

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4488	4377	4544	4470	0.00	0.00	0.0
4446	4340	4503	4430	-0.40	5.00	31.4
4418	4307	4473	4399	-0.70	10.00	62.9
4390	4274	4448	4371	-0.99	15.00	94.3
4358	4243	4427	4343	-1.27	20.00	125.8
4325	4216	4400	4314	-1.56	25.00	157.2
4399	4287	4466	4384	-0.86	0.00	0.0





Pressure at 1.25 mm deflexion =	124	kPa
Modulus of subgrade reaction (k) =	99	MPa/m
Equivalent 762 mm plate reaction =	62	MPa/m
Equivalent CBR =	12.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

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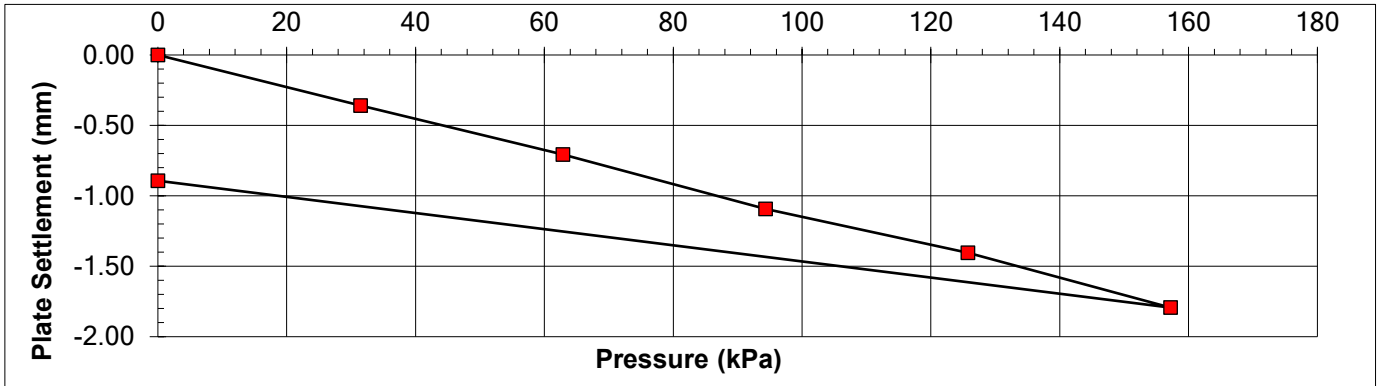
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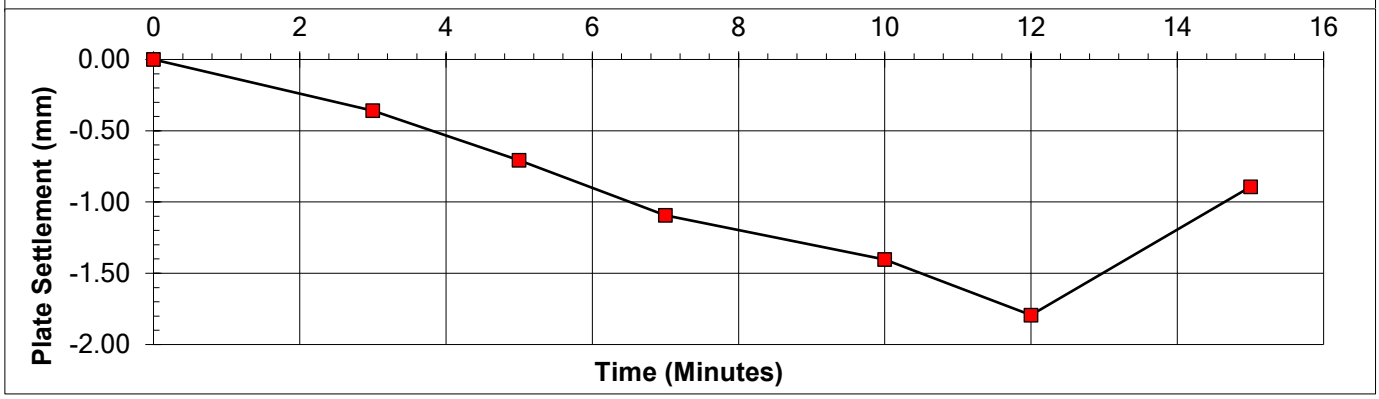
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P		
SITE	Bennett Street, Mcr		
JOB NUMBER	MRN 24005/232		
TEST LOCATION	2 Plot 163/162	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4524	4414	4496	4478	0.00	0.00	0.0
4492	4371	4463	4442	-0.36	5.00	31.4
4459	4327	4436	4407	-0.71	10.00	62.9
4426	4288	4392	4369	-1.09	15.00	94.3
4391	4259	4363	4338	-1.40	20.00	125.8
4352	4218	4326	4299	-1.79	25.00	157.2
4441	4297	4428	4389	-0.89	0.00	0.0





Pressure at 1.25 mm deflexion =	110	kPa
Modulus of subgrade reaction (k) =	88	MPa/m
Equivalent 762 mm plate reaction =	55	MPa/m
Equivalent CBR =	10.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

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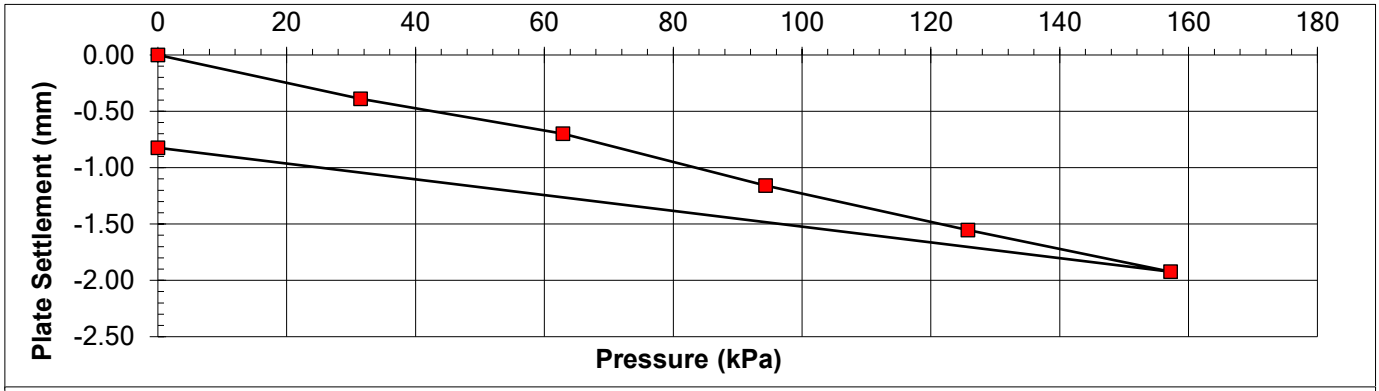
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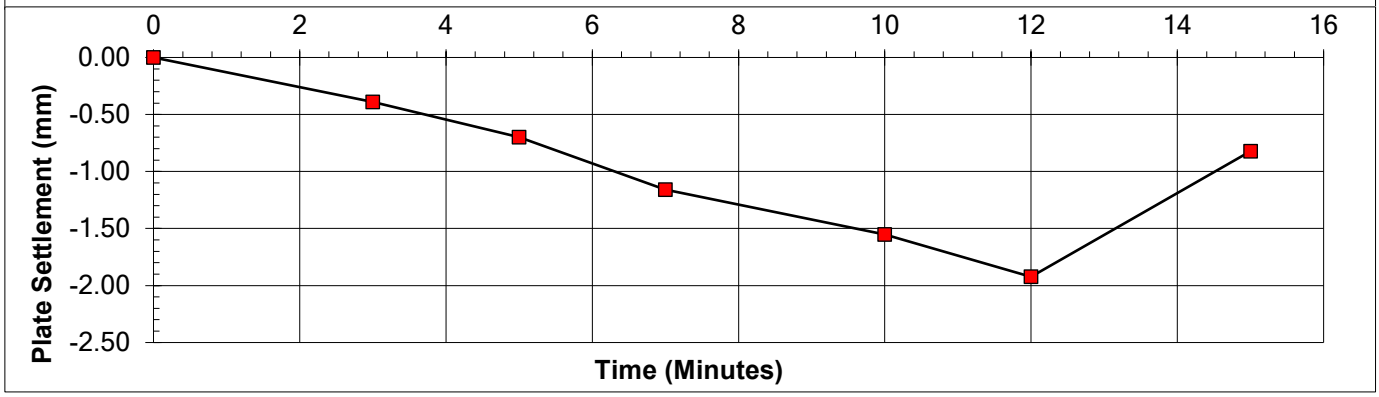
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P		
SITE	Bennett Street, Mcr		
JOB NUMBER	MRN 24005/232		
TEST LOCATION	3 Plot 160/161	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4625	4537	4468	4543	0.00	0.00	0.0
4587	4489	4437	4504	-0.39	5.00	31.4
4560	4456	4404	4473	-0.70	10.00	62.9
4512	4404	4366	4427	-1.16	15.00	94.3
4471	4365	4328	4388	-1.55	20.00	125.8
4438	4326	4289	4351	-1.92	25.00	157.2
4543	4439	4401	4461	-0.82	0.00	0.0





Pressure at 1.25 mm deflexion =	102	kPa
Modulus of subgrade reaction (k) =	81	MPa/m
Equivalent 762 mm plate reaction =	51	MPa/m
Equivalent CBR =	8.7	%

REMARKS

SIGNED

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(Laboratory Manager)

DATE 30-Sep-24

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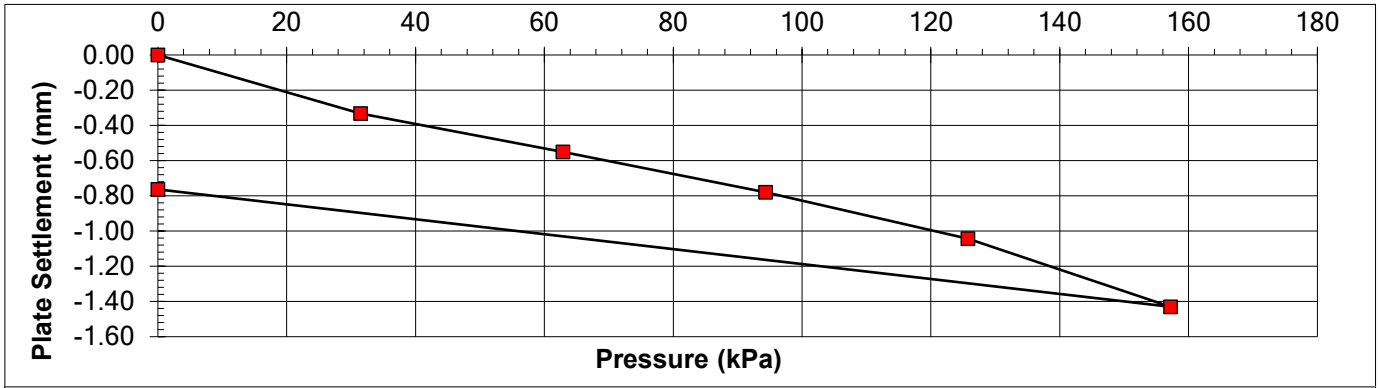
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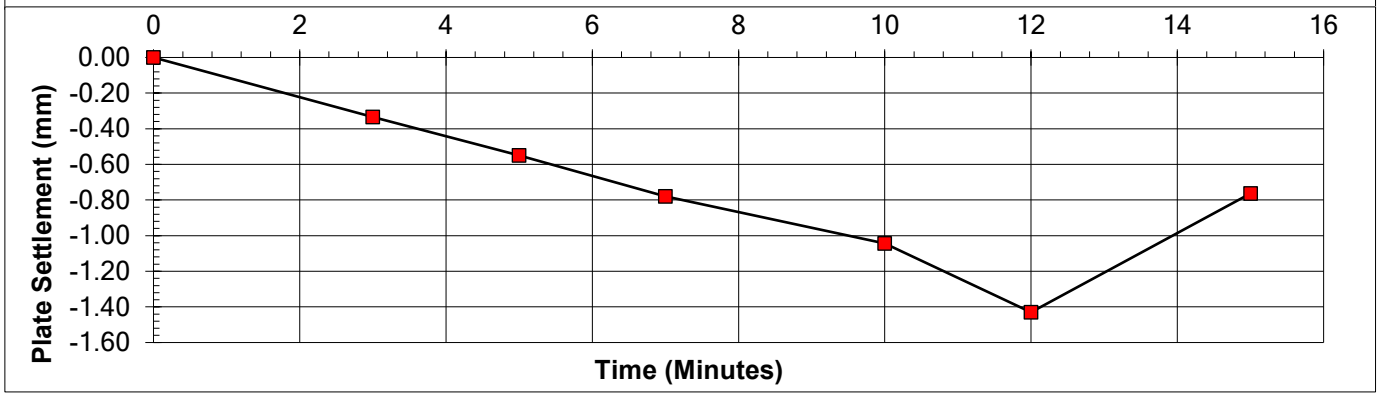
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P		
SITE	Bennett Street, Mcr		
JOB NUMBER	MRN 24005/232		
TEST LOCATION	4 Plot 159	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4577	4683	4683	4648	0.00	0.00	0.0
4542	4657	4644	4614	-0.33	5.00	31.4
4520	4639	4619	4593	-0.55	10.00	62.9
4494	4615	4600	4570	-0.78	15.00	94.3
4466	4582	4582	4543	-1.04	20.00	125.8
4430	4547	4537	4505	-1.43	25.00	157.2
4487	4614	4613	4571	-0.76	0.00	0.0





Pressure at 1.25 mm deflexion =	143	kPa
Modulus of subgrade reaction (k) =	114	MPa/m
Equivalent 762 mm plate reaction =	71	MPa/m
Equivalent CBR =	15.6	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

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UKAS TESTING 1580

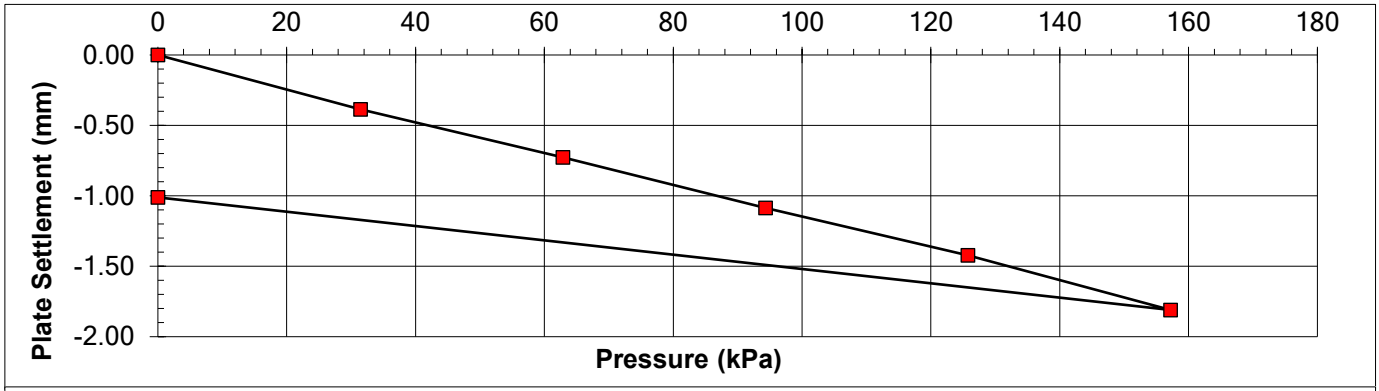
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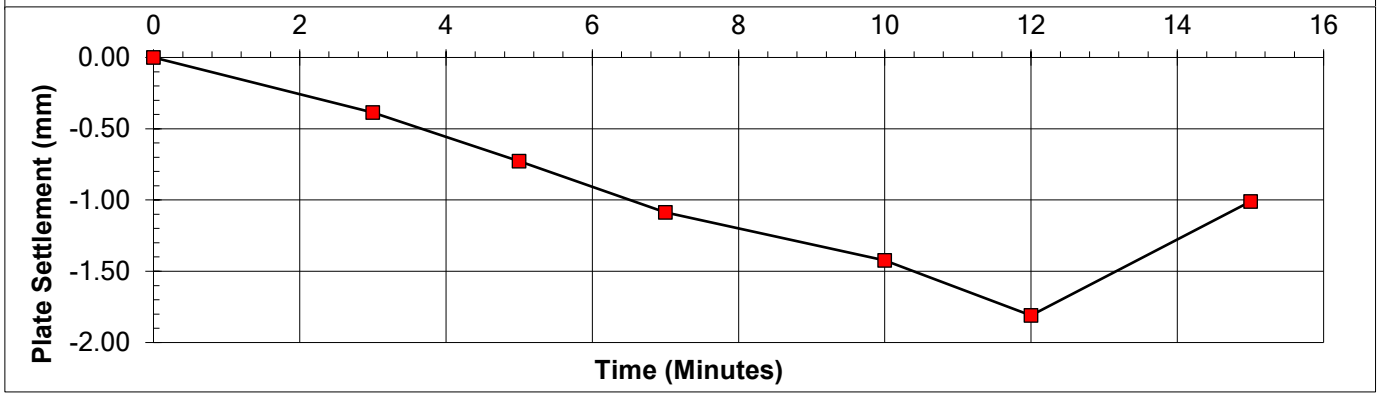
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P		
SITE	Bennett Street, Mcr		
JOB NUMBER	MRN 24005/232		
TEST LOCATION	5 Plot 158	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4591	4603	4544	4579	0.00	0.00	0.0
4546	4571	4505	4541	-0.39	5.00	31.4
4512	4539	4469	4507	-0.73	10.00	62.9
4472	4505	4435	4471	-1.09	15.00	94.3
4431	4473	4407	4437	-1.42	20.00	125.8
4400	4433	4362	4398	-1.81	25.00	157.2
4487	4499	4449	4478	-1.01	0.00	0.0





Pressure at 1.25 mm deflexion =	110	kPa
Modulus of subgrade reaction (k) =	88	MPa/m
Equivalent 762 mm plate reaction =	55	MPa/m
Equivalent CBR =	9.9	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

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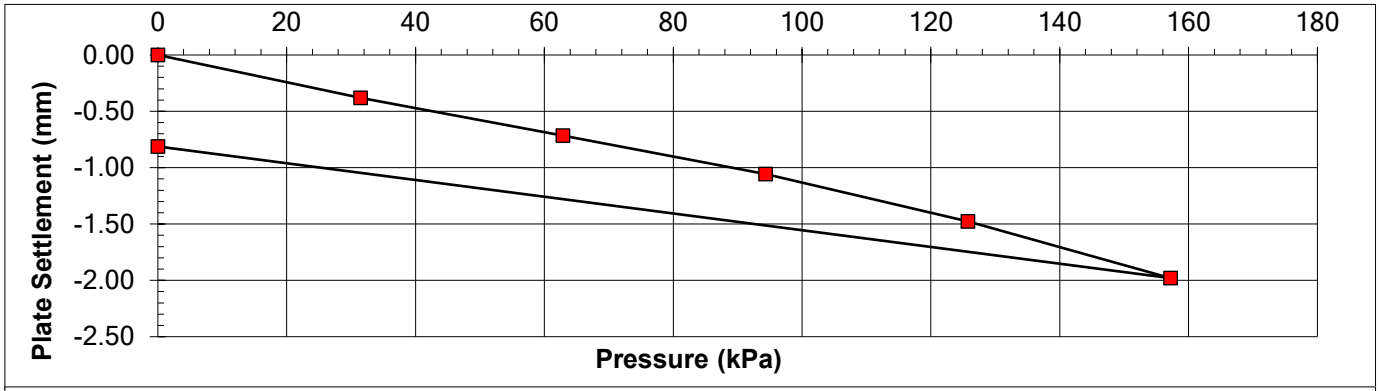
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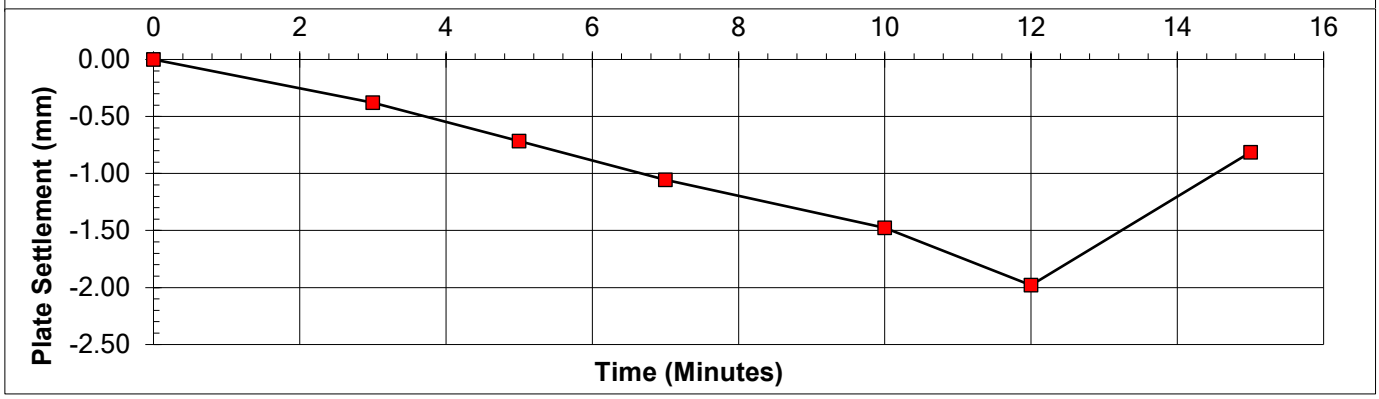
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P		
SITE	Bennett Street, Mcr		
JOB NUMBER	MRN 24005/232		
TEST LOCATION	6 Plot 166/167	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4516	4641	4568	4575	0.00	0.00	0.0
4482	4603	4526	4537	-0.38	5.00	31.4
4447	4566	4497	4503	-0.72	10.00	62.9
4411	4531	4466	4469	-1.06	15.00	94.3
4354	4491	4437	4427	-1.48	20.00	125.8
4308	4436	4387	4377	-1.98	25.00	157.2
4417	4566	4498	4494	-0.81	0.00	0.0





