Immingham Green Energy Terminal

TR030008

Volume 6

6.4 Environmental Statement Appendices

Appendix 21.B: Phase II Ground Investigation Interpretative Report

Planning Act 2008

Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended)

September 2023

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended)

Immingham Green Energy Terminal

Development Consent Order 2023

6.4 Environmental Statement Appendices

Appendix 21.B: Phase II Ground Investigation Interpretative Report

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Ground Investigation Report

Immingham Ammonia Import Terminal

Air Products PLC

Project number: 60687114

15 June 2023

Delivering a better world

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The exploratory holes carried out during the fieldwork, which investigate only a small volume of the ground in relation to the size of the site, can only provide a general indication of site conditions. The comments made and recommendations given in this report are based on the ground conditions apparent at the site of the exploratory holes. 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.

The comments made on groundwater conditions are based on observations made during site work and the limited monitoring programme. It should be noted that groundwater levels might vary owing to seasonal or other effects.

The site reconnaissance consisted of a general external inspection of the site aimed at identifying any obvious signs of geotechnical hazards and potential sources of ground contamination affecting the site. An environmental compliance audit and/or detailed structural inspection of existing buildings were outside the project brief. Similarly, the site visit excluded detailed consideration of the ecological or archaeological aspects of the site, and if such are believed to be of potential significance then it is recommended that specialist advice is sought.

Any risks identified in this report are perceived risks, based on the information reviewed during the desk study and therefore partially based on conjecture from available information. The study is limited by the non-intrusive nature of the work and actual risks can only be assessed following a physical investigation of the site.

The investigation itself was designed generally to meet the objectives of an exploratory / main investigation, as defined by BS10175:2011 Investigation of Potentially Contaminated Sites: Code of Practice (BSI) (check - 10 to 25m centres for main phase of investigation; and 25 to 50m centres for exploratory phase investigations). As an exploratory/ main investigation, the results may not provide sufficient data to make detailed estimates of the quantities involved in any remediation work, if required.

The opinions expressed in this report concerning any contamination found and the risks arising there from are based on current good practice simple statistical assessment and comparison with available soil guideline values, AECOM generic assessment criteria and other guidance values.

It should be noted that the effects of ground and water borne contamination on the environment are constantly under review, and authoritative guidance values are potentially subject to change. The conclusions presented herein are based on the guidance values available at the time this report was prepared, however, no liability by AECOM can be accepted for the retrospective effects of any changes or amendments to these values.

Unless otherwise stated in this report, the assessments made assume that the sites and facilities will continue to be used for their current purpose without significant changes.

Where assessments of works or costs identified in this report are made, such assessments are based upon the information available at the time and where appropriate are subject to further investigations or information which may become available.

Reference to historical Ordnance Survey (OS) maps and/or data provides invaluable information regarding the land use history of a site. However, it should be noted that historical evidence will be incomplete for the period pre-dating the first edition and between the release of successive maps and/or data.

Certain statements made in this report that are not historical facts may constitute estimates, projections or other forward-looking statements and even though they are based on reasonable assumptions as of the date of this

Report, such forward-looking statements by their nature involve risks and uncertainties that could cause actual results to differ materially from the results predicted. AECOM specifically does not guarantee or warrant any estimate or projections contained in this report.

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List of Symbols and Definitions

A list of abbreviations and symbols used throughout this Report are defined below.

Abbreviation	Title
ACEC	Aggressive Chemical Environment for Concrete
ACM	Asbestos Containing Materials
AEC	Acute Evaluation Criteria
AGL	Above Ground Level
AP	Air Products
BGS	British Geological Survey
BH	Borehole
BOD	Biochemical Oxygen Demand
BRE SD	Building Research Establishment Special Digest
BSI	British Standards Institution
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CBR	California Bearing Ratio
CD	Consolidated Drained
CH_4	Methane
CIEH	Chartered Institute of Environmental Health
CL:AIRE	Contaminated Land: Applications in Real Environments
CLEA	Contaminated Land Exposure Assessment
COD	Chemical Oxygen Demand
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CPT	Cone Penetration Test
CS	Characteristic Situation
CSM	Conceptual Site Model
CU	Consolidated Undrained
DS	Design Sulphate
DWS	Drinking Water Standards
EA	Environment Agency
EQS	Environmental Quality Standard
FCF	Flamborough Chalk Formation
FEED	Front End Engineering and Design
FOC	Fraction of Organic Carbon
GAC	Generic Assessment Criteria
GGTD	Granular Glacial Till Deposits
GI	Ground Investigation
GIR	Ground Investigation Report
GQRA	Generic Quantitative Risk Assessment
GSV	Gas Screening Values
GTD	Glacial Till Deposits
GWL	Groundwater Level
HPD	High Pressure Dilatometer
HQ	Hazard Quotients
H_2S	Hydrogen Sulphide

Abbreviation	Title
ICE	Institution of Civil Engineers
IGET	Immingham Green Energy Terminal
LCRM	Land Contamination Risk Management
l/hr	litres per hour
LL	Liquid Limit
m bgl	Meters Below Ground Level
m OD	Meters Above Ordnance Datum
m OD	Meters Ordinance Datum
mg/kg	milligram per kilogram
mg/l	milligram per litre
MG	Made Ground
MTBE	Methyl Tert-Butyl Ether
O_2	Oxygen
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PFAS	Per- and Polyfluoroalkyl Substances
PL	Plastic Limit
PFOS	Perfluorooctane Sulfonate
PPE	Personal Protective Equipment
PSD	Particle Size Distribution
RGL	Rough Ground Level
RPE	Respiratory Protective Equipment
RTM	Remedial Targets Methodology
SoBRA	Society of Brownfield Risk Assessment
SOM	Soil Organic Matter Content
SPT	Standard Penetration Test
SPZ	Source Protection Zone
SVOC	Semi Volatile Organic Compounds
TAME	Tert-Amyl Methyl Ether
TCE	Trichloroethene
TFD	Tidal Flat Deposits
TFD2	Tidal Flat Deposits, firm upper layer
TOC	Total organic Carbon
TP	Trial Pit
TPH CWG	Total Petroleum Hydrocarbons Criteria Working Group
TRL-DCP	Transport Research laboratory – Dynamic Cone Penetrometer
TSS	Total Suspended Solids
UCS	Uniaxial Compressive Strength
UU	Unconsolidated Undrained
µg/l	microgram per litre
VOC	Volatile organic compound
VC	Vinyl chloride
VWP	Vibrating Wire Piezometer
WFCF	Weathered Flamborough Chalk Formation

Executive Summary

The Client, Air Products PLC, aims to build a new green hydrogen production facility, Immingham Green Energy Terminal (IGET), in the northeast of England. The site is centred on National Grid Reference N: 520477.7 E: 414904, and comprises the following distinct areas:

East Site - Hydrogen Production area.