Pressure at 1.25 mm deflexion =	109	kPa
Modulus of subgrade reaction (k) =	87	MPa/m
Equivalent 762 mm plate reaction =	54	MPa/m
Equivalent CBR =	9.8	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

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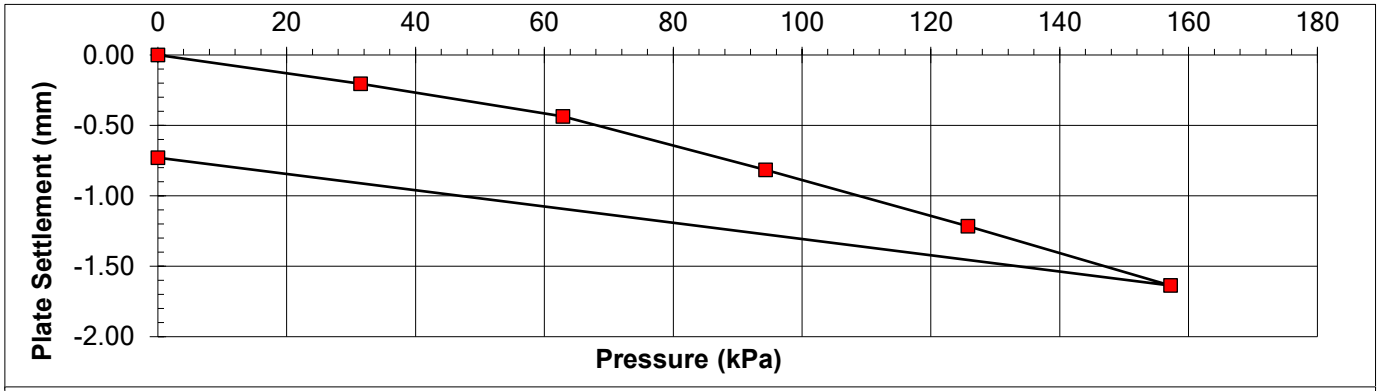
UKAS TESTING 1580

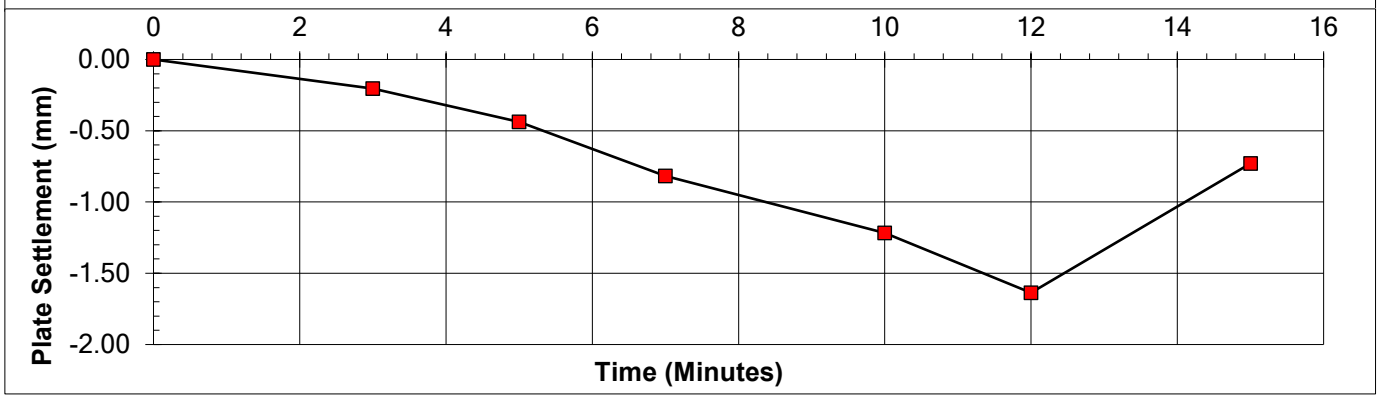
TEST CERTIFICATE

PLATE INCREMENTAL LOAD TEST
BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P		
SITE	Bennett Street, Mcr		
JOB NUMBER	MRN 24005/232		
TEST LOCATION	7 Road 4 10m	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4511	4529	4539	4526	0.00	0.00	0.0
4488	4508	4522	4506	-0.20	5.00	31.4
4466	4479	4503	4483	-0.44	10.00	62.9
4426	4448	4460	4445	-0.82	15.00	94.3
4391	4407	4416	4405	-1.22	20.00	125.8
4352	4365	4371	4363	-1.64	25.00	157.2
4436	4458	4466	4453	-0.73	0.00	0.0





Pressure at 1.25 mm deflexion =	128	kPa
Modulus of subgrade reaction (k) =	103	MPa/m
Equivalent 762 mm plate reaction =	64	MPa/m
Equivalent CBR =	13.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

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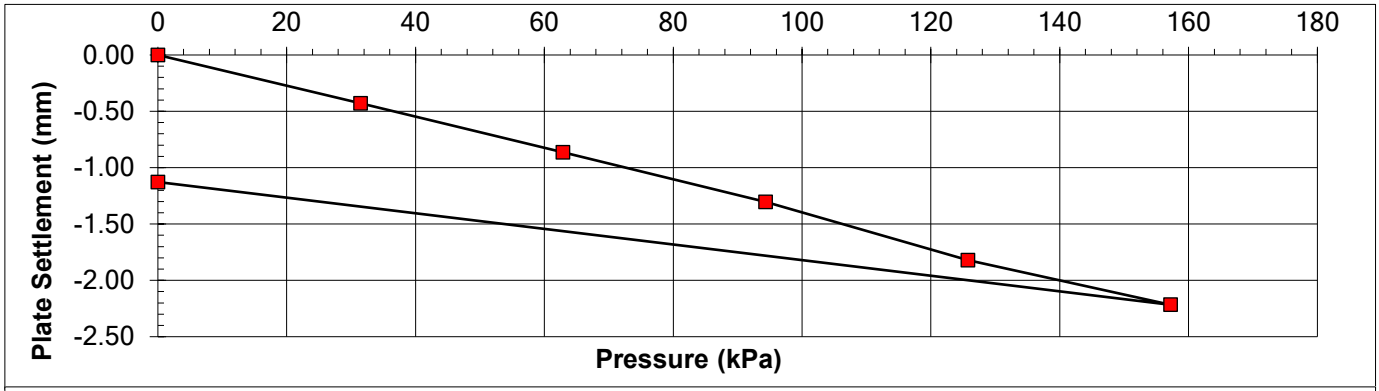
TEST CERTIFICATE

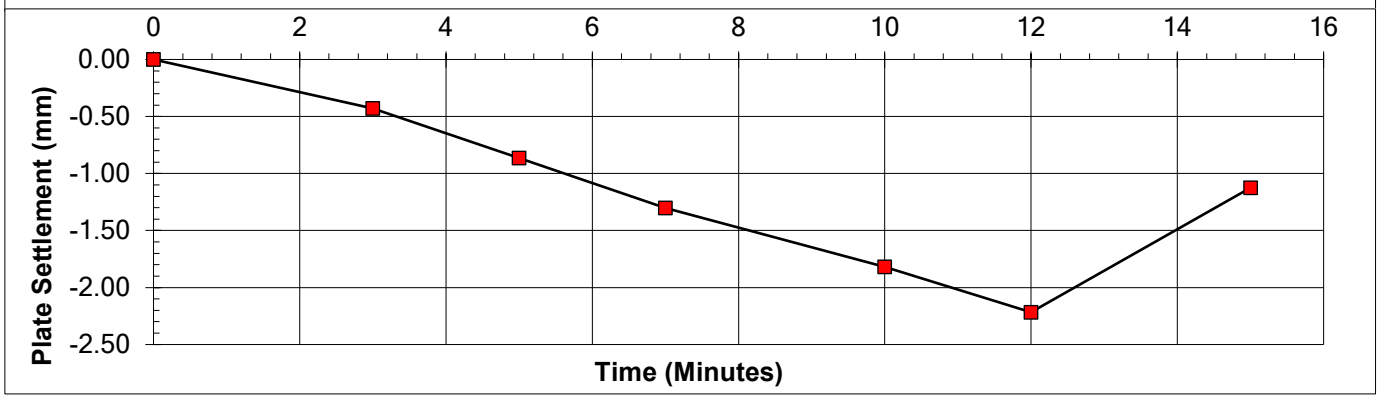
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P		
SITE	Bennett Street, Mcr		
JOB NUMBER	MRN 24005/232		
TEST LOCATION	8 Road 4 20m	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4561	4496	4515	4524	0.00	0.00	0.0
4522	4446	4475	4481	-0.43	5.00	31.4
4477	4400	4436	4438	-0.86	10.00	62.9
4436	4359	4386	4394	-1.30	15.00	94.3
4388	4305	4333	4342	-1.82	20.00	125.8
4350	4261	4296	4302	-2.22	25.00	157.2
4458	4361	4415	4411	-1.13	0.00	0.0





Pressure at 1.25 mm deflexion =	91	kPa
Modulus of subgrade reaction (k) =	72	MPa/m
Equivalent 762 mm plate reaction =	45	MPa/m
Equivalent CBR =	7.1	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

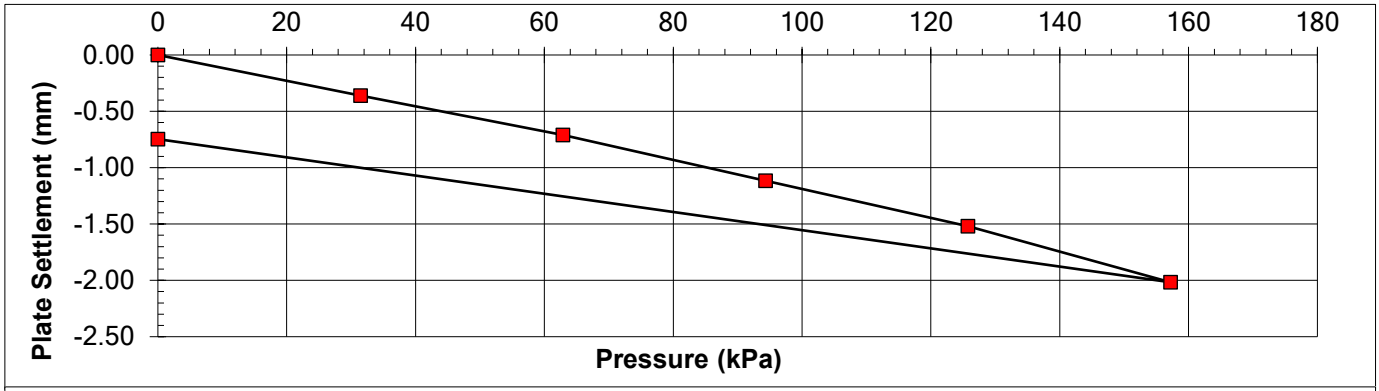
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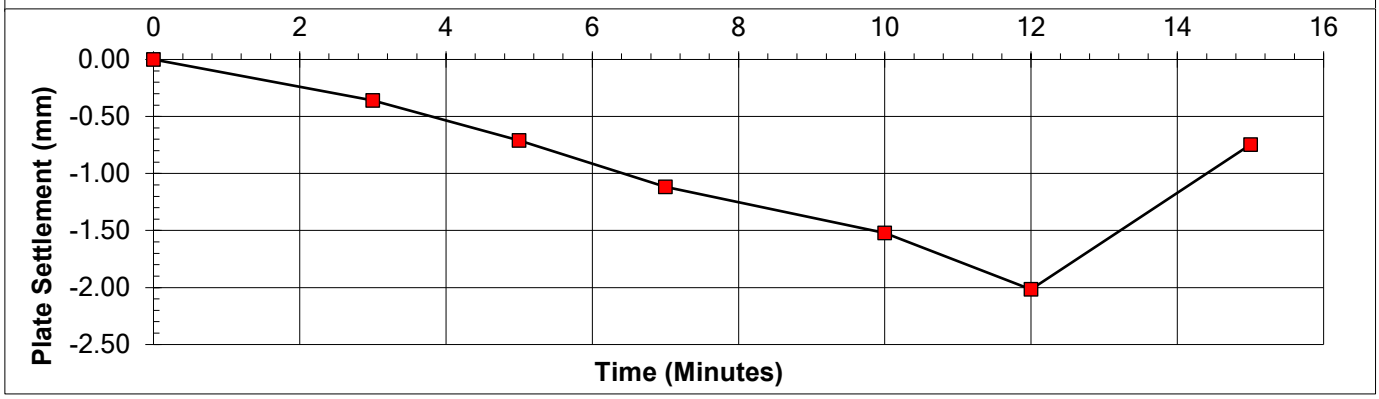
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P		
SITE	Bennett Street, Mcr		
JOB NUMBER	MRN 24005/232		
TEST LOCATION	9 Road 4 30m	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4734	4732	4744	4737	0.00	0.00	0.0
4700	4691	4711	4701	-0.36	5.00	31.4
4665	4655	4677	4666	-0.71	10.00	62.9
4623	4617	4635	4625	-1.12	15.00	94.3
4588	4571	4595	4585	-1.52	20.00	125.8
4543	4525	4537	4535	-2.02	25.00	157.2
4669	4659	4658	4662	-0.75	0.00	0.0





Pressure at 1.25 mm deflexion =	105	kPa
Modulus of subgrade reaction (k) =	84	MPa/m
Equivalent 762 mm plate reaction =	52	MPa/m
Equivalent CBR =	9.1	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

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DUKINFIELD, CHESHIRE SK16 4QX
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UKAS TESTING 1580

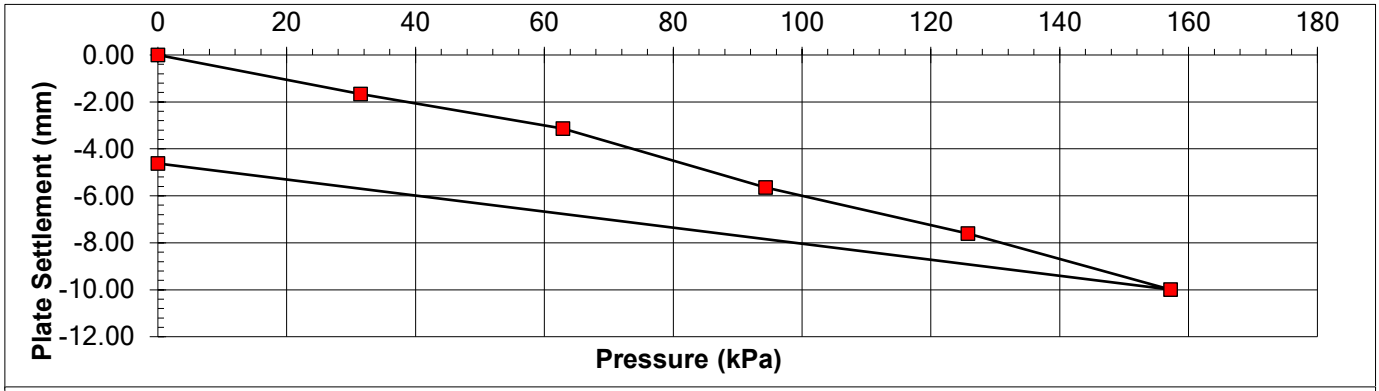
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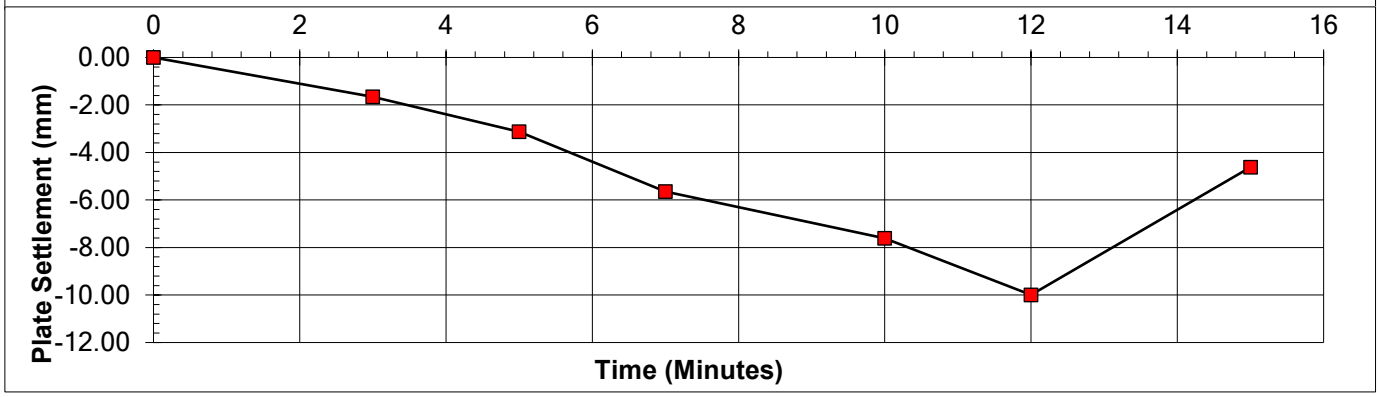
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P		
SITE	Bennett Street, Mcr		
JOB NUMBER	MRN 24005/232		
TEST LOCATION	10 Road 4 40m	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4397	4518	4456	4457	0.00	0.00	0.0
4240	4344	4290	4291	-1.66	5.00	31.4
4092	4192	4148	4144	-3.13	10.00	62.9
3886	3921	3870	3892	-5.65	15.00	94.3
3676	3740	3671	3696	-7.61	20.00	125.8
3451	3485	3437	3458	-9.99	25.00	157.2
3949	4089	3946	3995	-4.62	0.00	0.0





Pressure at 1.25 mm deflexion =	24	kPa
Modulus of subgrade reaction (k) =	19	MPa/m
Equivalent 762 mm plate reaction =	12	MPa/m
Equivalent CBR =	0.7	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

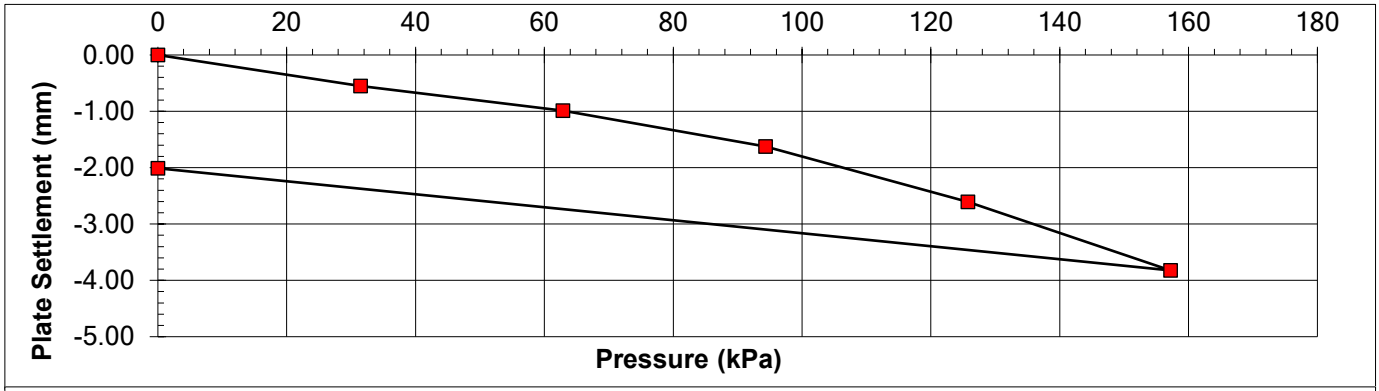
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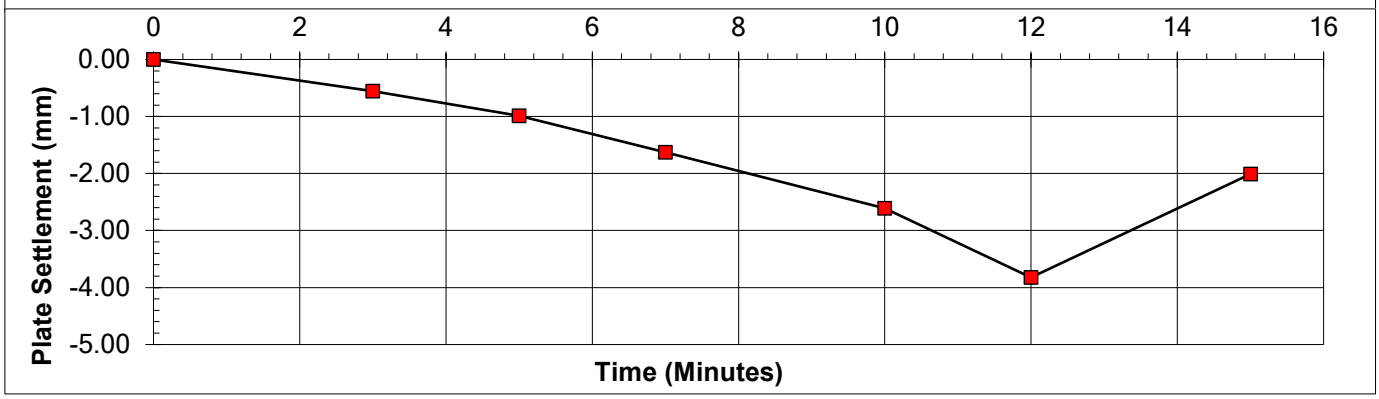
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P				
SITE	Bennett Street, Mcr				
JOB NUMBER	MRN 24005/232				
TEST LOCATION	11 Road 4 50m	LOADING DEVICE	20 Tonne Enerpac Jack		
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4519	4433	4504	4485	0.00	0.00	0.0
4462	4371	4457	4430	-0.55	5.00	31.4
4425	4325	4410	4387	-0.99	10.00	62.9
4366	4244	4358	4323	-1.63	15.00	94.3
4294	4129	4250	4224	-2.61	20.00	125.8
4191	4003	4115	4103	-3.82	25.00	157.2
4318	4226	4309	4284	-2.01	0.00	0.0





Pressure at 1.25 mm deflexion =	76	kPa
Modulus of subgrade reaction (k) =	61	MPa/m
Equivalent 762 mm plate reaction =	38	MPa/m
Equivalent CBR =	5.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

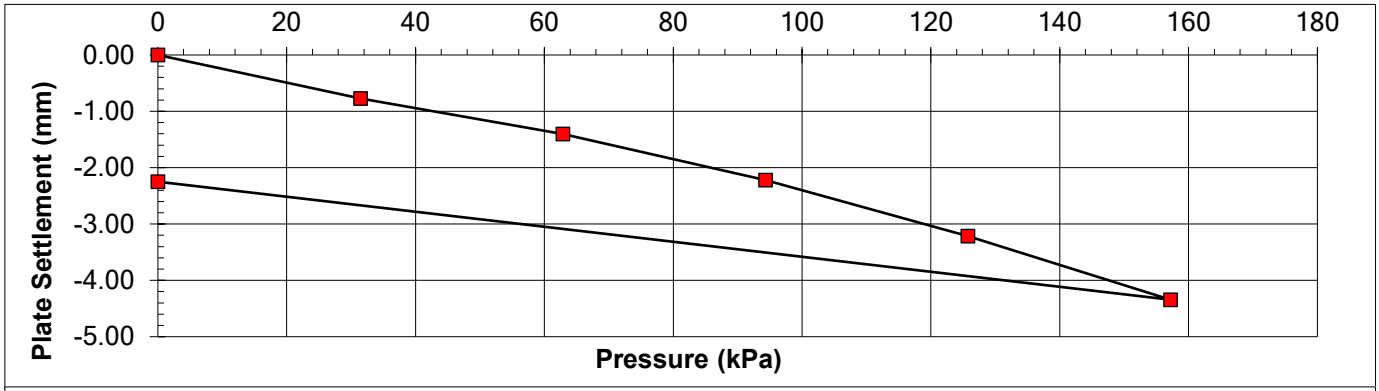
TEST CERTIFICATE

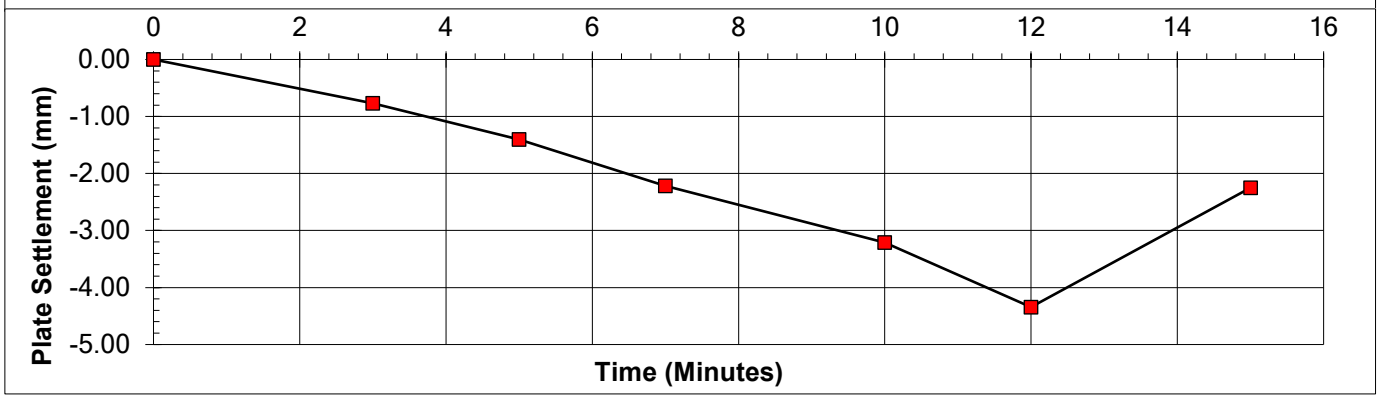
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P		
SITE	Bennett Street, Mcr		
JOB NUMBER	MRN 24005/232		
TEST LOCATION	12 Road 4 60m	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4555	4389	4525	4490	0.00	0.00	0.0
4489	4301	4448	4413	-0.77	5.00	31.4
4426	4236	4386	4349	-1.40	10.00	62.9
4360	4148	4295	4268	-2.22	15.00	94.3
4261	4051	4193	4168	-3.21	20.00	125.8
4153	3931	4082	4055	-4.34	25.00	157.2
4341	4158	4295	4265	-2.25	0.00	0.0





Pressure at 1.25 mm deflexion =	55	kPa
Modulus of subgrade reaction (k) =	44	MPa/m
Equivalent 762 mm plate reaction =	28	MPa/m
Equivalent CBR =	3.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

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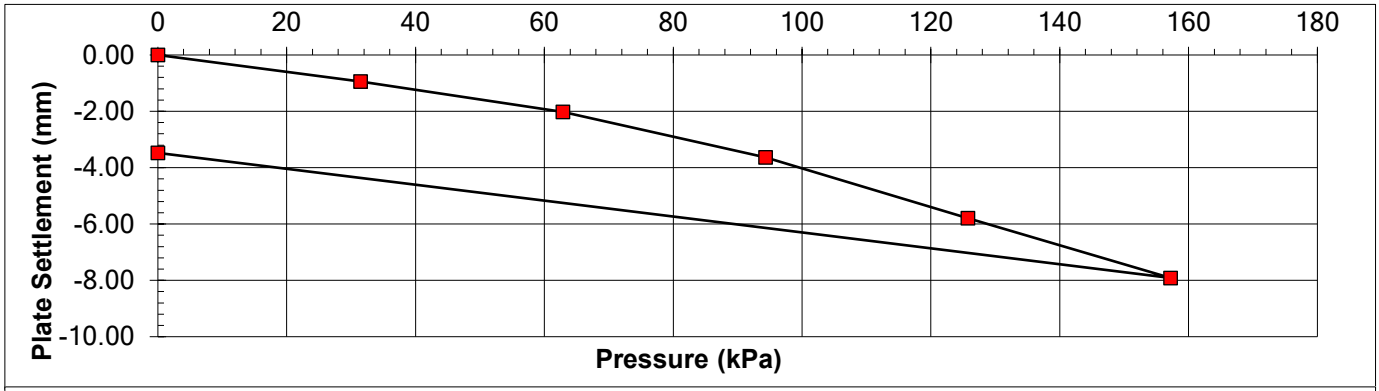
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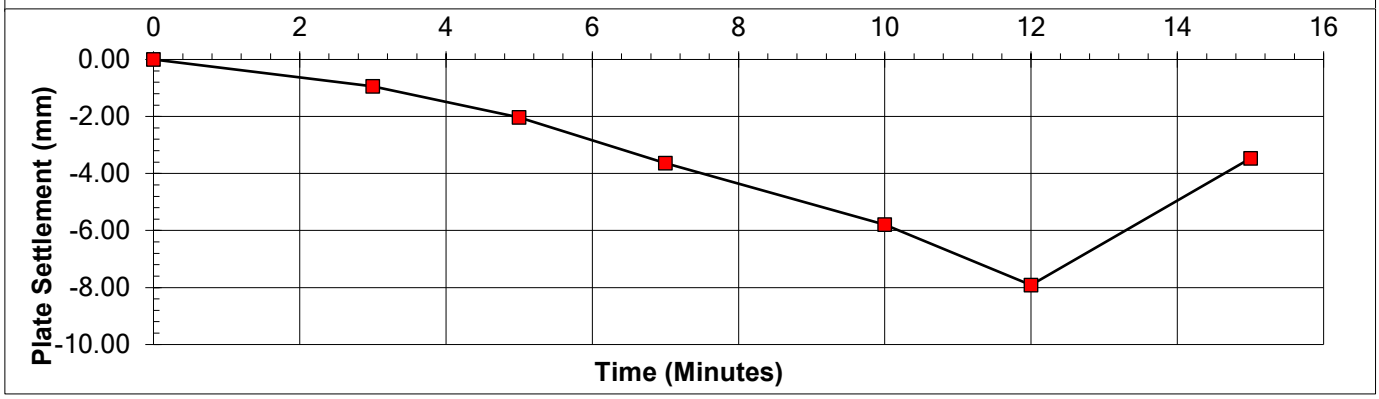
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P		
SITE	Bennett Street, Mcr		
JOB NUMBER	MRN 24005/232		
TEST LOCATION	13 Road 4 70m	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4375	4399	4437	4404	0.00	0.00	0.0
4270	4300	4359	4310	-0.94	5.00	31.4
4187	4180	4236	4201	-2.03	10.00	62.9
4051	3991	4077	4040	-3.64	15.00	94.3
3808	3779	3885	3824	-5.80	20.00	125.8
3622	3544	3671	3612	-7.91	25.00	157.2
4066	4059	4044	4056	-3.47	0.00	0.0





Pressure at 1.25 mm deflexion =	40	kPa
Modulus of subgrade reaction (k) =	32	MPa/m
Equivalent 762 mm plate reaction =	20	MPa/m
Equivalent CBR =	1.8	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

MURRAY RIX

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DUKINFIELD, CHESHIRE SK16 4QX
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UKAS TESTING 1580

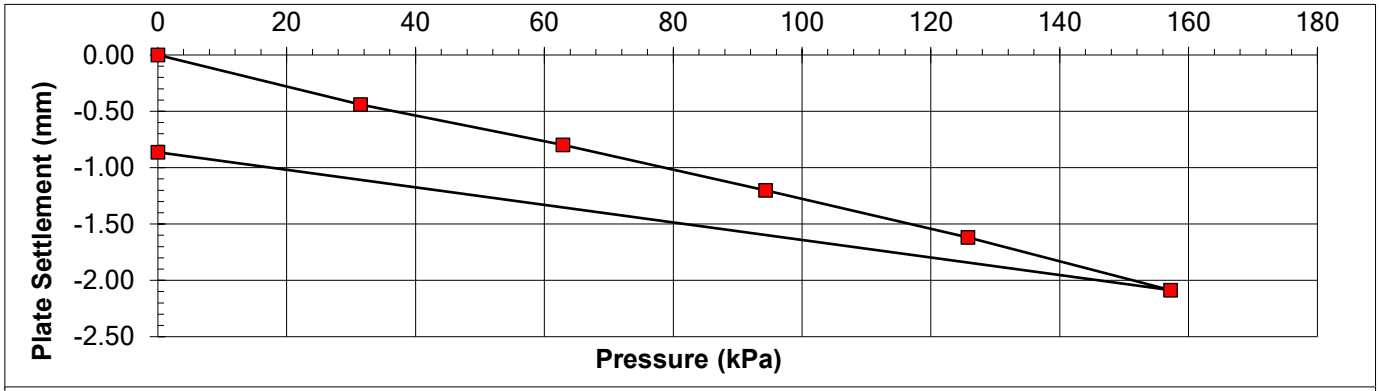
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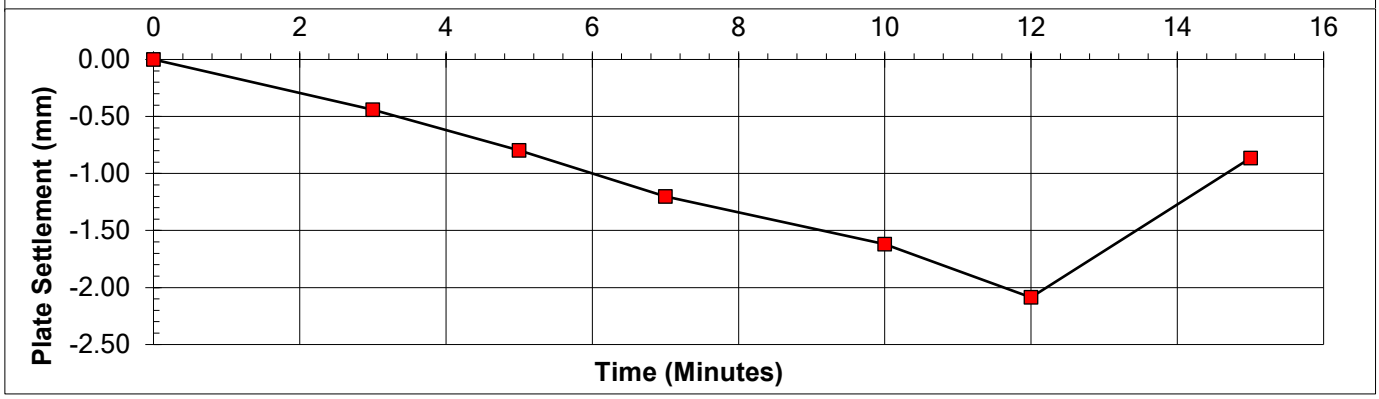
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	E3P		
SITE	Bennett Street, Mcr		
JOB NUMBER	MRN 24005/232		
TEST LOCATION	14 Plot 58 Re-Test	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	27-Sep-24	PLATE SIZE (mm)	450 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4624	4547	4531	4567	0.00	0.00	0.0
4581	4501	4488	4523	-0.44	5.00	31.4
4548	4466	4449	4488	-0.80	10.00	62.9
4503	4433	4406	4447	-1.20	15.00	94.3
4465	4390	4361	4405	-1.62	20.00	125.8
4417	4348	4311	4359	-2.09	25.00	157.2
4547	4459	4437	4481	-0.86	0.00	0.0





Pressure at 1.25 mm deflexion =	98	kPa
Modulus of subgrade reaction (k) =	78	MPa/m
Equivalent 762 mm plate reaction =	49	MPa/m
Equivalent CBR =	8.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 30-Sep-24

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client e3p

Address Taylor Road
Trafford Park
Urmston
Manchester
M41 7JQ

Contract Bennett Street

Job Number MRN 24005/301
Date of Issue 26 November 2024

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

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

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

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M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

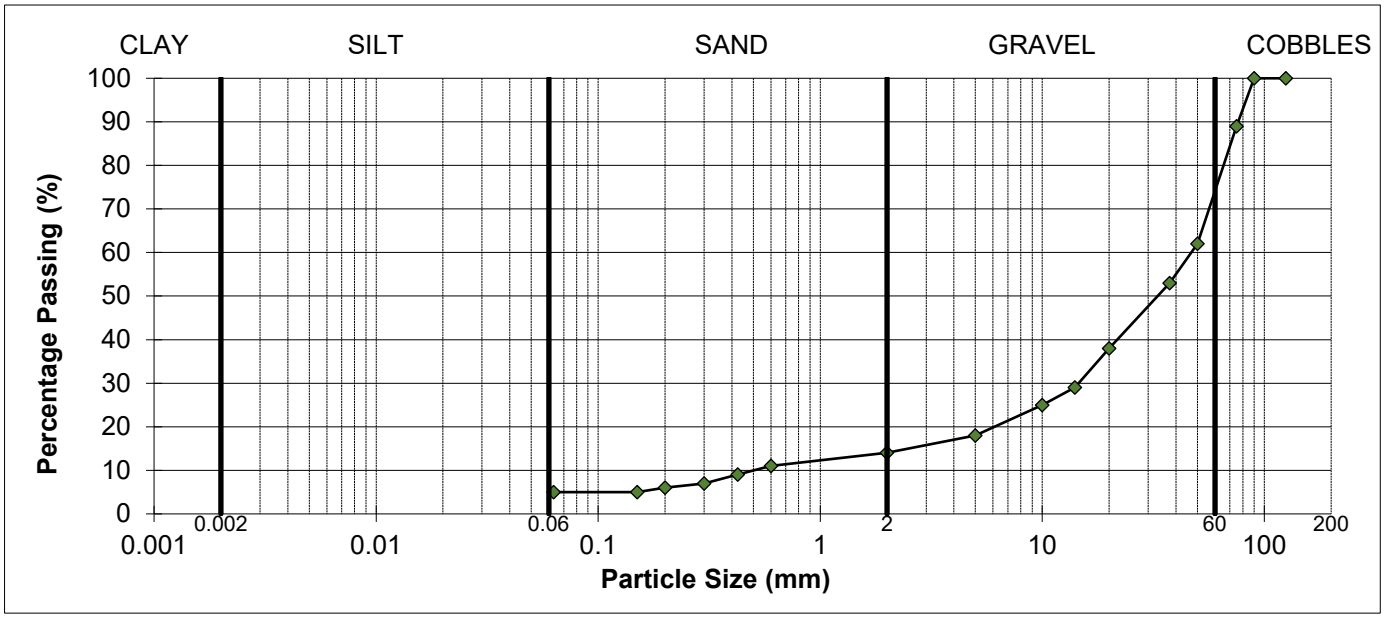
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	e3p
SITE	Bennett Street
JOB NUMBER	MRN 24005/301

SAMPLE LABEL	SW-CRUSH-007	DATE SAMPLED	24-Oct-24
LAB SAMPLE No	583901	DATE RECEIVED	30-Oct-24
DATE TESTED	01-Nov-24	SAMPLED BY	Client

MATERIAL	Crush
ADVISED SOURCE	Site Won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	18	10-45
90	100	80-100	2	14	
75	89	65-100	0.6	11	0-25
50	62		0.425	9	
37.5	53	45-100	0.3	7	
20	38		0.2	6	
14	29		0.15	5	
10	25	15-60	0.063	5	0-12



SOIL FRACTIONS			
COBBLES	25%	SAND	9%
GRAVEL	62%	SILT / CLAY	5%

As received water content	9.8%

REMARKS

Sample complies with the advised grading specification for a 6F2 material (SHW, Feb 2017)

SIGNED

NAME O.P. Davies BA (Hons) (Director / Head of Laboratory) DATE 26-Nov-24

LABORATORY REPORT

Contract Number: PSL24/5129

Report Date: 18 July 2024

Client's Reference:

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Stuart Ellis

Contract Title: Bennett Street, Manchester

Date Received: 17/7/2024
Date Commenced: 17/7/2024
Date Completed: 18/7/2024

Notes: **Opinions and Interpretations are outside the UKAS Accreditation**

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

A Watkins (Managing Director)	R Berriman (Associate Director)	S Royle (Laboratory Manager)
L Knight (Assistant Laboratory Manager)	D Nicholson (Senior Technician)	T Watkins (Senior Technician)

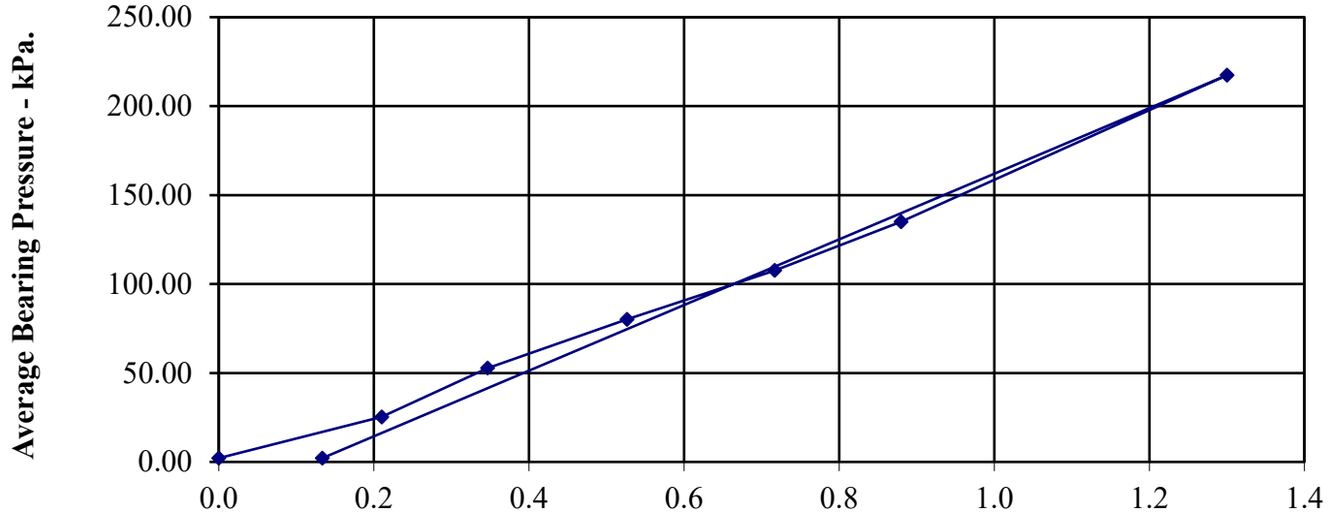
5 – 7 Hexthorpe Road,
Hexthorpe,
Doncaster,
DN4 0AR
Tel: 01302 768098
Email: rberriman@prosoils.co.uk
awatkins@prosoils.co.uk

VERTICAL DEFORMATION TESTS.