East Site - Ammonia Storage area.

West Site - Production, Storage and Distribution Area

Pipeline corridors.

A ground investigation was carried out at the site following a detailed desk study. The fieldwork was carried out between 8th November 2022 and 16th February 2023 (with groundwater and gas monitoring continuing to May 2023). For this ground investigation, AECOM was Principal Contractor, Principal Designer and Designer. AECOM Infrastructure & Environment UK Limited subcontracted GEL as the GI Contractor.

This Ground Investigation Report (GIR) presents AECOM's (in role of Designer) interpretation of the ground investigation data. The fieldwork comprised trial pits to a maximum depth of 3.3m, cable percussion and rotary drill holes to 55m depth, geophysical surveys to determine subsurface resistivity, in-situ testing and associated soil, rock, and groundwater laboratory testing. This GIR includes groundwater level and gas monitoring measurements undertaken between November 2022 and May 2023.

The ground investigation has enabled a better understanding of ground risks, with the findings used to develop a detailed ground model for the site and geotechnical design parameters for the geological strata encountered.

A summary of the key findings from the ground investigation is given below. Reference should be made to the full text for more detail.

Ground Model	The Site is underlain by a variable but significant thickness of Made Ground (MG), Tidal Flat Deposits (TFD) (firm and soft), granular and cohesive Glacial Till Deposits (GTD) and the Flamborough Chalk Formation (FCF) . For the East Site - Hydrogen Production, ground conditions were found to comprise a variable thickness of MG up to 4m, typically less than 1.8m, over TFD of 8.3m average thickness, on top of GTD of average thickness of 9.6m. MG was recorded as gravel and gravelly sand overlying firm sandy gravelly Clay. The superficial deposits were found to be underlain by a weathered horizon of FCF between 0.25m and 4.6m thick, overlying structured chalk to depth. For the East Site – Ammonia Storage, ground conditions were found to comprise variable thickness of MG up to 2m, typically less than 0.75m, over TFD of 8.6m average thickness, on top of GTD of average thickness of 8.6m. MG was recorded as Gravel, Sand and Clay. The superficial deposits were found to be underlain by a weathered horizon of FCF between 1.15m – 3.75m thick, overlying structured chalk to depth. For the West Site, ground conditions were found to comprise variable thickness of MG up to 2.1m, typically less than 0.5m, over TFD of 4.1m average thickness (locally up to 8.24m thick), on top of GTD of average thickness of 7.5m. MG was recorded as firm slightly gravelly clay. The superficial deposits were found to be underlain by a weathered horizon of FCF between 0.46m – 8.9m thick, overlying structured chalk to depth. TFD were found across all areas of the site to consist of soft to very soft clay, with an upper firm clay layer that was consistently present in the West site and occasionally present in the East Site – Hydrogen Production Area and East Site - Ammonia Storage Area. GTD were found across all site areas to consist of firm to stiff gravelly clay with a basal granular layer. Ground investigations scoped at the two pipeline corridors were not carried out due to access constraints. Further investigation will need to be carried out to provide information for the design of these underground pipelines.

Soil Properties	Numerous in-situ and laboratory tests were undertaken on each stratum to determine the characteristic properties of the respective geological deposits across the IGET site. MG is characterised by heterogeneous material content and variable engineering properties. TFD generally comprises a firm layer at the top (average 1m thick) of moderate shear strength and high compressibility, underlain by a significantly softer clay characterised by low shear strength and high compressibility. GTD generally comprise firm or stiff cohesive soils, characterised by moderate to high shear strength and low to medium compressibility. At the base of this stratum, a granular layer was recorded, comprising primarily medium dense sand. FCF comprises a weak high density chalk with closely spaced fractures and a top weathered layer (average 2.3m thick) which is structureless.
Rock Properties	A regime of point load testing and UCS testing together with SPTs has been completed on the chalk bedrock across the three sites. The laboratory testing confirmed on-site observations that the Flamborough Chalk Formation is very weak to weak with low UCS values being recorded. On-site observations indicated the chalk as weak, high density with closely spaced fractures.
Groundwater Level	Shallow groundwater is present in the Made Ground particularly in the East Site, with levels varying between +1.40m OD and +3.60m OD. Similar levels were also measured in the Tidal Flat Deposits (+1.60m OD and +3.97m OD) in the East Site. However, lower groundwater levels were recorded in the Tidal Flat Deposits in the West Site where it varied between +0m OD and +1.50m OD. The available data from the Tidal Flat Deposits indicated a north easterly groundwater flow direction towards the Estuary. The monitored groundwater level in the granular Glacial Till Deposits suggest similar levels compared with the recorded levels in the Made Ground and Tidal Flat Deposits. Groundwater levels in the Glacial Till Deposits ranged between +1.70m OD and +2.65m OD during the monitoring period (January 2023 to March 2023). Artesian conditions exist within both the Glacial Till Deposits and the underlying Chalk aquifer at the West Site, where groundwater levels ranged between +1.35m OD and +1.90m OD. The piezometric heads in the Glacial Till and Chalk aquifer were between +1.40m OD and +2.51m OD, equivalent to approximately 0.5m AGL (Above Ground Level). At the East Site, artesian conditions were not observed with the groundwater levels in the Glacial Till varying from 1.8m OD to 2.6m OD and in the Chalk between 0.7m OD and 3.1m OD. It should be noted that the current ground levels at the East Site are also generally slightly higher than those at the west site by approximately 2m. Groundwater level in the Chalk aquifer across the site is also potentially impacted by tidal influence from the Estuary (see Appendix B, Figures B3 and B4). However, there is limited monitoring data available to confirm this. The measured hydraulic conductivity values from field tests in the Glacial Till and the Chalk aquifer are typical of the strata and also consistent with literature values for matrix intergranular hydraulic conductivity values ($2.8x10^{-5}$ to $2.6x10^{-4}$ m/s in the Chalk). However, Chalk permeability can vary significantly with the presence of fractures which is the dominant groundwater flow mechanism in the aquifer due to the higher secondary permeability. Groundwater head will need to be controlled during the construction phase due to the shallow levels and in particularly due to the artesian conditions to maintain dry working conditions. Structures should be designed accordingly to minimise the risk of heave due to artesian conditions. It is recommended that groundwater monitoring is undertaken during and post construction phases.
Soil contamination	The soil chemical analysis results obtained from sampling were screened against the Generic Assessment Criteria (GAC) for a commercial / industrial end use to provide