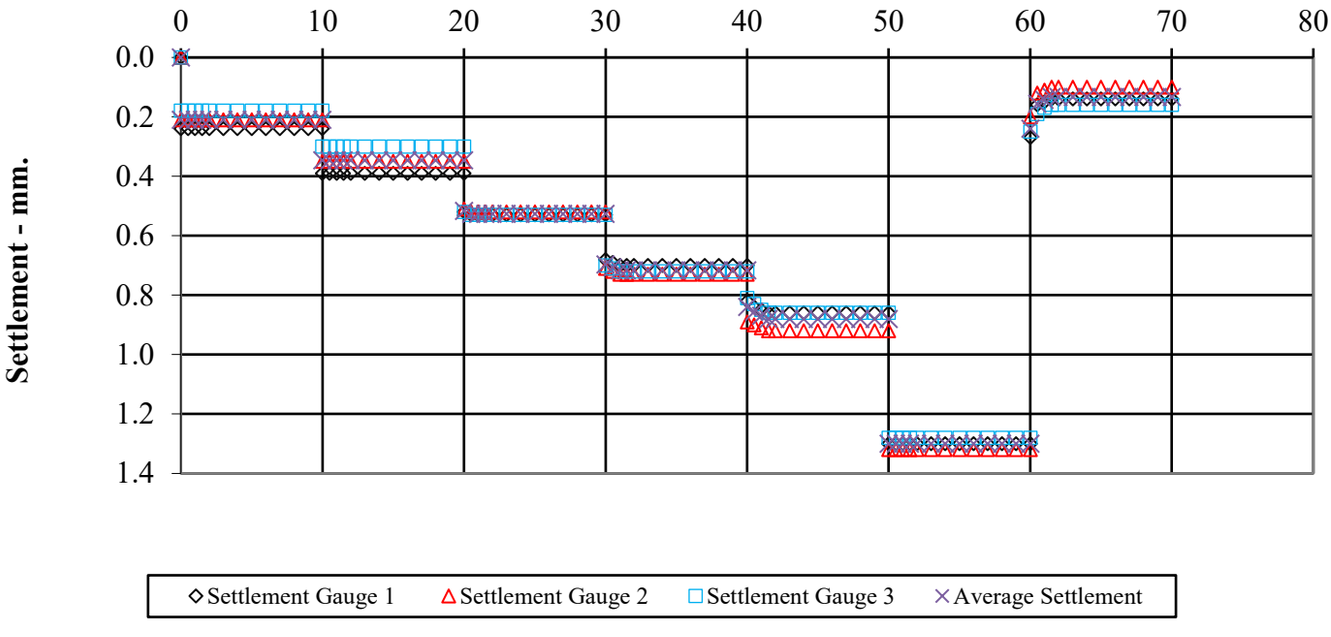
BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP018**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	

Maximum Applied Pressure (kPa):	**217.33**
Maximum Deformation (mm):	**1.30**
Plate Area (m2):	**0.1626**
Description:	**Hardcore**



Time - minutes.



UKAS TESTING 4043	**Bennett Street, Manchester**	**Contract No:**
PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY		**PSL24/5129**
		Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test

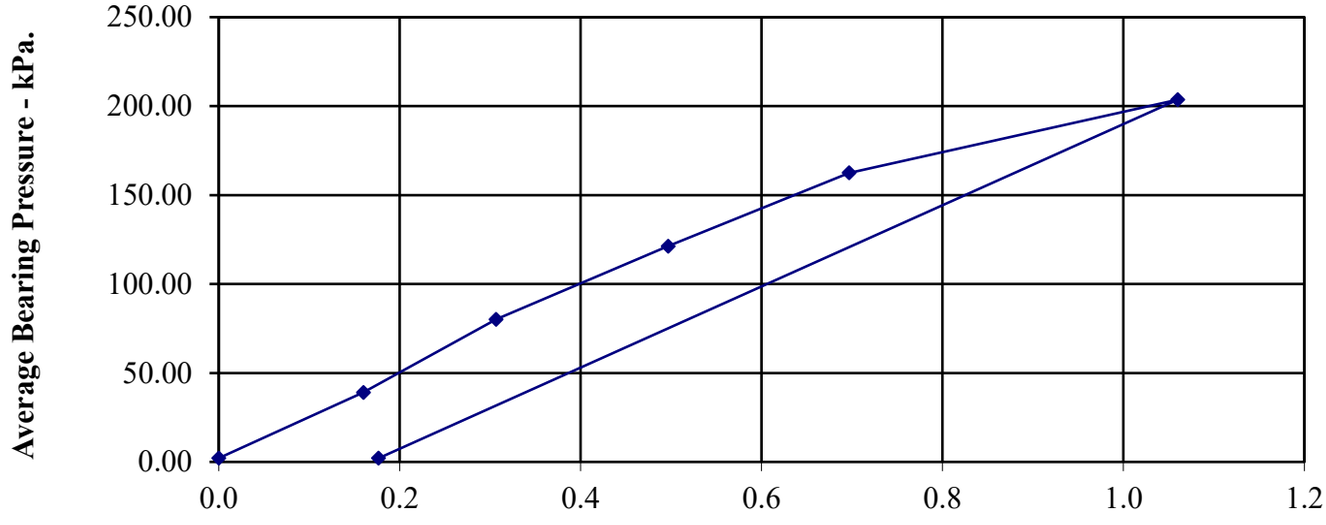
Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
Incorporating IAN 73/06

Date of Test	**17-Jul-24**	
Test Ref	**TP018**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**1.30**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 1.25mm	**140**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**70.6**	**kN/m^2/mm**
CBR Value	**15.4**	**%**

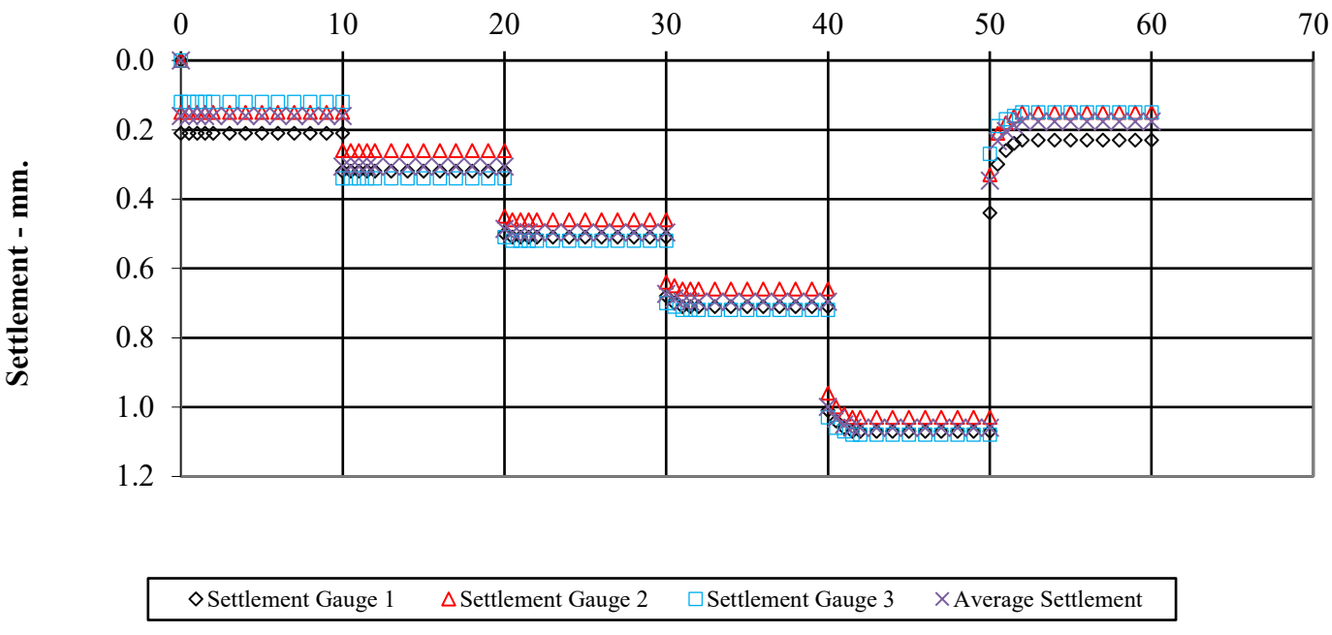
VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP19**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	
Maximum Applied Pressure (kPa):		**203.61**	
Maximum Deformation (mm):		**1.06**	
Plate Area (m2):		**0.1626**	
Description:		**Hardcore**	



Time - minutes.



UKAS TESTING 4043 / PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY	**Bennett Street, Manchester**	**Contract No:** PSL24/5129 **Client Ref:**

Calculation of Equivalent CBR Value from Plate Bearing Test

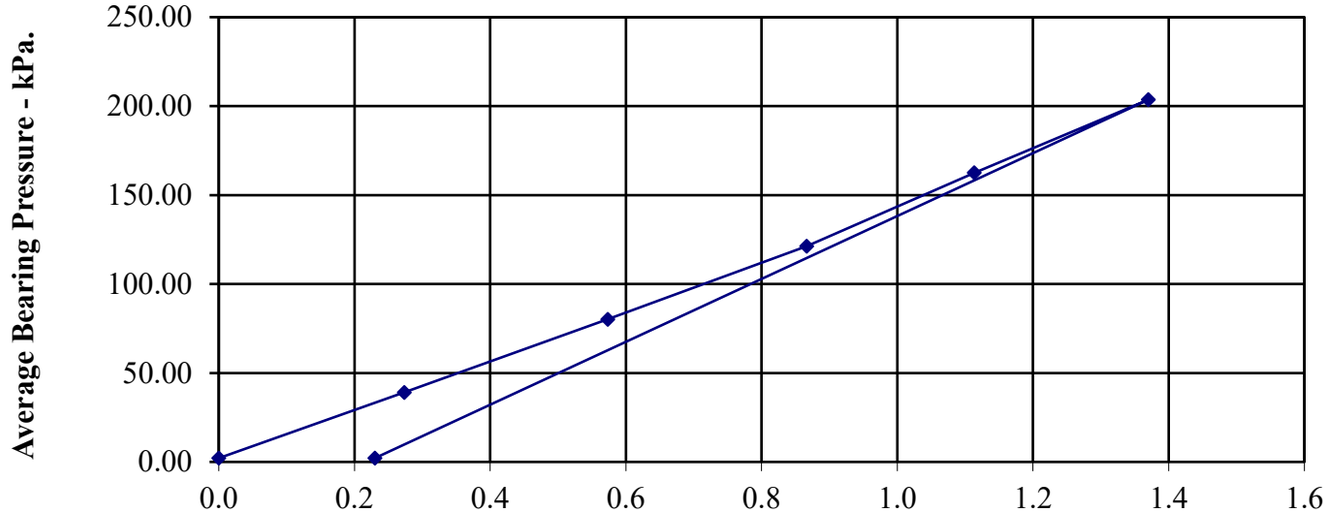
Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
Incorporating IAN 73/06

Date of Test	**17-Jul-24**	
Test Ref	**TP19**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**1.06**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 1.06mm	**204**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**> 102.5**	**kN/m^2/mm**
CBR Value	**> 29.4**	**%**

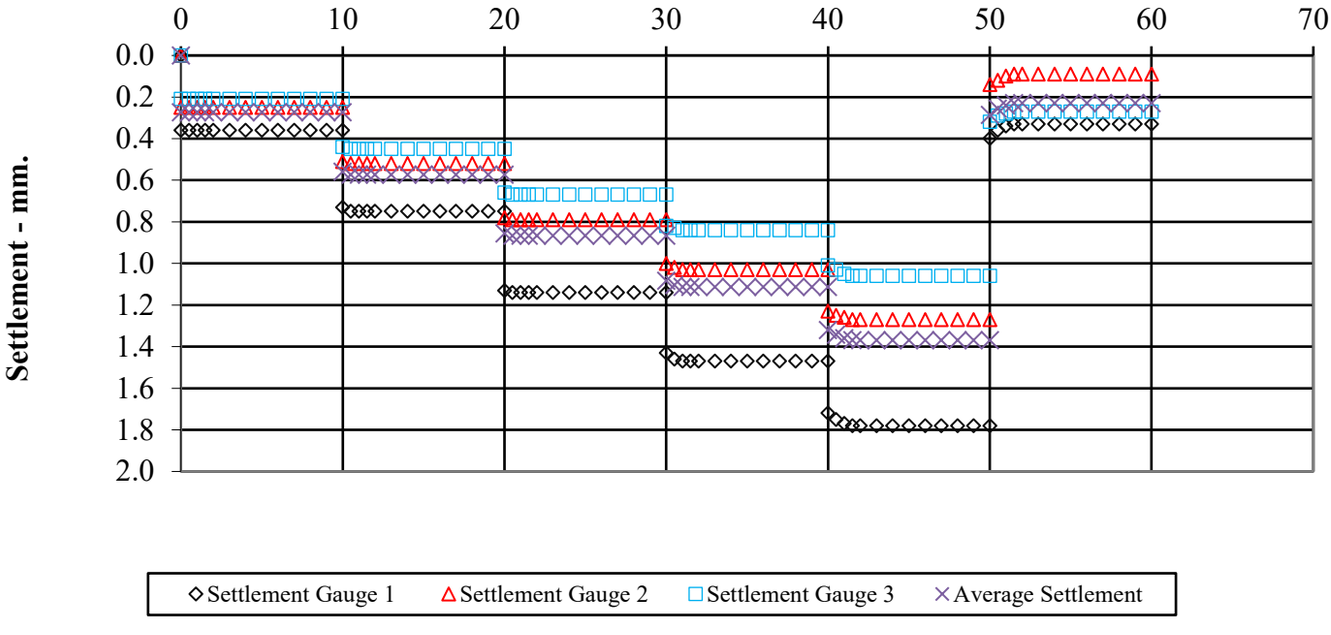
VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP20**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	
Maximum Applied Pressure (kPa):		**203.61**	
Maximum Deformation (mm):		**1.37**	
Plate Area (m2):		**0.1626**	
Description:		**Hardcore**	



Time - minutes.



UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Bennett Street, Manchester

Contract No:
PSL24/5129
Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
Incorporating IAN 73/06

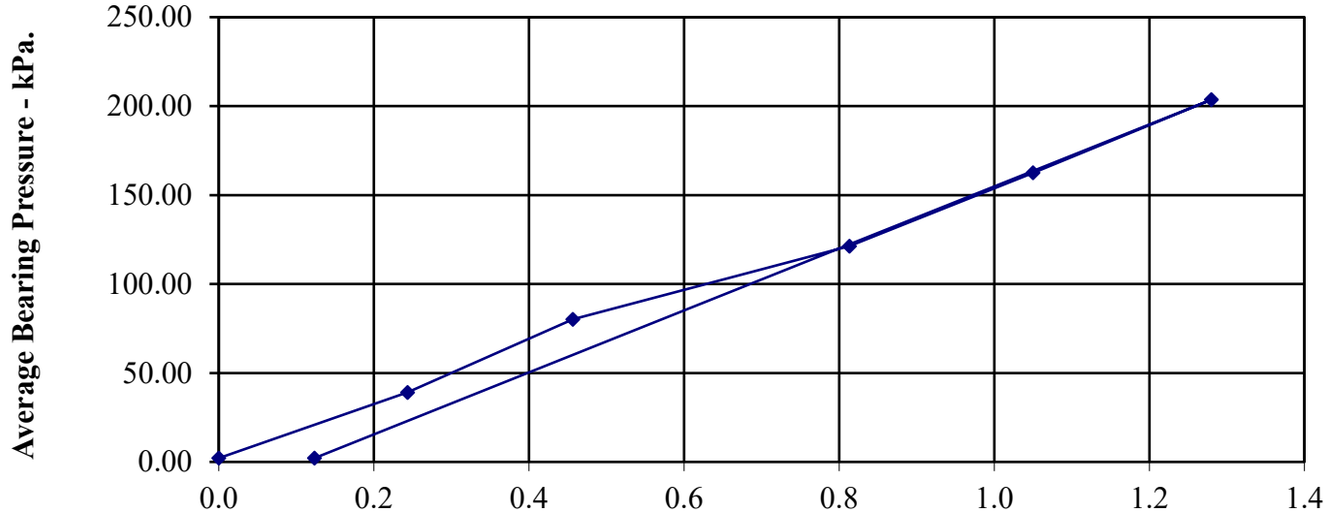
Date of Test	**17-Jul-24**	
Test Ref	**TP20**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**1.37**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 1.25mm	**184**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**92.8**	**kN/m^2/mm**
CBR Value	**24.8**	**%**

VERTICAL DEFORMATION TESTS.

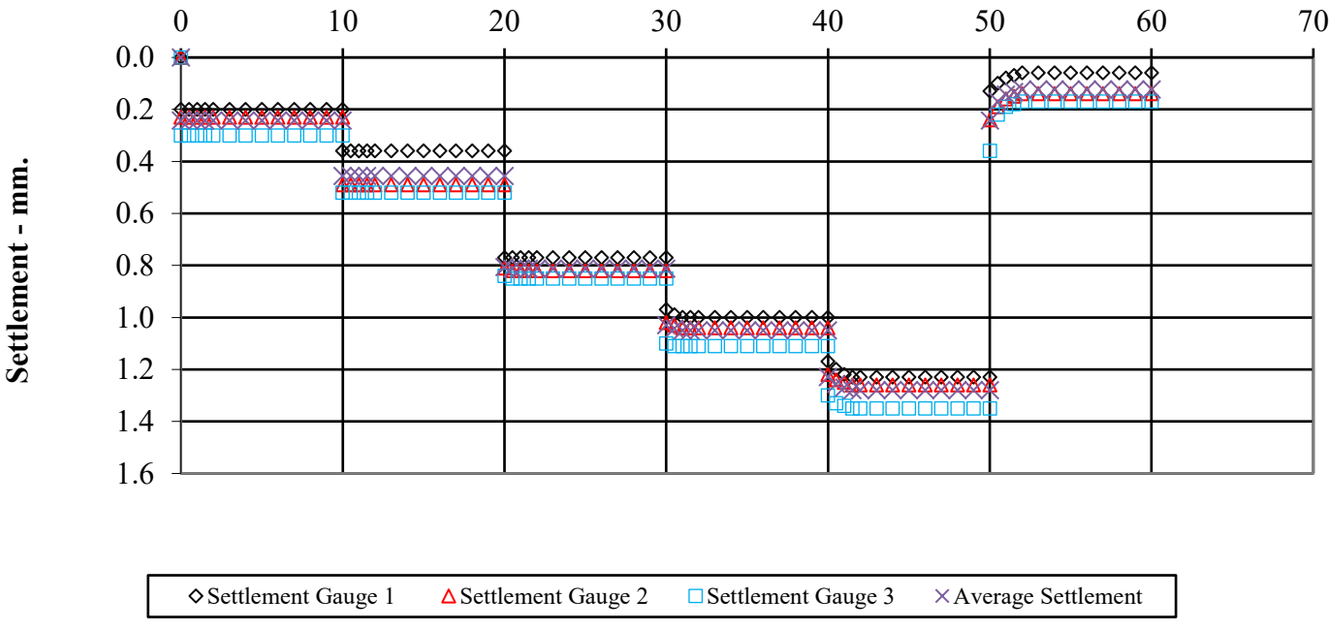
BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP21**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	

Maximum Applied Pressure (kPa):	**203.61**
Maximum Deformation (mm):	**1.28**
Plate Area (m2):	**0.1626**
Description:	**Hardcore**



Time - minutes.



UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Bennett Street, Manchester

Contract No:
PSL24/5129
Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
Incorporating IAN 73/06

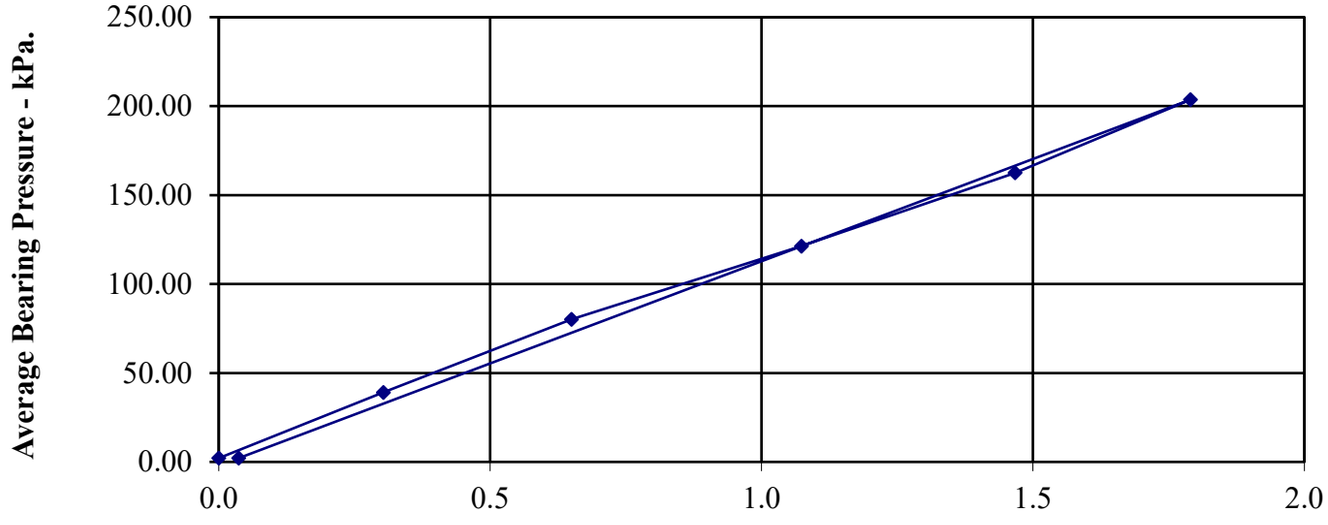
Date of Test	**17-Jul-24**	
Test Ref	**TP21**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**1.28**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 1.25mm	**198**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**99.8**	**kN/m^2/mm**
CBR Value	**28.1**	**%**

VERTICAL DEFORMATION TESTS.