	a baseline for the site and to provide a benchmark on which to compare the contaminant concentrations. There were no exceedances of the GAC from the soil samples obtained from the AECOM 2023 ground investigation with regard to chronic risks to human health. Thirty samples were analysed for the presence of asbestos. Of these, two were identified as containing asbestos material in the form of chrysotile within E-BH10 (East Site Ammonia Storage site) and E-BH25 (East Site Hydrogen Production site) at ground level within Made Ground. The sample from E-BH25 was described by the laboratory as loose fibres. The sample from E-BH10 was quantified as <0.001 (mass %). Historical investigations undertaken by RSK in 2020 recorded two positive identifications of chrysotile (<0.001%) within Made Ground at 0.3m bgl and 0.5m bgl out of seven samples tested for asbestos. The soil leachate results were screened against the Environmental Quality Standards (EQS) and Drinking Water Standards (DWS) to assess potential risks to surface waters and groundwater quality and to provide a baseline for the site and to provide a benchmark on which to compare the contaminant concentrations. Marginal exceedances of the screening criteria were recorded for metals, and some inorganics in all strata. A survey by a specialist in asbestos identification in soils is advised to ensure appropriate samples are taken for testing as part of the remedial works. Asbestos control measures will be required during development/construction works. Mitigation and monitoring will be required to eliminate, reduce, control or manage the risk, or in the last resort provide suitable personal protective equipment (PPE)/respiratory protective equipment (RPE) for ground workers. Mitigation will also be required to minimise the risk of off-site migration. It is expected that most of the development will comprise hardstanding and therefore provision of a designed cover layer, marker layer / anti dig layer is advised in areas of soft landscaping thereby reducing the risks to future site users and by placing services in “clean corridors” to reduce risk to maintenance workers from asbestos. High pH in dust in soil from made ground is a potential hazard for construction workers. Therefore, control of dust will be particularly important during groundworks. Control measures during ground works should be considered such as minimisation of simultaneously open cut areas, damping down and water spraying as part of a managed system of dust control. High pH in the soil is also a hazard for future users via direct contact. Therefore, mechanisms will be required to be put in place to minimise risk from exposure to these soils (hardstanding, soils with lower pH cover system for example). It should also be noted that the groundwater also exhibits high pH levels, which could also pose a hazard to construction workers.
Groundwater contamination	Groundwater, surface water and leachate samples were screened against the Environmental Quality Standards (EQS) and Drinking Water Standards (EQS) to assess the risk to surface water quality and groundwater quality respectively. Metals and inorganics were detected in the groundwater at concentrations which exceeded the screening criteria (EQS and DWS) for both surface water and groundwater quality protection across the West Site and East Site (Hydrogen Production and Ammonia Storage sites). It is considered that the groundwater quality within Made Ground and Tidal Flat Deposits beneath the West Site and East Site (Hydrogen Production and Ammonia Storage sites) may pose a risk to surface water quality. This is mostly associated with the presence of elevated inorganics, particularly ammonium and ammoniacal nitrogen within the East Site-Hydrogen Production Area. The exceedances of metals were mostly within the same order of magnitude or one order of magnitude above the EQS and were recorded across a range of strata. Therefore, these exceedances are not considered to pose a risk to the surface water. The exceedances of PAHs and TPH are also considered marginal as they are within the same order of magnitude as the EQS and were also isolated occurrences. Chloroform was detected in the groundwater at concentrations which exceeded the EQS for surface water quality within the East Site-Hydrogen Production Area and Ammonia Storage site.

	Widespread exceedances of ammoniacal nitrogen and ammonium were recorded within the West Site and East Site (Hydrogen Production and Ammonia Storage sites). The highest concentrations of ammonium and ammoniacal nitrogen were recorded within E-BH15 (870mg/l and 1100mg/l respectively), with the second highest concentrations recorded in groundwater within E-BH14A (9.4mg/l and 12mg/l respectively). This correlates to an ammonia odour recorded during drilling of E-BH14, E-BH14A and E-BH15 within Made Ground during the ground investigation. Therefore, there may be a localised hotspot of inorganic contamination within Made Ground in the East Site Hydrogen Production site which poses a risk to surface water quality. Surface water monitoring was undertaken within Habrough Marsh Drain upstream of the West Site (SW2) and approximately 40m west of the East Site (SW1), and the North Beck Drain approximately 450m east from the East Site (SW3). Exceedances of PAHs, metals and inorganics were recorded within the surface water samples across two monitoring rounds. However, it is likely that the exceedances within surface water samples are associated with off-site sources due to the industrial nature of the surrounding land use It is considered that the groundwater quality beneath the East Site (Hydrogen Production and Ammonia Storage Areas) may pose a risk to the aquifers beneath the site, particularly associated with metals and inorganics. The exceedances of C12-C16 aromatics and naphthalene are considered to be isolated occurrences and are within the same order of magnitude as the DWS. All the exceedances of metals were recorded within the same order of magnitude as the DWS. However, as there is a SPZ 1, 2 and 3 located on the site and the Flamborough Chalk Formation is designated as a Principal Aquifer, there is considered to be a risk to groundwater quality in the Flamborough Chalk Formation. Although exceedances of metals were recorded in Made Ground and Tidal Flat Deposits, there is not considered to be a risk to groundwater quality associated with metal exceedances as the Tidal Flat Deposits are designated as Unproductive Strata. Exploratory hole E-BH15 within Made Ground and E-BH14A within Tidal Flat Deposits recorded the highest concentrations of ammonium and nitrate (up to four orders of magnitude and two orders of magnitude above the DWS respectively). Therefore, this may represent a localised hotspot of inorganic contamination within the East Site Hydrogen Production site. No exceedances of the DWS were recorded in the West Site, therefore, there is not considered to be a risk to groundwater quality in the West Site. However, it should be noted that only one round of groundwater monitoring was undertaken. Therefore, it is recommended that additional groundwater monitoring is undertaken to assess the trend in contaminants over time. Groundwater measurably contaminated with inorganics may be encountered across the East Sites and West Sites, particularly in the Hydrogen Production site throughout the development works as obstructions etc. are removed. If encountered, these waters should be contained, sampled, assessed, treated as necessary and removed as part of remedial/construction works.
Aggressive ground conditions for buried concrete and steel	The ground investigation highlighted a risk of aggressive ground conditions for buried concrete and steel. Aggressive Chemical Environment for Concrete (ACEC) Classification for the East Site – Hydrogen Production is AC – 4 with a Design Sulphate Class of DS – 4 (in accordance with BRE Special Digest 1: 2005). The classification for each formation is as follows: MG: DS – 4 AC – 4; TFD: DS – 4 AC – 3s; GTD: DS – 3 AC – 2s; GGTD: DS – 2 AC – 2; FCF: DS – 1 AC – 1. ACEC Classification for the East Site – Ammonia Storage is AC – 4 with a Design Sulphate Class of DS – 4 (in accordance with BRE Special Digest 1: 2005). The classification for each formation is as follows: MG: DS – 4 AC – 4; TFD: DS – 4 AC – 3s; GTD: DS – 4 AC – 3s; GGTD: DS – 1 AC – 1; FCF: DS – 1 AC – 1.