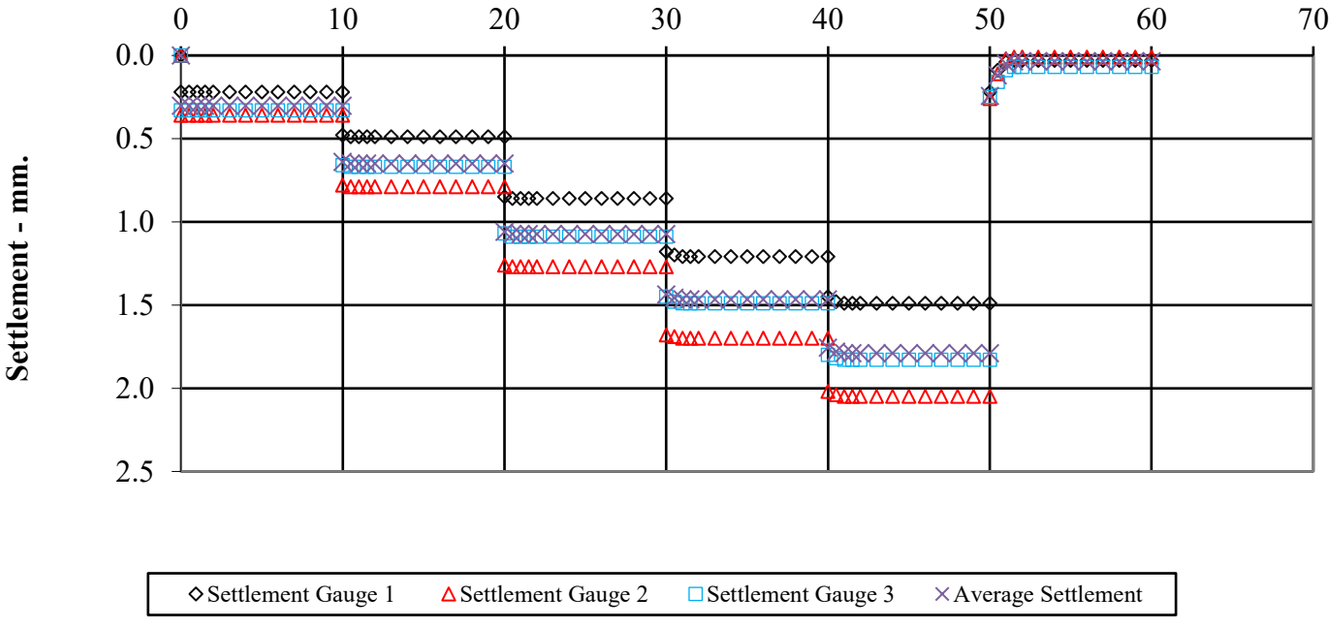
BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP22**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	

Maximum Applied Pressure (kPa):	**203.61**
Maximum Deformation (mm):	**1.79**
Plate Area (m2):	**0.1626**
Description:	**Hardcore**



Time - minutes.



UKAS TESTING 4043 / PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY	**Bennett Street, Manchester**	**Contract No:** PSL24/5129 **Client Ref:**

Calculation of Equivalent CBR Value from Plate Bearing Test

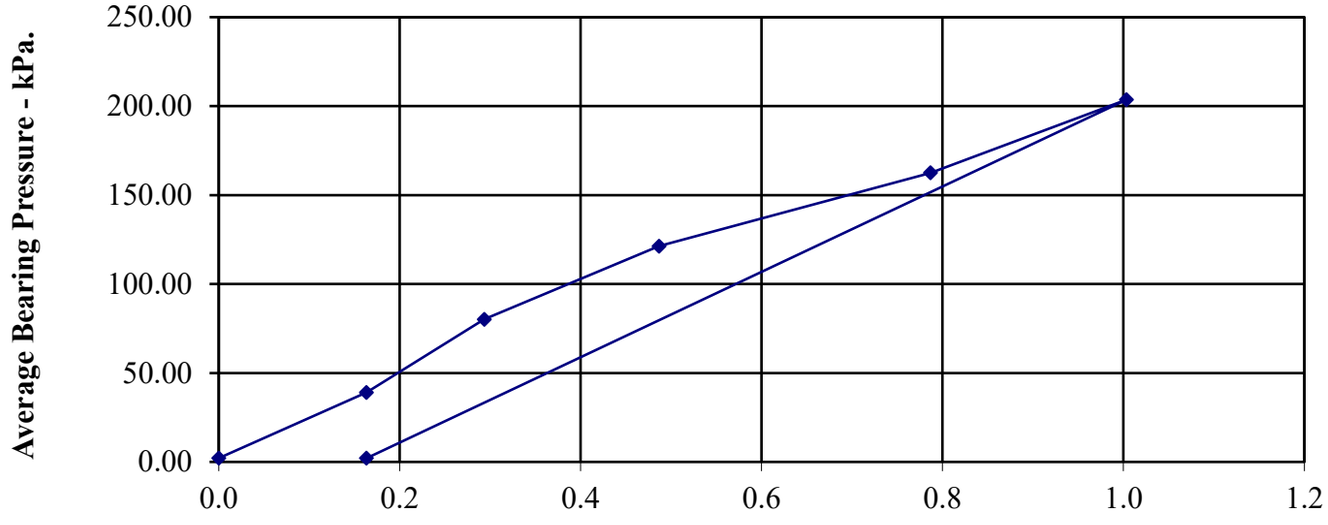
Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
Incorporating IAN 73/06

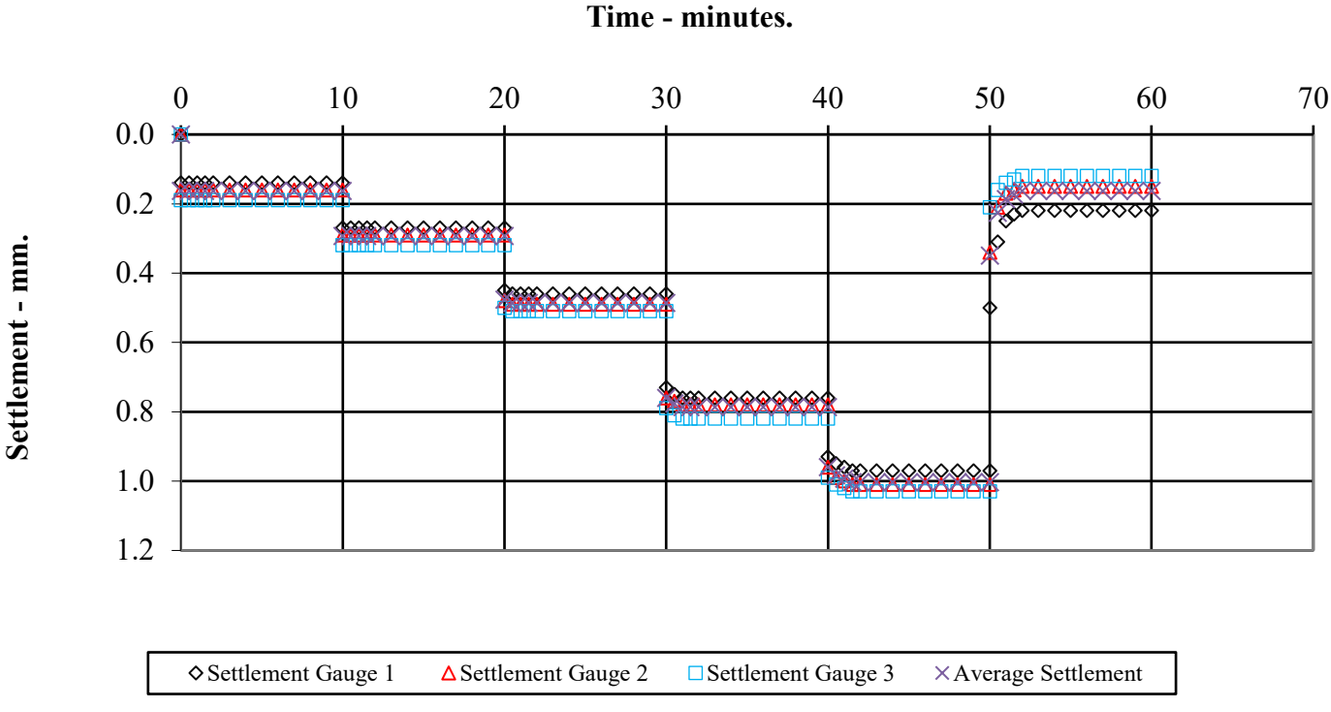
Date of Test	**17-Jul-24**	
Test Ref	**TP22**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**1.79**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 1.25mm	**140**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**70.4**	**kN/m^2/mm**
CBR Value	**15.3**	**%**

VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP53**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	
Maximum Applied Pressure (kPa):		**203.61**	
Maximum Deformation (mm):		**1.00**	
Plate Area (m2):		**0.1626**	
Description:		**Hardcore**	





UKAS TESTING 4043 / PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY	**Bennett Street, Manchester**	**Contract No:** PSL24/5129 **Client Ref:**

Calculation of Equivalent CBR Value from Plate Bearing Test

Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4
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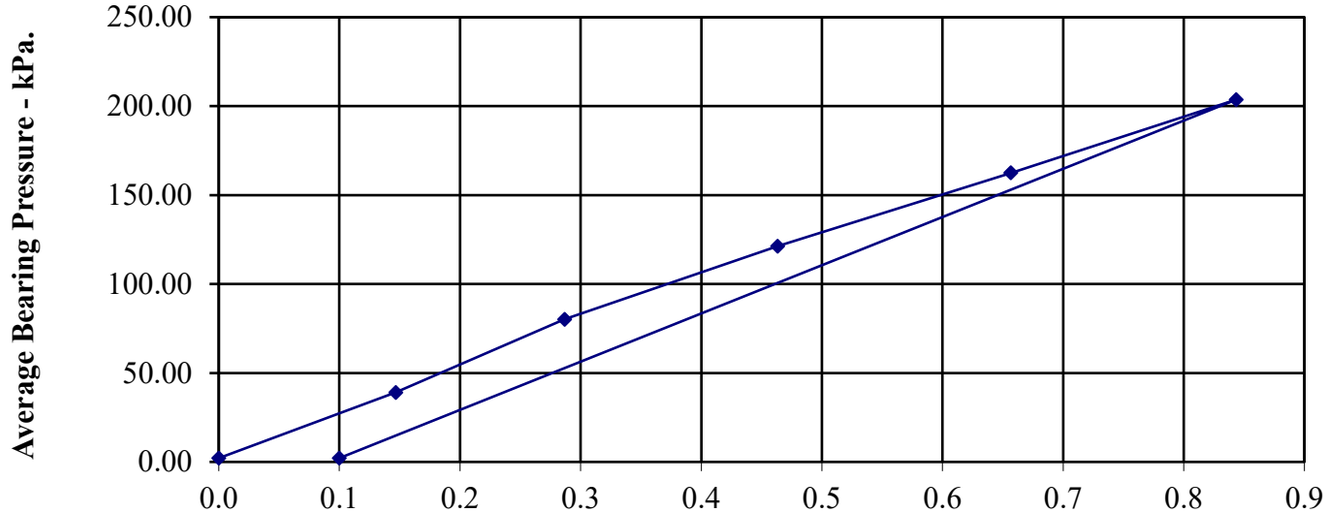
Date of Test	**17-Jul-24**	
Test Ref	**TP53**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**1.00**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 1.00mm	**204**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**> 102.5**	**kN/m^2/mm**
CBR Value	**> 29.4**	**%**

VERTICAL DEFORMATION TESTS.

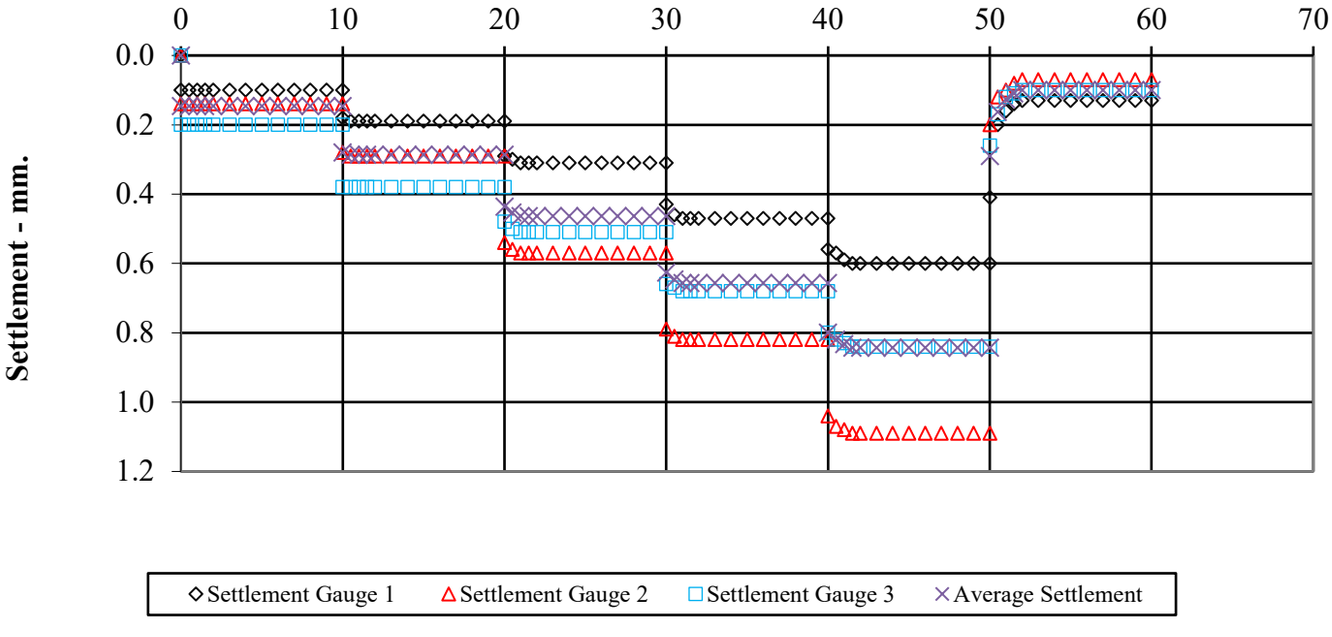
BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP54**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	

Maximum Applied Pressure (kPa):	**203.61**
Maximum Deformation (mm):	**0.84**
Plate Area (m2):	**0.1626**
Description:	**Hardcore**



Time - minutes.



UKAS TESTING 4043 / PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY	**Bennett Street, Manchester**	**Contract No:** PSL24/5129 **Client Ref:**

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Date of Test	**17-Jul-24**	
Test Ref	**TP54**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**0.84**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 0.84mm	**204**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**> 102.5**	**kN/m^2/mm**
CBR Value	**> 29.4**	**%**

UKAS TESTING 4043

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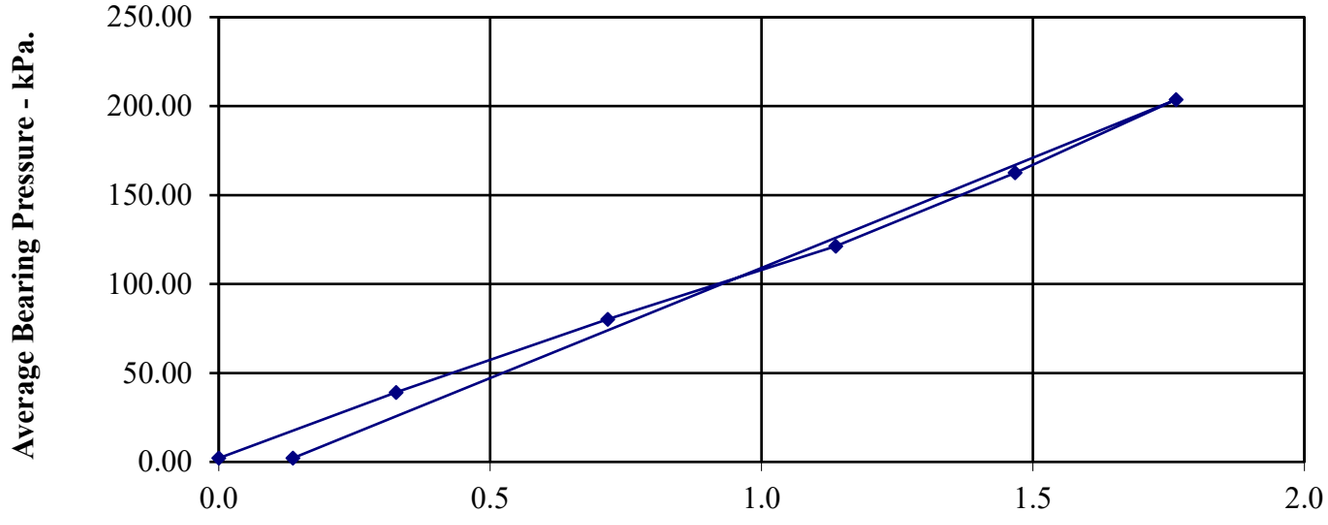
Bennett Street, Manchester

Contract No:
PSL24/5129
Client Ref:

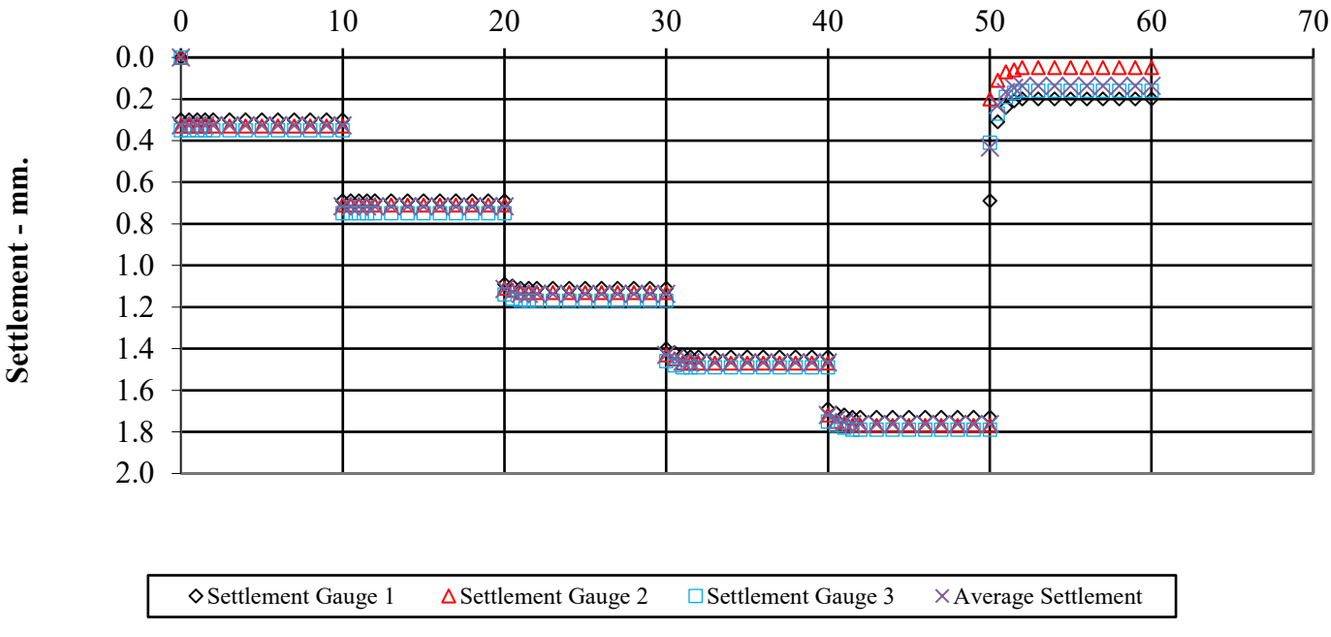
VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP56**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	
Maximum Applied Pressure (kPa):		**203.61**	
Maximum Deformation (mm):		**1.76**	
Plate Area (m2):		**0.1626**	
Description:		**Hardcore**	



Time - minutes.



UKAS TESTING 4043 / PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY	**Bennett Street, Manchester**	**Contract No:** PSL24/5129 **Client Ref:**

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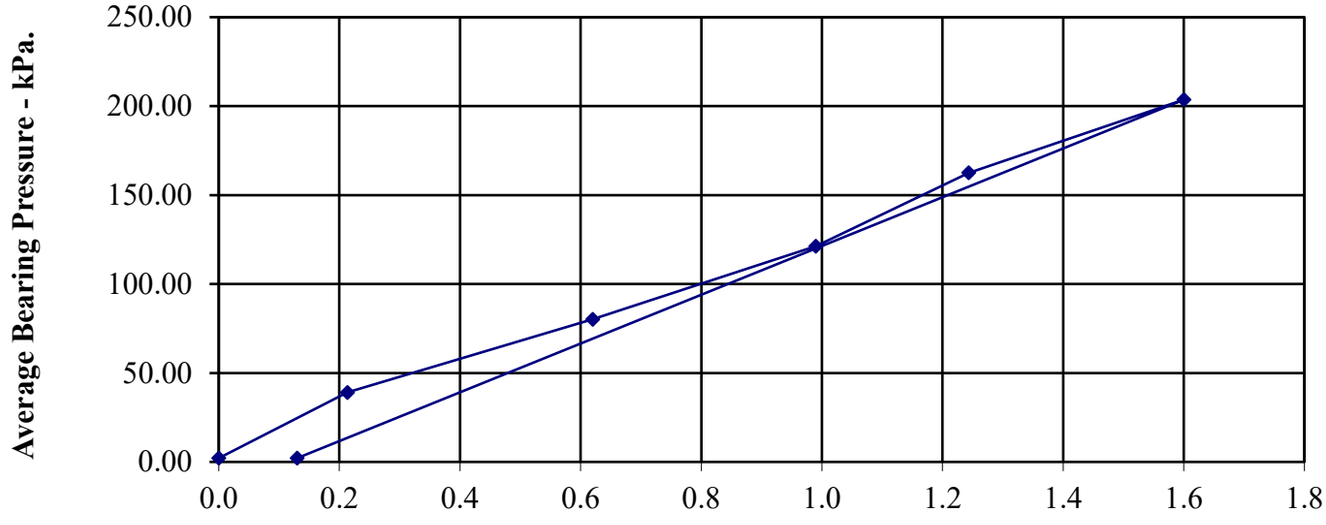
Date of Test	**17-Jul-24**	
Test Ref	**TP56**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**1.76**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 1.25mm	**135**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**68.2**	**kN/m^2/mm**
CBR Value	**14.5**	**%**

VERTICAL DEFORMATION TESTS.

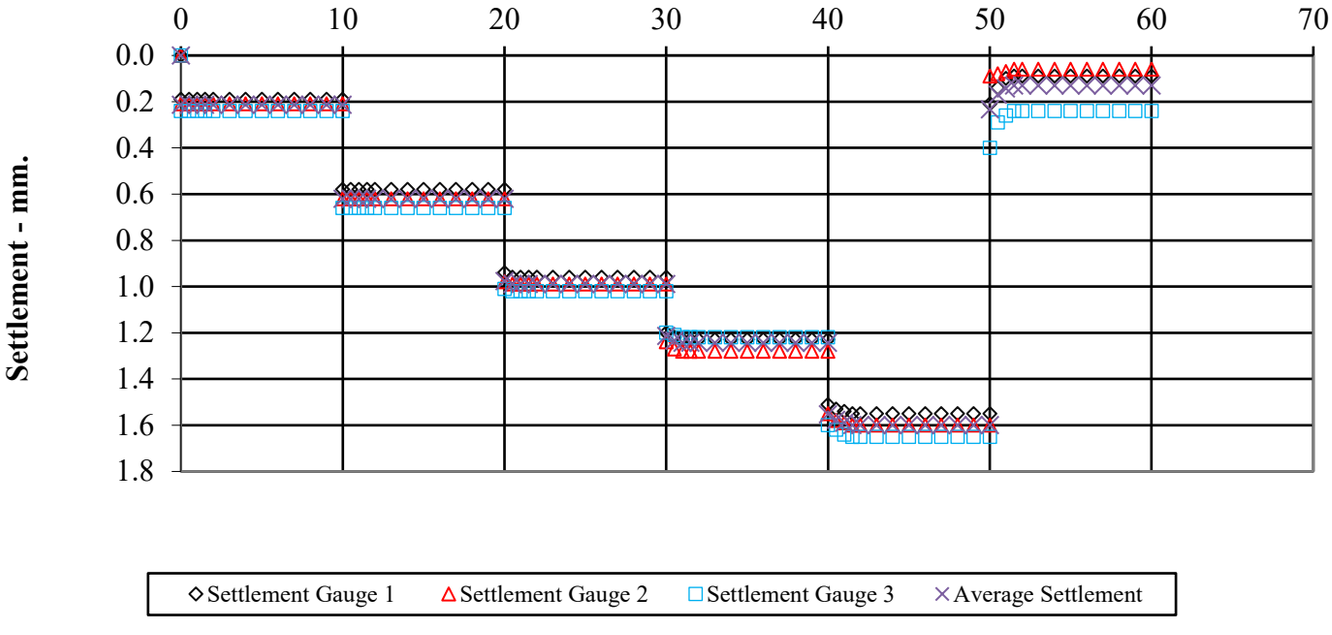
BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP57**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	

Maximum Applied Pressure (kPa):	**203.61**
Maximum Deformation (mm):	**1.60**
Plate Area (m2):	**0.1626**
Description:	**Hardcore**



Time - minutes.



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Bennett Street, Manchester

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PSL24/5129
Client Ref:

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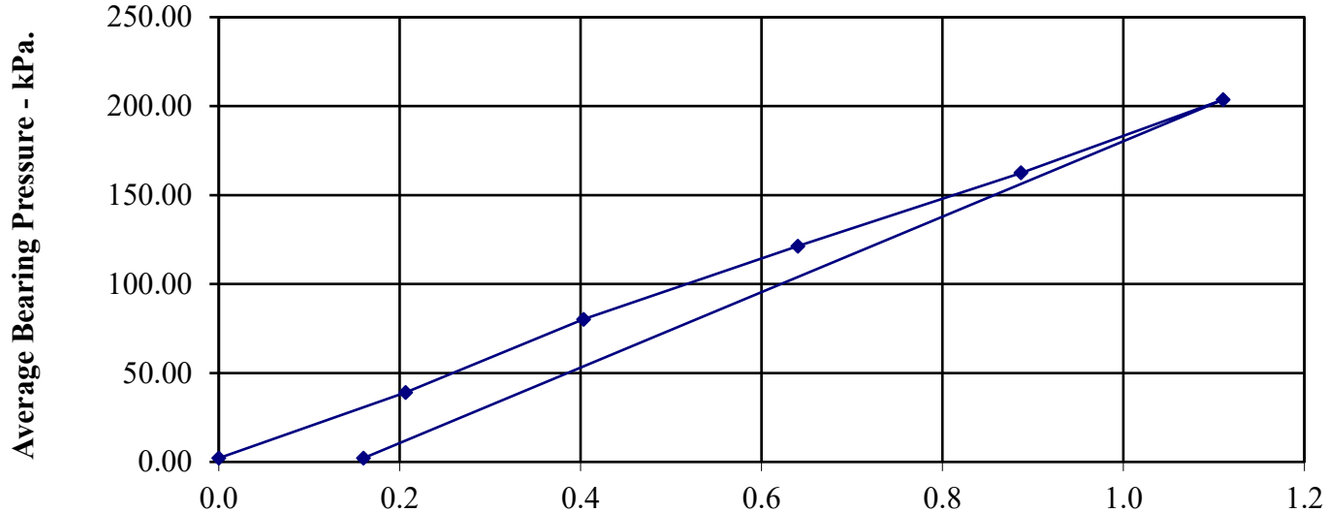
Date of Test	**17-Jul-24**	
Test Ref	**TP57**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**1.60**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 1.25mm	**163**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**82.2**	**kN/m^2/mm**
CBR Value	**20.1**	**%**

VERTICAL DEFORMATION TESTS.

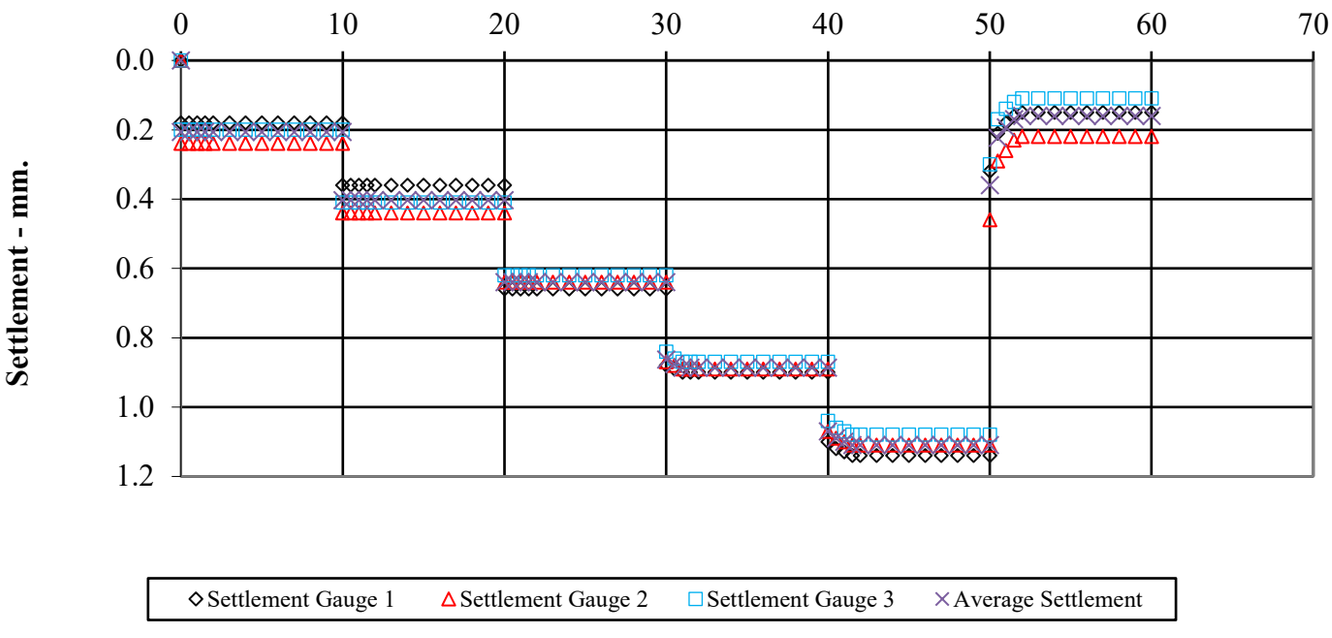
BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP58**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	

Maximum Applied Pressure (kPa):	**203.61**
Maximum Deformation (mm):	**1.11**
Plate Area (m2):	**0.1626**
Description:	**Hardcore**



Time - minutes.



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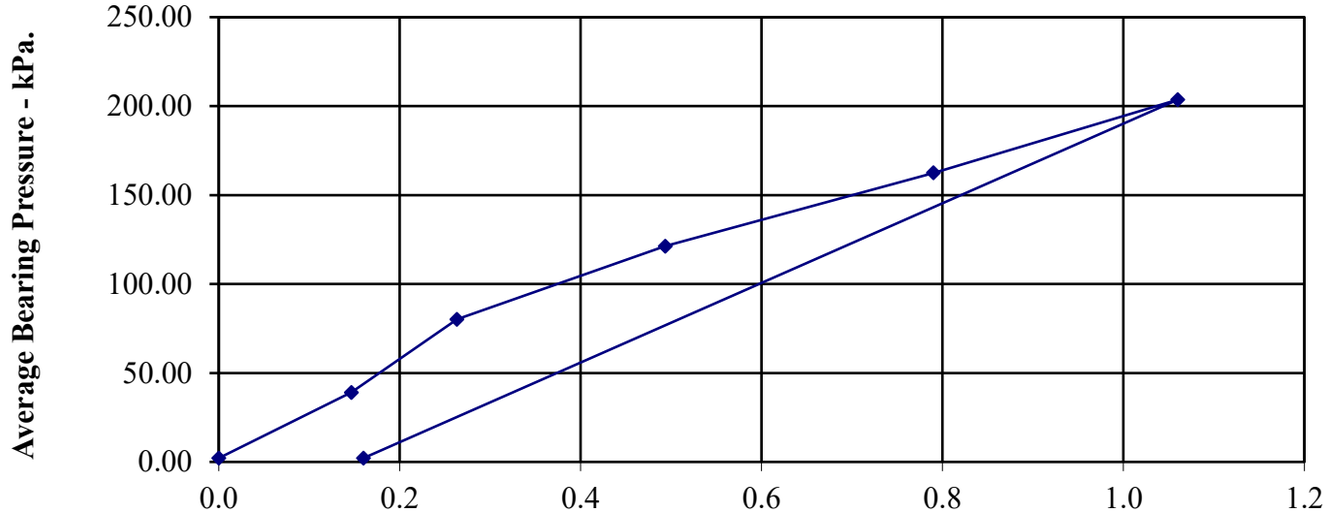
Date of Test	**17-Jul-24**	
Test Ref	**TP58**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**1.11**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 1.11mm	**204**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**> 102.5**	**kN/m^2/mm**
CBR Value	**> 29.4**	**%**

VERTICAL DEFORMATION TESTS.

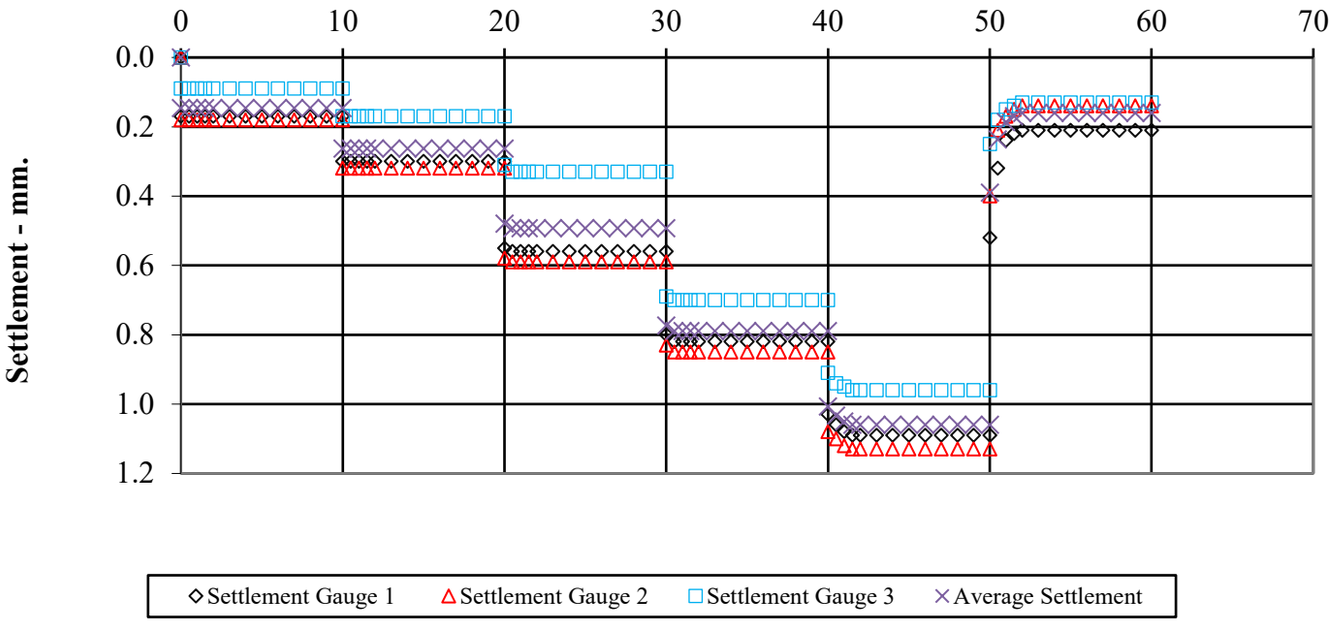
BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP59**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	

Maximum Applied Pressure (kPa):	**203.61**
Maximum Deformation (mm):	**1.06**
Plate Area (m2):	**0.1626**
Description:	**Hardcore**



Time - minutes.



UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Bennett Street, Manchester

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Client Ref:

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Date of Test	**17-Jul-24**	
Test Ref	**TP59**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**1.06**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 1.06mm	**204**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**> 102.5**	**kN/m^2/mm**
CBR Value	**> 29.4**	**%**

UKAS TESTING 4043

PROFESSIONAL SOILS LABORATORY
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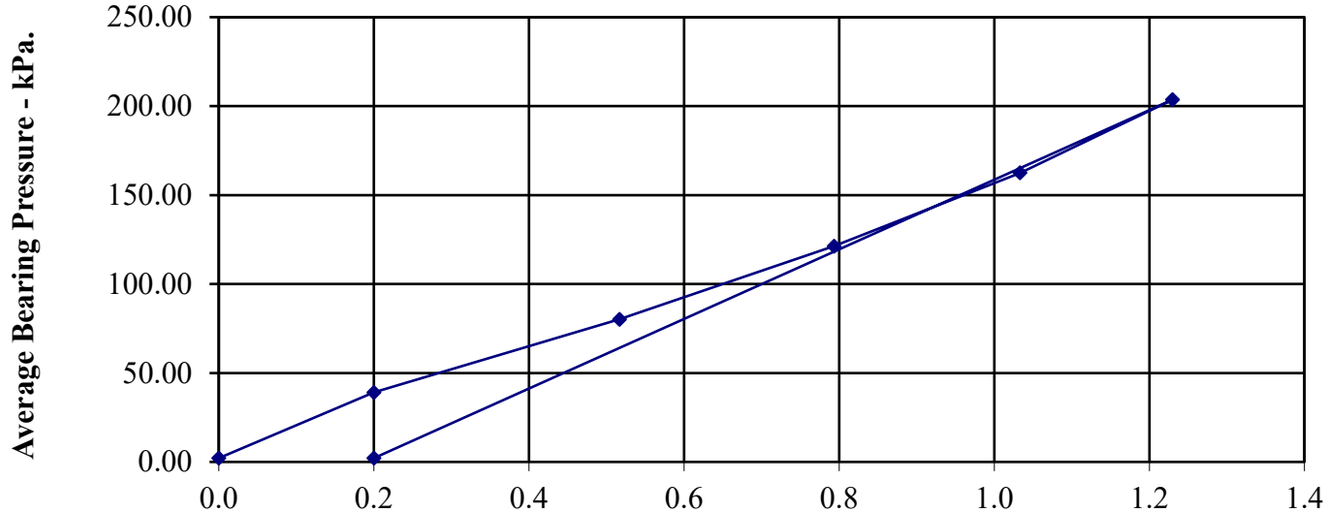
Bennett Street, Manchester

Contract No:
PSL24/5129
Client Ref:

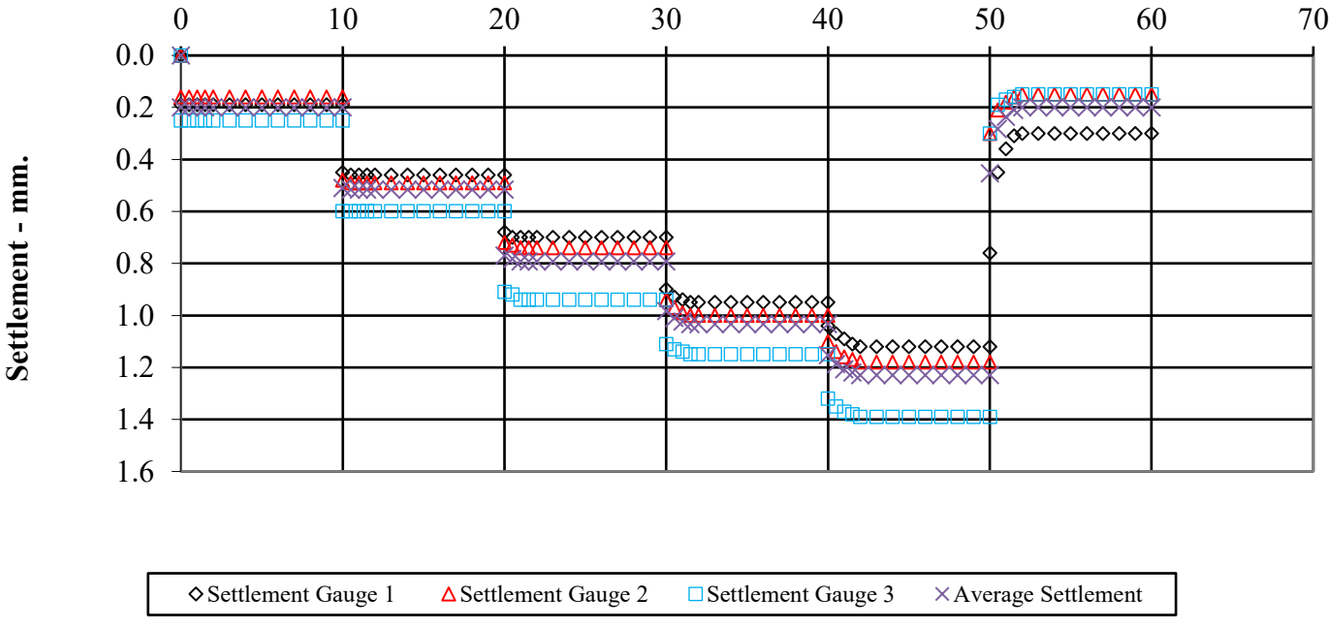
VERTICAL DEFORMATION TESTS.

BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP61**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	
Maximum Applied Pressure (kPa):		**203.61**	
Maximum Deformation (mm):		**1.23**	
Plate Area (m2):		**0.1626**	
Description:		**Hardcore**	



Time - minutes.