	ACEC Classification for the West Site is AC – 4 with a Design Sulphate Class of DS – 4 (in accordance with BRE Special Digest 1: 2005). The classification for each formation is as follows: MG: DS – 4 AC – 4; TFD: DS – 4 AC – 3s; GTD: DS – 4 AC – 3s; GGTD: DS – 4 AC – 4; FCF: DS – 2 AC – 2.

List of References and Related Documents

Summary of existing information relating to the site and other references are summarised below.

Report Type	Report Reference
Desk Study	AECOM (February 2022). Immingham NH3 Project Development Appraisal Report. Document 60673509-GTN-DAR-001 Revision 00.
Factual Reports	Geotechnical Engineering Limited (May 2023). AP Ammonia Import Terminal Factual Ground Investigation Report. Report Ref 37312.
Interpretive Reports	RSK (2020). Immingham BCP Phase 2 Geo-environmental and Geotechnical Site Investigation. Report Ref 252477-01(00).
British Geological Survey Maps	British Geological Survey (1991). 1:50,000 scale BGS Geological Map Sheet 81, Solid and Drift Edition – Patrington.
Standards & Codes	• BRE Special Digest 1 (2005). Concrete in aggressive ground. • British Standards Institution (2004). BS EN 1997-1:2004+A1:2013 - Eurocode 7: Geotechnical Design - Part 1: General Rules. • British Standards Institution (2015). BS 8485:2015+A1:2019, Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings. • British Standards Institution (2018). BS EN ISO 14688-2:2018 Geotechnical investigation and testing – Identification and classification of soil – Part 2: Principles for a classification (ISO 14688-2:2017), ISBN 978 0 580 87599 1. • BS EN 1990:2002+A1:2005 EN 1990:2002+A1:2005 (E), Eurocode, Basis of Structural Design, European Committee for Standardization, Brussels. • British Standards Institution (2014). BS EN 1997-1:2004+A1:2013 Incorporating corrigendum February 2009 Eurocode 7 – Geotechnical Design – Part 1: General Rules, Incorporating corrigendum 1 February 2009 Implementation of CEN amendment July 2014. ISBN 978 0 580 80773 2. • British Standards Institution (2018). BS EN ISO 14689:2018, Geotechnical investigation and testing - Identification, description and classification of rock (ISO 14689:2017).Institution of Civil Engineers (2012). UK Specification for Ground Investigation. • British Standards Institution (2012): Geotechnical investigation and testing - Geohydraulic testing Part 2: Water permeability tests in a borehole using open systems. BS EN ISO 22282-2:2012. • C.R.I. Clayton (1995) CIRA C143 The Standard Penetration Test (SPT): Methods and Use. CIRIA 1995. • C.R.I. Clayton, J. A. Lord, R. N. Mortimore (2002). CIRIA C575 Engineering in Chalk. CIRIA London 2002. • Highways England (2009): CD 225 Design for new pavement foundations (formerly IAN 73/06 revision 1 (2009), HD 25/94) Revision 1.
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Drawings	• AECOM Geological Long Section 1 – West Site 60687114_ACM_DR_RSGE_001_0 • AECOM Geological Long Section 2 – West Site 60687114_ACM_DR_RSGE_002_0 • AECOM Geological Long Section 3 – West Site 60687114_ACM_DR_RSGE_003_0 • AECOM Geological Long Section 4 – West Site 60687114_ACM_DR_RSGE_004_0 • AECOM Geological Long Section 1 – East Site 60687114_ACM_DR_RSGE_005_0 • AECOM Geological Long Section 2 – East Site 60687114_ACM_DR_RSGE_006_0 • AECOM Geological Long Section 3 – East Site 60687114_ACM_DR_RSGE_007_0 • Neom Downstream Storage Area Conceptual Drainage Layput Immingham UK. Drawing No. EN222517-000-PP507-001 (15 March 23). • Neom Downstream Storage Area Site Plan DCO Immingham UK. Drawing No. EN-222517-PIP-PP504-001 (27 Jan 2023). • Neom Downstream Overall West Site Site Plan DCO Immingham UK. Drawing No. EN-222517-PIP-PP502-001 (27 Jan 2023). • Neom Downstream Dissociator Area Site Plan DCO Immingham UK. Drawing No. EN-222517-PIP-PP503-001 (27 Jan 2023). • Neom Downstream Storage Area Conceptual Drainage Layout Immingham UK. Drawing No. EN222517-000-PP507-001 (15 March 2023). • Neom Downstream Overall West Site Conceptual Drainage Layout Immingham UK. Drawing No. EN222517-000-PP507-001 (15 March 2023).

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1 Introduction

1.1 Background

12The Client, Air Products PLC (AP), proposes to develop land in the northeast of England located east of Immingham Port and on the south bank of the Humber Estuary into a new green hydrogen production facility, Immingham Green Energy Terminal (IGET). The new IGET would comprise the alteration of a harbour facility for the construction, operation and maintenance of a multi-user green energy terminal to facilitate the import and export of bulk liquids associated with the energy sector, together with associated development. The terminal consists of a jetty and associated loading/ unloading infrastructure and pipelines.

Initially, the terminal will be used for the import and export of green ammonia to be converted to green hydrogen. To facilitate this, a hydrogen production facility, comprising associated ammonia handling equipment, storage and processing units will be constructed. Other proposed uses for the green energy terminal will come forward in due course. It is anticipated that future users of the terminal are likely to include customers in the carbon capture sector.

The site has been divided into an East Site to house equipment to manufacture green hydrogen and store green ammonia and a West Site to house production equipment and store hydrogen to be distributed around the UK. A pipe rack corridor will run from the jetty landfall to the East Site and an underground pipeline corridor will run between the east and west site facilities.

AECOM Ltd (AECOM) has been commissioned by AP to produce all relevant documents associated with a Development Consent Order (DCO); additional to this we have been commissioned to take on the role of Principal designer and Principal Contractor under CDM. As Principal Contractor AECOM have been responsible for undertaking the Ground Investigation works on site on behalf of the client with our subcontractor Ground Engineering Limited (GEL), along with fulfilling the role under CDM to ensure all required CDM Safety systems are in place and managed during these works. Ground investigation works at the East and West Sites were carried out by between 8th November 2022 and 16th February 2023.