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Contract No:
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Client Ref:

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Date of Test	**17-Jul-24**	
Test Ref	**TP61**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**1.23**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 1.23mm	**204**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**> 102.5**	**kN/m^2/mm**
CBR Value	**> 29.4**	**%**

UKAS TESTING 4043

PROFESSIONAL SOILS LABORATORY
A PHENNA GROUP COMPANY

Bennett Street, Manchester

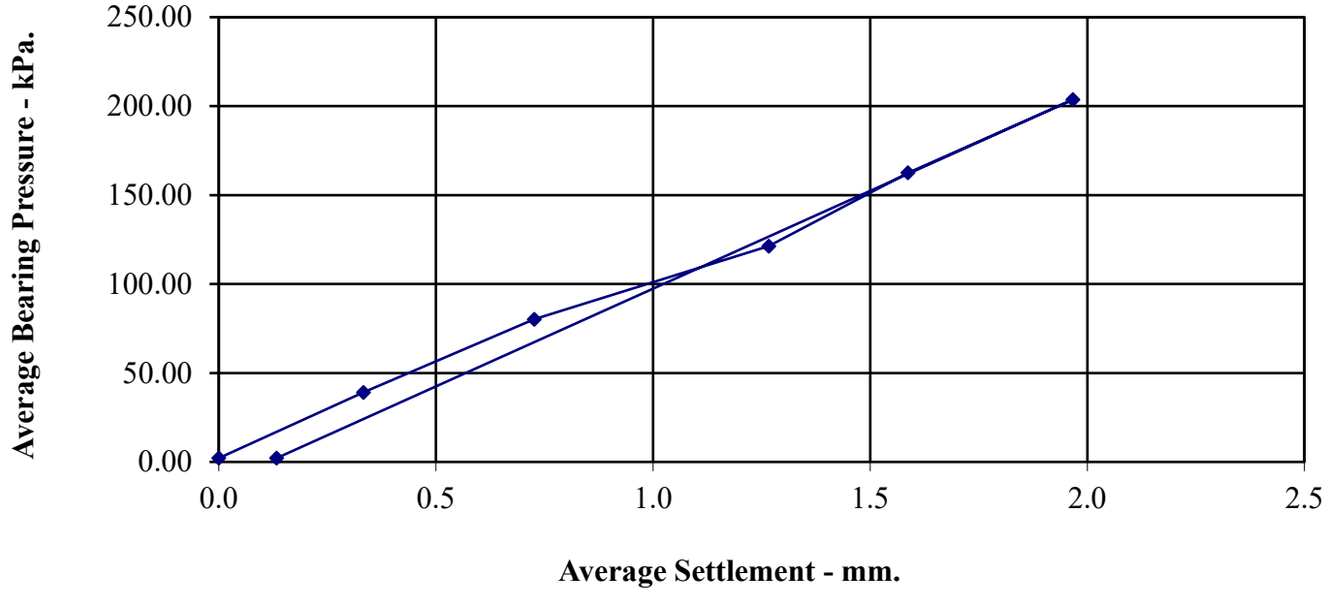
Contract No:
PSL24/5129
Client Ref:

VERTICAL DEFORMATION TESTS.

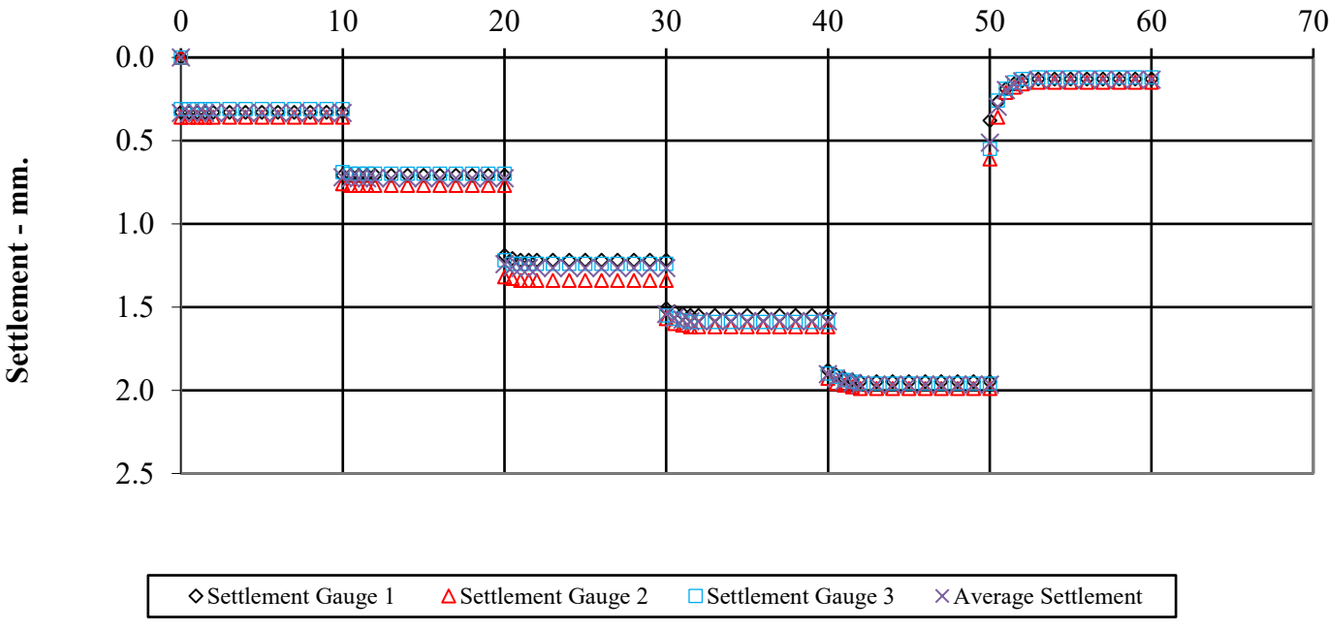
BS 1377 : Part 9 : 1990.

Date of Test:	**17-Jul-24**	**Test Ref:**	**TP63**
Grid Ref:		**Depth (m):**	**-0.45**
Layer:		**Comments:**	

Maximum Applied Pressure (kPa):	**203.61**
Maximum Deformation (mm):	**1.97**
Plate Area (m2):	**0.1626**
Description:	**Hardcore**



Time - minutes.



UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Bennett Street, Manchester

Contract No:
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Client Ref:

Calculation of Equivalent CBR Value from Plate Bearing Test

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Date of Test	**17-Jul-24**	
Test Ref	**TP63**	
Depth (m)	**-0.45**	
Grid Ref		
Layer		
Comments		
Description	**Hardcore**	
Maximum Deflection	**1.97**	**mm**
Deflection required for CBR value	**1.25**	**mm**
Load at 1.25mm	**120**	**kN/m^2**
Plate diameter	**455**	**mm**
Conversion factor for plate diameter	**0.629**	
K_{762}(modulus of subgrade reaction) calculated using 1.25mm settlement	**60.4**	**kN/m^2/mm**
CBR Value	**11.8**	**%**

NNDG Summary

IMS Ref: QD38-1

Job Number	15-974
Site Name	Bennett Street
Test Date	07/02/2024

OMC/ MDD test Number	DRY Density (Mg/m³)	OMC (%)	MC (-3%)	MC (+3%)
SW-MG-001	1.76	16.00		
SW-MG-002	1.73	15.00		
SW-MG-004	1.73	16.00		
SW-MG-005	1.74	16.00		
SW-MG-006	1.72	17.00		
SW-MG-007	1.73	15.00		
SW-MG-008	1.75	15.00		
SW-MG-009	1.79	14.00		
SP07	1.71	13.00		
Average	**1.74**	**15.22**	**12.22**	**18.22**

NNDG test Location	Level (depth below FFL)	Bulk Density (Mg/m³)	Dry density (Mg/m³)	Percentage compaction (%)
9	0.75	2.23	1.73	99
10	0.75	2.34	1.84	106
11	0.75	2.15	1.70	98
12	0.75	2.31	1.80	103
Road 1 A	Base Road Box	2.16	1.70	98
Road 1 B	Base Road Box	2.02	1.71	98
Road 1 C	Base Road Box	2.23	1.73	99
Plot 9/10	0.75	2.47	1.90	109
	FFL	2.42	1.93	111
Plot 11/12	0.75	2.36	1.87	107
	FFL	2.36	1.88	108
Plot 14/15	0.75	1.94	1.85	106
	FFL	2.39	1.92	110
Plot 16/17	0.75	2.22	1.73	99
	FFL	2.34	1.84	106
Plot 18/19	0.75	1.85	1.47	84
	0.75 - Retest	2.16	1.70	98
	FFL	2.22	1.74	100
Plot 20	0.75	2.77	2.47	142
	FFL	2.65	2.35	135
Plot 21	0.75	2.84	2.53	145
	FFL	3.07	2.70	155
Plot 22	0.75	3.07	2.70	155
	FFL	2.84	2.53	145
Plot 23	0.75	2.66	2.37	136
	FFL	2.78	2.49	143
Plot 24/25	FFL	2.76	2.48	143
Plot 26	0.75	2.20	2.08	120
	FFL	2.17	2.05	118
Plot 28	0.75	2.37	2.20	126
	FFL	2.34	2.18	125
Plot 29/30	0.75	2.20	2.06	118
	FFL	1.91	1.85	106
Plot 31/32	0.75	2.41	2.23	128
	FFL	2.58	2.35	135
Plot 33/34	0.75	2.58	2.36	136
	FFL	2.31	2.15	124
Plot 37/38	FFL	2.15	2.02	116
	0.75	2.12	1.69	97
	1.5	2.11	1.68	97
	2.25	2.06	1.65	95
	3	2.08	1.66	95
Plot 39/40	FFL	2.66	2.42	139
	0.75	2.85	2.56	147
	1.5	2.19	1.74	100
	2.25	2.11	1.68	97
Plot 41/42	0.75	2.22	1.76	101
	1.5	2.14	1.70	98
	2.25	2.03	1.62	93
	2.25 - Retest	2.11	1.68	96
Plot 43/44	FFL	2.11	1.68	97
	0.75	2.39	1.88	108
	1.5	2.75	2.47	142
	3	2.37	2.18	125
Plot 45	FFL	2.51	2.29	132
	0.75	2.21	1.75	100
	1.5	2.23	1.77	102
	2.25	2.08	1.66	95
Plot 46	FFL	2.08	1.66	96
	0.75	2.10	1.68	96
	1.5	2.73	2.46	141
	2.25	2.27	2.11	121
Plot 48	FFL	2.73	2.47	142
	0.75	2.13	2.00	115
	1.5	1.72	1.69	97
	2.25	2.34	2.17	125
Plot 49/50	FFL	1.72	1.68	97
	0.75	2.49	2.22	128
	1.5	2.12	2.02	116
Plot 51	FFL	2.30	2.10	121
	0.75	1.85	1.79	103
	1.5	2.00	1.93	111
Plot 53	FFL	2.36	2.20	126
	0.75	1.99	1.93	111
	1.5	2.11	2.01	115
Plot 54	FFL	2.52	2.30	132
	0.75	1.85	1.81	104
	1.5	1.96	1.90	109
Plot 57	FFL	2.55	2.33	134
	0.75	3.12	2.77	159
Plot 58/59	FFL	2.43	2.25	129
Plot 60	FFL	1.81	1.78	102
	0.75	2.35	2.21	127
	1.5	2.26	2.14	123
Plot 62	FFL	2.19	2.06	118
	0.75	2.48	2.30	132
	1.5	2.51	2.34	134
Plot 63	FFL	2.33	2.17	125
	0.75	2.14	2.06	118
	1.5	2.59	2.39	137
Plot 65	FFL	2.69	2.43	140
	0.75	2.35	2.21	127
	1.5	1.85	1.79	103
Plot 66/67	FFL	2.76	2.49	143
	0.75	2.41	2.27	130
	1.5	2.39	2.24	129
Plot 68	FFL	2.47	2.25	129
	0.75	2.56	2.33	134
	1.5	2.41	2.23	128
Plot 69/70	FFL	2.59	2.38	137
	0.75	2.60	2.37	136
	1.5	2.76	2.50	144
Plot 71	FFL	1.78	1.75	101
	0.75	1.74	1.70	98
Plot 73	FFL	1.96	1.87	107
	0.75	1.87	1.81	104
Plot 74	FFL	2.16	2.04	117
	0.75	2.10	1.99	114
Plot 76	FFL	1.98	1.90	109
	0.75	1.77	1.73	99
Plot 77	FFL	2.14	2.01	116
	0.75	2.08	1.99	114
Plot 79	FFL	2.24	2.10	121
	0.75	2.28	2.12	122
Plot 80	FFL	3.11	2.79	160
	0.75	2.86	2.51	144
	1.50	2.86	2.51	144
Plot 82	FFL	3.11	2.74	157
	0.75	1.58	1.54	88
	0.75 - Retest	2.12	1.66	95
Plot 83/84	FFL	3.32	2.91	167
	0.75	2.27	2.08	119
Plot 85/86	FFL	3.08	2.48	143
	0.75	3.07	2.42	139
Plot 87/88	FFL	2.31	2.12	122
	0.75	2.36	2.12	122
Plot 89/90	FFL	2.57	2.37	136
Plot 91/92	0.75	2.16	2.07	119
	FFL	2.86	2.58	148
Plot 93/94	0.75	2.64	2.32	133
	FFL	3.16	2.80	161
Plot 95/96	FFL	3.13	2.78	160
	0.75	2.41	1.90	109
	1.50	3.41	2.89	166
Plot 97/98	FFL	2.79	2.51	144
	0.75	2.03	1.90	109
	1.50	2.08	1.73	99
Plot 99/100	0.75	2.86	2.50	144
	FFL	2.75	2.49	143
Plot 101/102	FFL	2.79	2.48	143
	0.75	2.27	1.90	109
	1.50	2.08	1.69	97
Plot 103/04	FFL	2.39	2.20	126
	0.75	2.51	2.05	118
	1.50	2.11	1.72	99
	2.25	2.47	2.30	132
Plot 105	FFL	2.34	2.13	122
	0.75	2.30	1.81	104
Plot 107	FFL	1.93	1.88	108
	0.75	2.32	1.95	112
Plot 108	FFL	2.65	2.42	139
	0.75	2.44	2.22	128
Plot 110	FFL	2.07	1.69	97
	0.75	2.45	2.04	117
Plot 113	0.75	2.38	2.02	116
	FFL	2.32	1.98	114
Plot 115/116	FFL	2.69	2.10	121
Plot 117/118	FFL	3.23	2.53	145
	0.75	2.69	2.36	136
	1.5	2.26	2.06	118
Plot 119/120	FFL	3.76	3.09	178
	0.75	2.30	2.10	121
	1.5	2.32	2.11	121
121/122	FFL	2.00	1.88	108
	0.75	3.11	2.74	157
	1.5	3.56	2.81	161
	2.25	1.89	1.55	89
	2.25 - Retest	2.76	2.1	121
Plot 123	FFL	2.16	2.07	119
	0.75	2.85	2.58	148
Plot 125	FFL	2.11	2.08	120
Plot 127	0.75	2.25	1.78	102
Plot 127	FFL	1.86	1.77	102
Plot 128/129	FFL	2.69	2.40	138
Plot 128/129	0.75	2.07	1.67	96
Plot 128/129	1.50	2.37	1.87	107
Plot 134/135	FFL	2.65	1.92	110
Plot 134/136	0.75	2.61	1.91	110
Plot 137/138	FFL	2.62	1.92	110
Plot 139/140	0.75	2.72	2.39	137
Plot 141/142	FFL	2.90	2.47	142
Plot 143/144	0.75	2.84	2.43	140
Plot 145/146	FFL	2.84	2.41	139
Plot 147/148	0.75	2.88	2.44	140
149/150	0.75	2.71	2.44	140
151	FFL	3.07	2.72	156
153/154	0.75	2.62	2.39	137
	1.5	2.66	2.44	140
	2.25	2.37	2.20	126
155/156	0.75	2.66	2.42	139
	1.5	2.42	2.24	129
	2.25	2.72	2.47	142
157	0.75	2.69	2.45	141
	1.5	2.81	2.57	148
	2.25	2.55	2.34	134
159	0.75	2.34	1.97	113
	1.5	2.26	1.90	109
	2.25	2.09	1.77	102
Plot 160	0.75	2.75	2.50	144
	1.5	2.78	2.50	144
	2.25	2.78	2.48	143
163	FFL	3.15	2.76	158
165	0.75	3.10	2.72	156
167	FFL	3.09	2.73	157
167	0.75	3.55	3.06	176
169	FFL	3.18	2.80	161
170	FFL	3.18	2.81	161
171/172	FFL	3.14	2.77	159
172/172	0.75	3.25	2.85	164

APPENDIX VI
CONTRACTOR COMPLETION CHECK SHEET

GEOTECHNICAL ENABLING WORKS COMPLETION FORM

Upon completion of all site remediation and enabling works, this form will be completed by E3P, in the presence of the appointed contractor, to ensure that all pertinent geotechnical enabling works activities are complete or, where a deviation from the specification has occurred, all future limitations and issues are documented for the client's records.

Activity	Complete			Signature
	Yes	No	N/A	(initial)
Eradication of all invasive plant species	X			MSD
Removal of all vegetation	X			MSD
Removal of all root bulbs and root networks	X			MSD
Stockpiling of topsoil and certification of suitability for reuse			X	MSD
Stockpiling of subsoil and certification of suitability for reuse	X			MSD
Stockpile all recycled aggregate with geotechnical and chemical validation testing	X			MSD
Removal of all relict foundations and infrastructure in their entirety	X			MSD
Decommission of all redundant drainage infrastructure	X			MSD
Decommission of all former interceptors			X	MSD
Decommission of all former above- and below-ground tanks	X			MSD
Removal of all waste materials to a licensed facility	X			MSD
Removal of all asbestos to a licensed facility	X			MSD
Engineering of all plots for shallow spread foundation in accordance with E3P Geotechnical Specification	X			MSD
Engineering of all plots for VSC in accordance with E3P Geotechnical Specification	X			MSD
Engineering of all plots for pile foundation in accordance with E3P Geotechnical Specification	X			MSD
Engineering of all plots for raft foundation in accordance with E3P Geotechnical Specification			X	MSD
Engineering of highways bulk upfill in accordance with E3P Specification with compliant validation testing		X		Caldwells to complete
Engineering of highways subgrade in accordance with E3P Specification with compliant validation testing		X		Caldwells to complete
Engineering of highways capping in accordance with E3P Specification with compliant validation testing		X		Caldwells to complete
Cut-and-fill the development site to client's required elevation with as-built survey	X			MSD