Alongside the above-mentioned roles AECOM are also the designer for the Ground Investigation providing consultancy services to the IGET project in the form of Ground Investigation design, Investigation Supervisor onsite support (both Geotechnical and Geo-environment), laboratory scheduling, checking of the sub-contractors factual data during and after the site works.

On the reporting site AECOM produced an Interim Geotechnical Advice Note in February 2023 to provide an initial idea of likely site ground conditions and any constraints, and early foundation consideration that would help the support AP with project forecast costing. This Ground Investigation Report (GIR) is produced to support the Front End Engineering Design (FEED) and Detailed Design. The Engineering Recommendations will be issued as an Addendum to the GIR.

The locations of the proposed exploratory holes are shown on Figure 1a of the AECOM (2023) Ground investigation Specification.

1.2 Scope and purpose of report

This Ground Investigation Report (GIR) covers reporting of the recent ground investigation undertaken at Immingham to support engineering development of the new IGET. The GIR scope comprises the following tasks:

A summary of the site/site history/walkover survey (carried over, and developed from, the Desk Study Report);

An evaluation of the field and laboratory testing results included in the ground investigation Contractor's Factual Report;

Development of the ground model for the site, including the groundwater regime. Geological cross sections to be produced, as required;

Derivation of geotechnical global parameters for the various geological materials encountered at the site;

Provision of a summary table of preliminary geotechnical parameters;

Interpretation of the geo-environmental aspects of the investigation, including:

- A generic quantitative human health risk assessment defined as a Tier 2 assessment in the Environment Agency Land Condition Risk Management (LCRM) Guidance, based on published Generic Assessment Criteria (GAC) values and, where appropriate, criteria prepared by AECOM;
- A generic quantitative risk assessment to controlled waters in line with the processes outlined in LCRM using published water quality criteria;
- A ground gas risk assessment in accordance with BS8485;

Assessment of the geotechnical and geo-environmental risks associated with the development.

Preliminary engineering assessment for potential foundation types;

The Engineering Recommendations will be issued separately as an Addendum to the GIR, following issue of the GIR. This will enable the Final GIR to be available for AP's Development Consent Order (DCO) submission.

The output of this GIR will be used for detailed design of the new IGET facilities. Further structure-specific geotechnical (and geo-environmental) investigation is likely to be required during detailed design.

1.3 Structure of report

This report provides interpretation of the ground investigation data for the Immingham Green Energy Terminal project. The report is divided into twelve sections.

- Section 1 outlines the background, scope and structure of the report and its limitations.
- Section 2 describes the site, its development history and the proposed construction of the project.
- Section 3 details the ground investigations carried out between November 2022 and February 2023.
- Sections 4 and 5 describe the geology encountered and the hydrogeological conditions determined from the ground investigations
- Section 6 summarises the geotechnical properties gathered from the respective strata.
- Sections 7 and 8 describes the environmental aspects of the ground investigations.
- Section 9 provides a geotechnical risk register.

1.4 Limitations of report

The information, views and conclusions drawn concerning the site are based, in part, on information supplied to AECOM by other parties. AECOM has proceeded in good faith on the assumption that this information is accurate. AECOM accepts no liability for any inaccurate conclusions, assumptions or actions taken resulting from any inaccurate information supplied to AECOM from others.

The investigation was to provide sufficient data to support to develop a commercial, industrial-scale ammonia usage and transport facility south of Immingham Docks. Based on preliminary discussions with AP, we understand that ammonia will be shipped to the UK Site via an ocean tanker vessel and make berth at the proposed import terminal. The ammonia will be offloaded into storage tanks. The terminal will be equipped with an ammonia dissociator facility that will convert the ammonia into hydrogen gas, and also a hydrogen liquefier which will convert the gaseous hydrogen product into liquid hydrogen. The liquid hydrogen will be distributed to various receivers via pipeline or truck (or a combination thereof). The development will include but not limited to: Ammonia dissociators, bulk hydrogen filling and HRS, hydrogen liquefier and liquid hydrogen storage, associated utilities and buildings.

The exploratory holes carried out during the fieldwork, which investigate only a small volume of the ground in relation to the size of the site, can only provide a general indication of site conditions. The comments made and recommendations given in this report are based on the ground conditions apparent at the site of the exploratory holes. There may be exceptional ground conditions elsewhere on the site which have not been disclosed by this investigation and which have therefore not been considered in this report.

The comments made on groundwater conditions are based on observations made during site work and during a subsequent limited monitoring programme. It should be noted that groundwater levels may vary due to seasonal or other effects such as tidal related fluctuations which may not have been observed during the limited monitoring period.

The opinions expressed in this report concerning any contamination found and the risks arising there from are based on current good practice, simple statistical assessment and comparison with available soil guideline values, AECOM generic assessment criteria and other guidance values.

It should be noted that the effects of ground and water borne contamination on the environment are constantly under review, and authoritative guidance values are potentially subject to change. The conclusions presented herein are based on the guidance values available at the time this report was prepared, however, no liability by AECOM can be accepted for the retrospective effects of any changes or amendments to these values.

2 Site Description and Setting

A detailed description of the site is provided in the Development Appraisal Report (AECOM, 2022). A concise summary is provided below for reference. Readers are encouraged to refer to the above referenced Development Appraisal Report for further information.

2.1 Site location

The Site is located on the south bank of the Humber Estuary and to the east of Immingham Port in Northeast Lincolnshire, UK. The site centre is approximately located on National Grid Reference N: 520477.7 E: 414904 and covers an area of approximately 45 ha. The entire IGET comprises two parts - a land side and a marine side. The marine side, which comprises a jetty and two berths, is outside the scope of this report. The land side is split into the West Site, 'East Site – Hydrogen Production', 'East Site – Ammonia Storage' and Pipeline Corridor as shown in Figure . The Pipeline Corridor does not form part of this GIR scope.

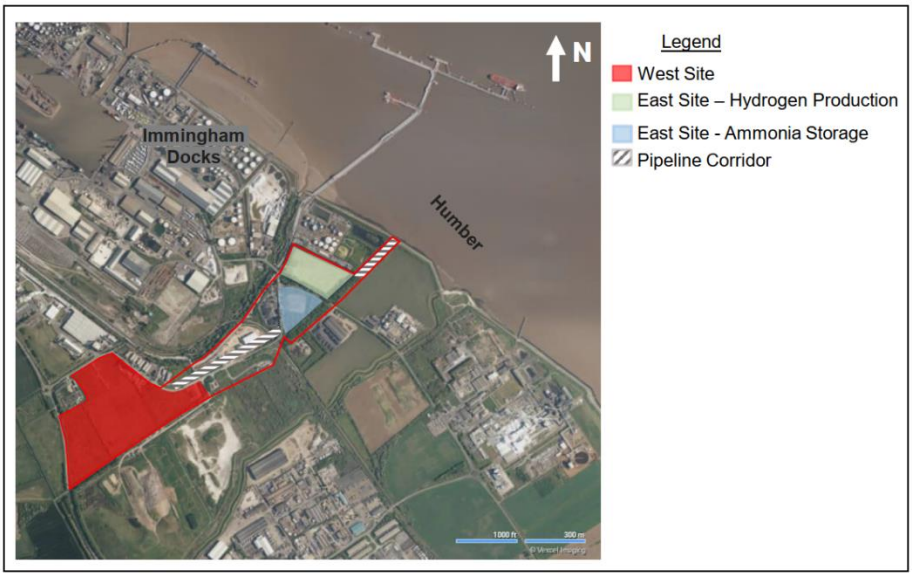


Figure 2-1 Site Location plan, including limits of study area and project options

2.2 Site description

2.2.1 West Site

The West Site comprises three agricultural fields separated by hedgerows and drainage ditches. Existing ground elevations are generally in the range 1.5m to 2.0m OD. Commercial and residential buildings are located on the eastern boundary of the West Site along with Queens Road. The northern boundary follows Kings Road and the western boundary follows the A1173. An electrical substation is located at the eastern extent of the West Site, which is fenced off from the surrounding agricultural field. A short road is present starting from Kings Road leading to the centre of the site, thought to be associated with previous construction activities.

Section profiles provided by AP indicate that it is intended to raise the West Site to a Rough Ground Level (RGL) of 2.5m OD. However due to ongoing design development consideration shall be given to RGLs of 2.0m, 2.5m and 3.0m OD. Finished Ground Level (i.e. the average of High Point Paving and Low Point Paving) is expected to be of the order 0.5m higher than RGL.

2.2.2 East Site – Hydrogen Production

The 'East Site – Hydrogen Production' area comprises an area of concrete hardstanding used for temporary storage of materials for the Port of Immingham. Historical photographs (2007-2016) show the site to have housed various stockpiles appearing black in colour (potentially coal/slag), which could be associated with the disused coal stockpiling. From 2016 the stockpiles are no longer shown.

Existing ground elevations are generally in the range 3.5m to 4.0m OD. The East Site is surrounded by earth embankments, to a maximum height of approximately 4m, which are heavily vegetated with trees. A drain is found at the base of the slope around much of the perimeter of the East Site. The southern site boundary follows Laporte Road and the western boundary follows the A1173.

Section profiles provided by AP indicate that it is intended to cut the embankments on the southern, eastern and western sides and raise the majority of the 'East Site – Hydrogen Production' to a Rough Grade Level (RGL) of between 3.5m and 4.0m OD. Finished Ground Level (i.e. the average of High Point Paving and Low Point Paving) is expected to be of the order 0.5m higher than RGL.

2.2.3 East Site – Ammonia Storage

The 'East Site – Ammonia Storage' area comprises an area of hardstanding surrounded by woodland and dense vegetation. Existing ground elevations are generally in the range 3.0m to 3.5m OD. An approximate 2m high embankment is present along the south and east boundary of the area of hardstanding.

Section profiles provided by AP indicate that it is intended to raise the 'East Site – Ammonia Storage' area to a Rough Grade Level (RGL) of 3.5m OD. Finished Ground Level (i.e. the average of High Point Paving and Low Point Paving) is expected to be of the order 0.5m higher than RGL.

2.2.4 Pipeline Corridors

Figure shows two pipeline corridors as follows:

- From the Jetty Landfall to the East Site. The pipelines are proposed to be above-ground and supported on a pipe rack structure.
- From the East Site to the West Site. The pipelines are proposed to be underground in Horizontal Directional Drilled (HDD) bores up to 10m deep.

Ground investigations scoped at the two pipeline corridors were not carried out due to access constraints. Further investigation will need to be carried out to provide information for the design of these underground pipelines.

2.3 Development history

The historical development of the site and the immediate surroundings have been assessed using Ordnance Survey (OS) maps dating from 1886-2002 obtained as part of the Groundsure Report (GS-9009838) and Google Earth Pro.

Historical records dating back to the late 19th century show that all areas of the Site comprised agricultural fields. There are several historical surface water features present on and in the direct vicinity of the Site. Surface water pooling has been observed predominantly within the eastern section of the Site. A drain is shown running northwards through the East to West Site pipeline corridor and another connecting drain running north-eastwards adjacent to the northern boundary of the Site leading to a Sluice approximately 225m north from the East Site. Three springs also present approximately 100 to 150m north of the East to West Site pipeline corridor along with a residential building labelled 'Habrough Marsh'. A forested area labelled as 'Long Strip' is shown adjacent to the southern boundary of the 'East Site - Hydrogen Production' and 'East Site – Ammonia Storage' area now identified as the Tree Protection Order (TPO) area.

During the 20th century, areas in and around the site were developed predominantly for industrial use. The Grimsby District Electric Light Railway is shown in 1930 orientated northeast to southwest along Queens Road, and northwest to southeast, used to connect the surrounding areas to Immingham Dock. Associated railway sidings and 'Engine Shed' are also shown. 'Sewage Works' are also indicated 50m southeast of the East Site – Ammonia Storage area and residential housing is developed along Queens Road adjacent to the West Site. A 'Gypsum Disposal Bed' is denoted bordering the southern boundary of the West Site in 1951 and was identified during the site walkover as an area of raised land. In 2003, the East Site is indicated to have been a Coal Stockyard and another Coal Stockyard is shown north of Queens Road in 2008. In 2019, it appears that sporadic areas of hardstanding was laid on the East Site, and in 2021 a continuous layer of hardstanding concrete was added. These layers of Made Ground can be shown in Cross Section 60687114_ACM_DR_RSGE_005_0. The 'East Site – Ammonia Storage' area is shown in 2009 to be used for construction activities but appears to have been left derelict from 2017 onwards. Development of the 'Border Control Post' and associated construction area is shown in 2021 in the East to West Site pipeline corridor.

2.4 Geology

This section details the anticipated superficial and bedrock geology for the site. This information has been interpreted from the published 1:50,000 solid and drift geological map produced by the BGS (BGS Geological Survey) (Sheet 81, Patrington, Solid and Drift, 1991), the BGS GeoIndex Onshore viewer and the Groundsure Report. The proven composition and thickness of superficial and deposits on site are discussed in Section 0.

2.4.1 Made Ground

A small area of Made Ground (MG) is indicated to underlie the north-east section of the East Site. However, Made Ground was expected to underlie the entirety of the East Site as it is covered in hardstanding concrete.

Made Ground is indicated underneath the Coal Yard adjacent to the north of Queens Road, directly east of the Border Control Post.