APPENDIX VII
M-BAT ASSESSMENT

INPUT DATA												RESULTS (Copper)				RESULTS (Zinc)				RESULTS (Mn)				RESULTS (Ni)			
ID	Location	Waterbody	Date	Measured Cu Concentration (dissolved) (µg l^{-1})	Measured Zn Concentration (dissolved) (µg l^{-1})	Measured Mn Concentration (dissolved) (µg l^{-1})	Measured Ni Concentration (dissolved) (µg l^{-1})	pH	DOC	Ca	Site-specific PNEC Dissolved Copper (µg l^{-1})	BioF	Bioavailable Copper Concentration (µg l^{-1})	Risk Characterisation Ratio	Site-specific PNEC Dissolved Zinc (µg l^{-1})	BioF	Bioavailable Zinc Concentration (µg l^{-1})	Risk Characterisation Ratio	Site-specific PNEC Dissolved Manganese (µg l^{-1})	BioF	Bioavailable Manganese Concentration (µg l^{-1})	Risk Characterisation Ratio	Site-specific PNEC Dissolved Nickel (µg l^{-1})	BioF	Bioavailable Nickel Concentration (µg l^{-1})	Risk Characterisation Ratio
1	Black Brook Upstream	Black Brook	28/07/2023	10	15	67	3	7.9	8.29	160	29.73	0.03	0.34	0.34	39.59	0.28	4.13	0.38	266.45	0.46	30.93	0.25	15.97	0.25	0.75	0.19
2	Black Brook Mid Site	Black Brook	28/07/2023	9	21	63	2	8.1	38.9	150	1.46	0.69	6.18	6.18	86.11	0.13	2.66	0.24	180.91	0.68	42.83	0.35	26.54	0.15	0.30	0.08
3	Black Brook Downstream	Black Brook	28/07/2023	5.6	9.1	310	3.1	7.8	30.9	150	32.93	0.03	0.17	0.17	79.21	0.14	1.25	0.11	323.36	0.38	117.92	0.96	33.10	0.12	0.37	0.09
4	Corn Brook Upstream	Corn Brook	28/07/2023	3.3	61	2.4	4.7	8	0.86	130	2.02	0.49	1.63	1.63	16.24	0.67	40.94	3.76	219.55	0.56	1.34	0.01	5.71	0.70	3.29	0.82
5	Corn Brook Mid Site	Corn Brook	28/07/2023	7	34	5.7	4.1	8	0.8	140	1.91	0.52	3.67	3.67	16.27	0.67	22.75	2.09	219.55	0.56	3.19	0.03	5.64	0.71	2.91	0.73
6	Corn Brook Downstream	Corn Brook	28/07/2023	7.5	23	7.8	5.3	8	6.23	130	20.26	0.05	0.37	0.37	33.60	0.32	7.46	0.68	219.55	0.56	4.37	0.04	12.17	0.33	1.74	0.44
7	Black Brook Upstream	Black Brook	11/08/2023	7	24	68	2.5	8.1	4.17	190	10.86	0.09	0.64	0.64	26.95	0.40	9.71	0.89	180.91	0.68	46.23	0.38	8.68	0.46	1.15	0.29
8	Black Brook Mid Site	Black Brook	11/08/2023	7.9	13	170	2.1	8	3.77	190	10.85	0.09	0.73	0.73	25.69	0.42	5.52	0.51	219.55	0.56	95.24	0.77	9.21	0.43	0.91	0.23
9	Black Brook Downstream	Black Brook	11/08/2023	2.4	3	6.7	3.5	8.1	6.07	170	17.51	0.06	0.14	0.14	33.10	0.33	0.99	0.09	180.91	0.68	4.56	0.04	10.80	0.37	1.30	0.32
10	Corn Brook Mid Site	Corn Brook	11/08/2023	2.1	36	3.8	3.7	7.9	6.02	160	21.54	0.05	0.10	0.10	32.33	0.34	12.14	1.11	266.45	0.46	1.75	0.01	13.06	0.31	1.13	0.28
11	Corn Brook Downstream	Corn Brook	11/08/2023	4.3	29	7.5	4.1	8.2	5.49	180	13.58	0.07	0.32	0.32	31.20	0.35	10.13	0.93	149.07	0.83	6.19	0.05	9.00	0.44	1.82	0.46
12	Black Brook Upstream	Black Brook	26/09/2023	7.1	11	76	1.9	7.7	4.01	170	15.63	0.06	0.45	0.45	25.68	0.42	4.67	0.43	392.43	0.31	23.82	0.19	12.46	0.32	0.61	0.15
13	Black Brook Mid Site	Black Brook	26/09/2023	7.1	2	43	1.7	8	3.89	180	11.30	0.09	0.63	0.63	26.06	0.42	0.84	0.08	219.55	0.56	24.09	0.20	9.35	0.43	0.73	0.18
14	Black Brook Downstream	Black Brook	26/09/2023	8.6	4.9	9.2	2.5	7.9	4.07	170	13.42	0.07	0.64	0.64	26.37	0.41	2.03	0.19	266.45	0.46	4.25	0.03	10.57	0.38	0.95	0.24
15	Corn Brook Mid Site	Corn Brook	26/09/2023	8.1	20	4.4	3.3	7.8	6.98	140	27.50	0.04	0.29	0.29	34.61	0.31	6.30	0.58	323.36	0.38	1.67	0.01	15.47	0.26	0.85	0.21
16	Corn Brook Downstream	Corn Brook	26/09/2023	5	22	1.7	3.9	7.9	6.22	150	22.35	0.04	0.22	0.22	32.95	0.33	7.28	0.67	266.45	0.46	0.78	0.01	13.32	0.30	1.17	0.29
17	Black Brook Upstream	Black Brook	30/10/2023	7.6	13	11	1.7	7.9	6.87	140	24.88	0.04	0.31	0.31	35.03	0.31	4.04	0.37	266.45	0.46	5.08	0.04	14.15	0.28	0.48	0.12
18	Black Brook Mid Site	Black Brook	30/10/2023	8.9	15	12	1.6	8	3.28	130	9.04	0.11	0.98	0.98	23.83	0.46	6.86	0.63	219.55	0.56	6.72	0.05	8.62	0.46	0.74	0.19
19	Black Brook Downstream	Black Brook	30/10/2023	8.9	14	30	1.6	7.9	4.66	140	15.88	0.06	0.56	0.56	28.03	0.39	5.44	0.50	266.45	0.46	13.85	0.11	11.32	0.35	0.57	0.14
20	Corn Brook Upstream	Corn Brook	30/10/2023	3	63	20	3.1	7.9	5.78	110	20.56	0.05	0.15	0.15	31.45	0.35	21.83	2.00	266.45	0.46	9.23	0.08	12.75	0.31	0.97	0.24
21	Corn Brook Mid Site	Corn Brook	30/10/2023	3.5	40	10	2.9	7.8	6.23	110	24.33	0.04	0.14	0.14	32.30	0.34	13.50	1.24	323.36	0.38	3.80	0.03	14.46	0.28	0.80	0.20
22	Corn Brook Downstream	Corn Brook	30/10/2023	3.8	59	23	3.1	7.8	5.96	100	23.15	0.04	0.16	0.16	31.42	0.35	20.47	1.88	323.36	0.38	8.75	0.07	14.10	0.28	0.88	0.22
23	Black Brook Upstream	Black Brook	29/11/2023	4.9	23	1.8	1.6	8.1	3.17	150	7.47	0.13	0.66	0.66	23.71	0.46	10.58	0.97	180.91	0.68	1.22	0.01	7.56	0.53	0.85	0.21
24	Black Brook Mid Site	Black Brook	29/11/2023	5.7	8.3	0.3	1.6	7.9	3.06	170	9.38	0.11	0.61	0.61	23.38	0.47	3.87	0.36	266.45	0.46	0.14	0.00	9.27	0.43	0.69	0.17
25	Black Brook Downstream	Black Brook	29/11/2023	4.7	7.3	3.3	1.7	8	3.25	160	8.94	0.11	0.53	0.53	24.06	0.45	3.31	0.30	219.55	0.56	1.85	0.02	8.58	0.47	0.79	0.20
26	Corn Brook Upstream	Corn Brook	29/11/2023	9.1	73	13	5	7.9	5.4	130	18.98	0.05	0.48	0.48	30.30	0.36	26.26	2.41	266.45	0.46	6.00	0.05	12.27	0.33	1.63	0.41
27	Corn Brook Mid Site	Corn Brook	29/11/2023	4.5	56	32	4.8	7.9	5.94	150	21.21	0.05	0.21	0.21	32.07	0.34	19.04	1.76	266.45	0.46	14.77	0.12	12.96	0.31	1.48	0.37
28	Corn Brook Downstream	Corn Brook	29/11/2023	4.8	50	32	4.7	7.8	5.72	120	22.09	0.05	0.22	0.22	30.73	0.35	17.73	1.63	323.36	0.38	12.17	0.10	13.77	0.29	1.36	0.34
29	Black Brook Upstream	Black Brook	19/12/2023	5.3	29	2.2	2.2	7.6	4.41	130	18.48	0.05	0.29	0.29	26.19	0.42	12.07	1.11	476.25	0.26	0.57	0.00	14.02	0.29	0.63	0.16
30	Black Brook Mid Site	Black Brook	19/12/2023	6	50	21	2.1	7.5	9.8	130	44.83	0.02	0.13	0.13	39.74	0.27	13.71	1.26	577.98	0.21	4.47	0.04	22.97	0.17	0.37	0.09
31	Black Brook Downstream	Black Brook	19/12/2023	5	56	8	1.9	7.6	4.09	130	16.94	0.06	0.30	0.30	25.36	0.43	24.07	2.21	476.25	0.26	2.07	0.02	13.56	0.29	0.56	0.14
32	Corn Brook Upstream	Corn Brook	19/12/2023	2.8	45	12	3	7.8	9.46	100	36.12	0.03	0.08	0.08	42.89	0.25	11.44	1.05	323.36	0.38	4.56	0.04	18.81	0.21	0.64	0.16
33	Corn Brook Mid Site	Corn Brook	19/12/2023	2.9	63	7.9	3.1	7.8	5.18	94	19.68	0.05	0.15	0.15	28.92	0.38	23.74	2.18	323.36	0.38	3.01	0.02	13.05	0.31	0.95	0.24
34	Corn Brook Downstream	Corn Brook	19/12/2023	3	47	8.9	2.9	7.8	9.55	100	36.36	0.03	0.08	0.08	43.20	0.25	11.85	1.09	323.36	0.38	3.39	0.03	18.93	0.21	0.61	0.15
35	Black Brook Upstream	Black Brook	31/01/2024	12	23	31	2.8	8	3.2	160	8.76	0.11	1.37	1.37	23.90	0.46	10.49	0.96	219.55	0.56	17.37	0.14	8.52	0.47	1.31	0.33
36	Black Brook Mid Site	Black Brook	31/01/2024	11	17	48	2.8	8.1	3.51	160	8.53	0.12	1.28	1.28	24.87	0.44	7.45	0.68	180.91	0.68	32.64	0.27	7.94	0.50	1.41	0.35
37	Black Brook Downstream	Black Brook	31/01/2024	12	26	23	2.8	8.2	3.57	140	7.52	0.13	1.60	1.60	24.87	0.44	11.44	1.05	149.07	0.83	18.98	0.15	7.05	0.57	1.59	0.40
38	Corn Brook Upstream	Corn Brook	31/01/2024	3.21	58	4.8	3.8	7.9	6	140	21.46	0.05	0.15	0.15	32.24	0.34	19.61	1.80	266.45	0.46	2.22	0.02	13.04	0.31	1.17	0.29
39	Corn Brook Mid Site	Corn Brook	31/01/2024	3.9	57	3.2	3.5	8	5.23	150	16.48	0.06	0.24	0.24	30.31	0.36	20.50	1.88	219.55	0.56	1.79	0.01	10.97	0.36	1.28	0.32
40	Corn Brook Downstream	Corn Brook	31/01/2024	3.7	50	5.9	3.5	8	5.84	150	18.81	0.05	0.20	0.20	32.33	0.34	16.86	1.55	219.55	0.56	3.31	0.03	11.70	0.34	1.20	0.30
41	Black Brook Upstream	Black Brook	12/03/2024	11	54	280	2.5	7.7	2.75	130	10.02	0.10	1.10	1.10	21.98	0.50	26.78	2.46	392.43	0.31	87.76	0.71	10.70	0.37	0.93	0.23
42	Black Brook Mid Site	Black Brook	12/03/2024	12	20	280	2.4	7.7	2.89	150	10.62	0.09	1.13	1.13	22.63	0.48	9.63	0.88	392.43	0.31	87.76	0.71	10.89	0.37	0.88	0.22
43	Black Brook Downstream	Black Brook	12/03/2024	11	54	270	2.4	7.8	2.92	140	9.86	0.10	1.12	1.12	22.65	0.48	25.98	2.38	323.36	0.38	102.70	0.83	10.01	0.40	0.96	0.24
44	Corn Brook Upstream	Corn Brook	28/02/2024	8	63	23	4.3	7.9	7.07	170	25.63	0.04	0.31	0.31	35.65	0.31	19.26	1.77	266.45	0.46	10.62	0.09	14.41	0.28	1.19	0.30
45	Corn Brook Mid Site	Corn Brook	28/02/2024	6.6	44	37	4.1	7.8	6.64	160	26.08	0.04	0.25	0.25	33.57	0.32	14.29	1.31	323.36	0.38	14.07	0.11	15.01	0.27	1.09	0.27
46	Corn Brook Downstream	Corn Brook	12/03/2024	5.5	41	5.2	1.7	7.7	3.84	54	14.78	0.07	0.37	0.37	23.73	0.46	18.84	1.73	217.00	0.57	2.95	0.02	11.85	0.34	0.57	0.14
47	Black Brook Upstream	Black Brook	28/03/2024	2	33		3.2	8.1	1	1	2.68	0.37	0.75	0.75	10.90	1.00	33.00	3.03	123.00	1.00			4.00	1.00	3.20	0.80
48	Black Brook Mid Site	Black Brook	28/03/2024	12	27		2.5	8	1	1	2.96	0.34	4.06	4.06	10.90	1.00	27.00	2.48	123.00	1.00			4.00	1.00	2.50	0.63
49	Black Brook Downstream	Black Brook	28/03/2024	12	28		2.2	7.8	1	1	3.47	0.29	3.45	3.45	10.90	1.00	28.00	2.57	123.00	1.00			4.44	0.90	1.98	0.50
50	Corn Brook Upstream	Corn Brook	28/03/2024	2.6	31		4.4	8.3	1	1	2.18	0.46	1.19	1.19	10.90	1.00	31.00	2.84	123.00	1.00			4.09	1.00	4.49	1.10
51	Corn Brook Mid Site	Corn Brook	28/03/2024	0.5	2.5		0.5	8.4	1	1	2.00	0.50	0.25	0.25	10.90	1.00	2.50	0.23	123.00	1.00			4.00	1.00	0.50	0.13
52	Corn Brook Downstream	Corn Brook	28/03/2024	2.3	32		3.3	8.4	1	1	2.00	0.59	1.15	1.15	10.90	1.00	32.00	2.94	123.00	1.00			4.00	1.00	3.30	0.83
53	Black Brook Upstream	Black Brook	30/04/2024	9.1	18	410	2.9	7.7	1	1	3.69	0.27	2.47	2.47	10.90	1.00	18.00	1.65	123.00	1.00	410.00	3.33	4.68	0.85	2.48	0.62
54	Black Brook Mid Site	Black Brook	30/04/2024	8.8	18	430	3.2	7.8	1	1	3.47	0.29	2.53	2.53	10.90	1.00	18.00	1.65	123.00	1.00	430.00	3.50	4.44	0.90	2.89	0.72
55	Black Brook Downstream	Black Brook	30/04/2024	8.9	21	510	3.5	8	1	1	2.96	0.34	3.01	3.01	10.90	1.00	21.00	1.93	123.00	1.00	510.00	4.15	4.00	1.00	3.50	0.88
56	Corn Brook Upstream	Corn Brook	30/04/2024	0.7	36	130	2.9	8.2	1	1	2.42	0.41	0.29	0.29	10.90	1.00	36.00	3.30	123.00	1.00	130.00	1.06	4.00	1.00	2.90	0.73
57	Corn Brook Mid Site	Corn Brook	30/04/2024	0.67	38	140	3.3	8.2	1	1	2.42	0.41	0.28	0.28	10.90	1.00	38.00	3.49	123.00	1.00	140.00	1.14	4.00	1.00	3.30	0.83
58	Corn Brook Downstream	Corn Brook	30/04/2024	0.77	41	170	3.2	8.3	1	1	2.18	0.46	0.35	0.35	10.90	1.00	41.00	3.76	123.00	1.00	170.00	1.38	4.00	1.00	3.20	0.80
59	Black Brook Upstream	Black Brook	30/05/2024	11	20	160	2.6	8.1	7.9	140	22.74	0.04	0.48	0.48	39.35	0.28	5.54	0.51	180.91	0.68	108.78	0.88	12.85	0.31	0.81	0.20
60	Black Brook Mid Site	Black Brook	30/05/2024	11	23	190	2.5	8.3	9.5	140	18.09	0.06	0.61	0.61	45.02	0.24	5.57	0.51	123.00	1.00	190.00	1.54	11.49	0.35	0.87	0.22
61	Black Brook Downstream	Black Brook	30/05/2024	11	25	190	2.7	8	9.1	140	28.35	0.04	0.39	0.39	43.58	0.25	6.25	0.57	219.55	0.56	106.44	0.87	15.64	0.26	0.69	0.17
62	Black Brook Upstream	Black Brook	02/07/2024	7.6	11	650	4.7	8.2	4.3	220	9.79	0.10	0.78	0.78	27.36	0.40	4.38	0.40	149.07	0.83	536.13	4.36	7.79	0.51	2.41	0.60
63	Black Brook Mid Site	Black Brook	02/07/2024	6.8	10	620	4.6	8.2	4	210	8.84	0.11	0.77	0.77	26.41	0.41	4.13	0.38	149.07	0.83	511.55	4.16	7.48	0.53	2.46	0.61
64	Black Brook Downstream	Black Brook	02/07/2024	7.3	9.4	600	4.7	8.3	4.4	220	8.67	0.12	0.84	0.84	27.68	0.39	3.70	0.34	123.00	1.00	600.00	4.88	6.83	0.59	2.75	0.69
65	Corn Brook Upstream	Corn Brook	02/07/2024	7.1	9.9	630	4.5	8.3	4.4	210	8.67	0.12	0.82	0.82	27.68	0.39	3.90	0.36	123.00	1.00	630.00	5.12	6.83	0.59	2.64	0.66
66	Corn Brook Mid Site	Corn Brook	02/07/2024	7.1	10	650	4.5	8.3	4.4	220	8.67	0.12	0.82	0.82	27.68	0.39	3.94	0.36	123.00	1.00	650.00	5.28	6.83	0.59	2.64	0.66
67	Corn Brook Downstream	Corn Brook	02/07/2024	6.9	16	650	4.4	8.5	4.5	220	6.78	0.15	1.02	1.02	28.00	0.39	6.23	0.57	123.00	1.00	650.00	5.28	4.69	0.85	3.75	0.94
68	Black Brook Upstream	Black Brook	30/07/2024	2.9	0.5	350	2.1	8.1	3.8	180	9.57	0.10	0.30	0.30	25.78	0.42	0.21	0.02	180.91	0.68	237.96	1.93	8.27	0.48	1.02	0.25
69	Black Brook Mid Site	Black Brook	30/07/2024	2.5	0.5	320	1.8	7.8	3.7	180	13.13	0.08	0.19	0.19	25.07	0.43	0.22	0.02	323.36	0.38	121.72	0.99	11.06	0.36	0.65	0.16
70	Black Brook Downstream	Black Brook	30/07/2024	2.3	0.5	370	1.8	7.8	3.5	180	12.28	0.08	0.19	0.19	24.51	0.44	0.22	0.02	323.36	0.38	140.74	1.14	10.79	0.37	0.67	0.17
71	Corn Brook Upstream	Corn Brook	30/07/2024	0.51	0.5	1.8	2.8	8.2	6.3	130	16.02	0.06	0.03	0.03	33.84	0.32	0.16	0.01	149.07	0.83	1.49	0.01	9.83	0.41	1.14	0.28
72	Corn Brook Mid Site	Corn Brook	30/07/2024	0.5	0.5	1.3	2.9	8.2	6.1	140	15.44	0.06	0.03	0.03	33.18	0.33	0.16	0.02	149.07	0.83	1.07	0.01	9.63	0.42	1.21	0.30
73	Corn Brook Downstream	Corn Brook	30/07/2024	0.52	0.5	1.5	2.8	8.3	6.4	140	14.16	0.07	0.04	0.04	34.19	0.32	0.16	0.01	123.00	1.00	1.50	0.01	8.65	0.46	1.29	0.32
74	Black Brook Upstream	Corn Brook	27/08/2024	0.5	13.8	260	2.4	8.2	15	120	1.00	1.00	0.50	0.50	66.39	0.16	2.27	0.21	149.07	0.83	214.53	1.74	18.77	0.21	0.51	0.13
75	Black Brook Mid Site	Corn Brook	27/08/2024	0.5	13.8	260	2.1	8.2	15	120	1.00	1.00	0.50	0.50	66.39	0.16	2.27	0.21	149.07	0.83	214.53	1.74	18.77	0.21	0.45	0.11
76	Black Brook Downstream	Corn Brook	27/08/2024	0.5	25.8	260	2.9	8	7.4	120	24.23	0.04	0.02	0.02	37.68	0.29	7.46	0.68	219.55	0.56	145.66	1.18	13.58	0.29	0.85	0.21
77	Corn Brook Upstream	Corn Brook	27/08/2024	3.8	55.8	860	7.1	8	50	430	11.55	0.09	0.33	0.33	85.74	0.13	7.09	0.65	219.55	0.56	481.80	3.92	28.90	0.14	0.98	0.25
78	Corn Brook Mid Site	Corn Brook	27/08/2024	4.2	50.8	870	7.2	8.1	47	390	1.46	0.69	2.88	2.88	85.74	0.13	6.46	0.59	180.91	0.68	591.51	4.81	26.54	0.15	1.09	0.27
79	Corn Brook Downstream	Corn Brook	27/08/2024	2.2	49.8	1500	13	7.9	85	640	22.33	0.04	0.10	0.10	82.28	0.13	6.60	0.61	266.45	0.46	692.44	5.63	31.09	0.13	1.67	0.42
80	Black Brook Upstream	Corn Brook	30/09/2024	8.5	7.3	1.7	1.2	8.4	3.8	77	6.09	0.16	1.40	1.40	24.83	0.44	3.21	0.29	123.00	1.00	1.70	0.01	6.40	0.63	0.75	0.19
81	Black Brook Mid Site	Corn Brook	30/09/2024	9.0	7.8	0.93	0.94	8.4	3.6	77	5.62	0.18	1.60	1.60	24.13	0.45	3.52	0.32	123.00	1.00	0.93	0.01	6.28	0.64	0.60	0.15
82	Black Brook Downstream	Corn Brook	30/09/2024	9.0	7.8	1.5	0.92	8.4	3.8	77	6.09	0.18	1.48	1.48	24.83	0.44	3.42	0.31	123.00	1.00	1.50	0.01	6.40	0.63	0.58	0.14
83	Corn Brook Upstream	Corn Brook	30/09/2024	8.7	7.5	3.2	1.1	8.4	3.5	75	5.41	0.18	1.61	1.61	23.74	0.46	3.44	0.32	123.00	1.00	3.20	0.03	6.30	0.64	0.70	0.17
84	Corn Brook Mid Site	Corn Brook	30/09/2024	8.9	7.7	0.69	0.95	8.2	3.6	77	7.71	0.13	1.16	1.16	24.13	0.45	3.48	0.32	149.07	0.83	0.57	0.00	8.26	0.48	0.46	0.12
85	Corn Brook Downstream	Corn Brook	30/09/2024	8.0	6.8	2.2	1.4	8.5	3.5	77	4.78	0.21	1.67	1.67	23.78	0.46	3.12	0.29	123.00	1.00	2.20	0.02	5.22	0.77	1.07	0.27