Made Ground is also indicated in the Landfill, locally adjacent to the southern extent of the West Site.

2.4.2 Superficial Deposits

The published 1:50,000 solid and drift geological map and the BGS GeoIndex Onshore viewer indicates the superficial geology underlying the entire site to be Tidal Flat Deposits (formerly Marine and Estuarine Alluvium). This is shown in Figure 2-2.

Review of BGS historical boreholes logs TA11SE150 and TA11SE154 associated with the construction of the A1173 indicate Tidal Flat Deposits (TFD) to consist of firm and soft clay with organic material to be underlain by Glacial Till Deposits (GTD), which consist of stiff clay with chalk gravels.

The BGS Lexicon describes the TFD as ‘unconsolidated sediment, mainly mud and/or sand’ amd the GTD as ‘heterogenous mixture of clay, sand, gravel and boulders varying widely in size and shape’.

2.4.3 Bedrock Deposits

The Flamborough Chalk Formation (FCF) underlies the entirety of the site. It is described by the BGS Lexicon as ‘white, well-bedded, flint-free chalk with common marl seams’ and can be up to 265m thick.

The Burnham Chalk Formation is shown locally adjacent to the western extent of the West Site. It is described by the BGS Lexicon as ‘white, thinly-bedded chalk with common tabular and discontinuous flint bands; sporadic marl seams’.

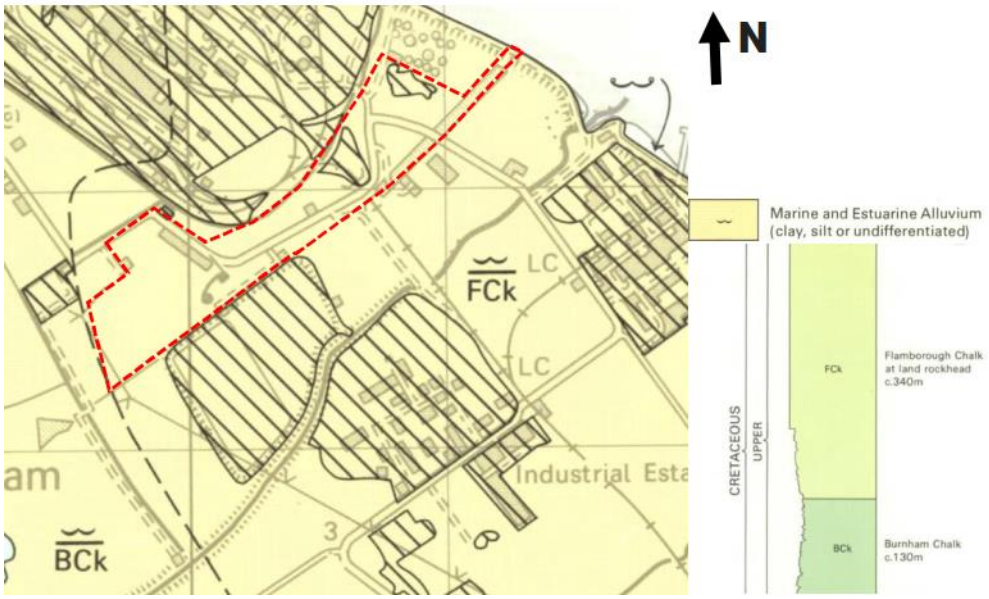


Figure 2-2 Geological plan, including limits of study area. Reproduced from [Sheet no. 81, Patrington Solid and Drift, 1991] by permission of British Geological Survey. ©UKRI. All rights reserved 2022. [C16/02-CSL] British Geological Survey © UKRI. All

2.5 Hydrogeology

The site is underlain by the Chalk formation, which is a Principal Aquifer. Groundwater flow in the Chalk is typically via fractures which facilitates rapid flow due to the high secondary permeability. The Chalk matrix has a much smaller contribution to groundwater flow due to the lower intergranular permeability.

The overlying Tidal Flat deposits across the area are likely to have a variable but predominantly low permeability. Between the Tidal Flat deposits and Flamborough Chalk Formation sits the Glacial Till. The Glacial Till generally has a higher but variable permeability depending on lithological variations, and where granular the permeability is slightly lower than the Chalk beneath.

The Chalk aquifer is the main water bearing stratum across the area. Regionally, groundwater flow in the Chalk is easterly discharging to the Humber estuary. A review of the Environment Agency groundwater monitoring records for a borehole located within 1km of the site, indicates that the Chalk groundwater in the area is tidal in response to the impact from the Humber estuary.

Table 2-11 summarises the aquifer classification for the strata underlying the site.

The site-specific hydrogeological condition, including recorded groundwater conditions and classification of the water-bearing zones (aquifer), is discussed in Section 5. Findings from the groundwater level monitoring and in-situ quality are also discussed in Section 0 The groundwater quality data collected as part of the ground investigation works are discussed in Section 7.

Table 2-1 Aquifer classification

Geological Unit	Stratum	Aquifer Classification
Superficial	Tidal Flat Deposits	Secondary A
Superficial	Glacial Till	Secondary undifferentiated
Bedrock	Flamborough Chalk Formation	Principal

2.6 Site reconnaissance

A site walkover was undertaken by AECOM on 13th January 2022 and the findings were reported in the Development Appraisal Study (Doc No. 60673509-GTN-DAR-001). A subsequent site walkover was performed with the GI Tenderers on 14th July 2022 primarily with a view to identify of site access constraints. Apart from the constraints posed by the underground pipelines, no significant issues were identified during the walkovers.

2.7 Proposed construction

A plan layout of the proposed new facilities at the West and East Sites are shown in Drawing Number EN-222517-PIP-PP502-001 and EN-222517-PIP-PP503-00 supplied by AP. The location and layout of the ammonia storage tank to be constructed in the East Site are shown in Drawing Number EN-222517-PIP-PP504-001 and EN222517-000-PP507-001, also supplied by AP.

The proposed development is understood to comprise a process plant, storage tanks and pipe racks, much of which are expected to be settlement sensitive. The ground surface on the finished site is expected to be occupied by a combination of plant roads, paved areas and gravel areas.

3 Summary of 2022/2023 Ground Investigation

3.1 Introduction

A ground investigation (GI) at Immingham was undertaken by AECOM Infrastructure & Environment UK Limited (hereafter referred to as "AECOM PC"), to obtain an understanding of the overall ground conditions for the site and provide parameters for design. Intrusive field works were undertaken from 8th November 2022 and 16th February 2023.

The location of the exploratory holes is shown on the front end of the Factual Report (Document number: 60687114). The proposed construction layout for the new IGET facilities in relation to the exploratory holes is detailed in the AECOM (2022) Ground Investigation Specification (Figure title - Proposed Ground Investigation locations). At each exploratory hole location, a minimum 10m x 10m area was subjected to the British Standard PAS128 Survey B M3P from which a Clearance Sheet and associated Permit to Dig were produced prior to intrusive activities taking place. The PAS128 Type B survey utilised CAT and Genny and Ground Penetrating Radar (GPR) techniques, along with a compilation of Buried Utilities Drawings.

A summary of the exploratory holes carried out at the IGET site is provided in Table 3-1.

There were six bi-weekly gas and groundwater monitoring visits undertaken post-fieldwork between 27th February and 9th May 2023. In addition, up to 6no. weekly ground gas monitoring rounds were undertaken during the ground investigation.

One round of groundwater sampling was undertaken during the visits between 27th February, and 1st March 2023.

Table 3-2. Summary of exploratory holes

	Number of exploratory boreholes				
Exploratory hole type	West Site	East Site	East Site – Ammonia Storage area	Total	Max. depth (m)
Cable Percussion with Rotary Core follow-on	37	12	12	61	55
Cable Percussion	3	-	1	5	19.5
Rotary Core	1	1	-	2	12
Cone Penetration Tests (CPTs)	35	13	10	60	25.5
Machine Excavated Trial Pits (TP)	41	-	4	45	3.3
Inspection Pits (terminated locations)	2	3	2	7	1.2

Notes:

3.2 Design of the Ground Investigation

The GI was designed in line with BS EN 1997-1:2004+A1:2013 (BSI, 2004) with the requirements defined for construction of a new Ammonia Import Terminal. The GI Specification (AECOM, 2022) was developed in accordance with the UK Specification for Ground Investigation, Version 2 (ICE, 2012) and set out to obtain the following core objectives:

Determine soil and groundwater profile across site

To provide geotechnical and geo-environmental parameters for the following activities:

- Design of site preparation earthworks as required to raise site elevations
- Design of ground treatment works (if required)

- Design of shallow foundations (bearing capacity, settlement under foundation loads, settlement due to weight of earthworks platform, differential settlement between structures supported on piled and shallow foundations)
- Design of piled foundations (axial capacity versus depth, negative skin friction due to downward movement of soft soils and overlying earthworks platform relative to pile shaft).
- Design of piled foundations for 70m diameter ammonia storage tank
- Foundation design for vibrating equipment
- Design of plant roads and paved areas (requires CBR of subgrade soils)
- Design of earthing and cathodic protection systems
- Design of buried cables (determine heat loss)
- Design of site drainage and groundwater control measures
- Design of HDD pipeline from East Site to West Site, including design of launch and reception pits.
- Design of pipe rack from jetty landfall to East Site
- Environmental and contamination considerations

For the East and West Sites, the GI layout was based on a grid at approximately 40-60m centres across the site, following the guidance provided for ‘industrial structures’ and for ‘large-area structures’ provided within Annex B of BS EN 1997-2 with some modification to target specific plant structure and to accommodate Air Products instruction to reduce the GI layout intensity within Future Areas and Construction Laydown Areas.

Reference was made to typical values used within the oil & gas industry for the East Site – Ammonia Storage area as Eurocode 7-2 provides no guidance for scoping GI for large diameter storage tanks. One borehole was positioned in the tank centre, 2 boreholes and 2 CPTs at half-radius, and 4 boreholes and 4 CPTs around the tank perimeter. Borehole depths were increased below the storge tank, due to its large 70m diameter footprint, to ensure that geotechnical data is available to sufficient depth for purposes of both pile capacity and settlement calculations.

Exploratory holes were positioned at 50m centres along the pipeline corridors, with boreholes extending to top of bedrock and Cone Penetration Tests (CPT) to refusal along the HDD corridor.

3.3 Boreholes and Sampling

The information below summarises the exploratory techniques and sampling employed for this GI. Further information is presented in the (AECOM, 2023) Factual Report.

3.3.1 Inspection pits

All exploratory hole locations were preceded by an inspection pit to check for presence of buried services. In areas of soft standing, the inspection pit was hand excavated to a maximum depth of 1.2m. In areas of hardstanding, the inspection pits were excavated using a JCB 3CX to penetrate the surface and underlying hard strata to 1.2m.

3.3.2 Cable Percussion boreholes

Cable percussion drilling was undertaken using a Dando 2000 or 3000 light cable tool (shell and auger) rig utilising 200mm and 250mm tools and casing. Cable percussion solely was used to drill five boreholes to a maximum depth of 19.5 m, E-BH13 & E-BH14A, W-BH06A, W-BH07A and W-BH11A.

In other boreholes, cable percussion drilling was utilised with rotary coring follow on to investigate the condition of the Chalk bedrock.

3.3.3 Rotary Cored Drilling

A track-mounted Geotechnical Pioneer Rig with Geobor ‘S’ wireline was used for the rotary coring follow-on, up to a maximum of 20 m into the bedrock. An inner barrel assembly, incorporating a semi-rigid plastic liner, was deployed down the borehole and latched onto the outer barrel/casing to recover continuous cores of 102 mm diameter. The outer barrel enabled the hole to be fully cased.

Conventional Rotary drilling techniques were used for the rotary core follow-on in eight boreholes (E-BH03, E-BH11, E-BH12, E-BH17, E-BH21, W-BH19, W-BH23 and W-BH29). A double-tube swivel core barrel with semi-rigid plastic liner was utilised to recover a continuous sample of 120mm diameter. A 99mm diameter core barrel recovering a continuous sample of 70mm diameter was used to construct the High-Pressure Dilatometer (HPD) test pockets.

Two fully rotary cored boreholes were carried out: Borehole E-BH26 was drilled as pilot hole to assess thickness of hard strata and borehole W-BH15A to facilitate HPD testing in the Glacial Till Deposits. Rotary coring was also used to penetrate surface hardstanding and underlying hard strata to facilitate thirteen CPTs.

3.3.4 Undisturbed Sampling

The sampling regime adopted for the Immingham GI is summarised in Table 3-3.

Table 3-3 Summary of undisturbed sampling regime

Exploratory Hole Type	Fine grained soils	Coarse Grained soils
Trial pits	• Small, disturbed samples in topsoil and at hand shear vane location; • Bulk disturbed samples at change in strata; • Large bulk disturbed samples at 1.5 m intervals; • 1no. per m for BRE SD1 electrochem.	• Small, disturbed samples in topsoil; • Bulk disturbed samples at change in strata; • Large bulk disturbed samples at 1.5 m intervals; • 1no. per m for BRE SD1 electrochem.
Inspection pits	• Small, disturbed samples in topsoil • and at hand shear vane locations; • Bulk disturbed samples at change in strata; • 1no. per m BRE SD1 electrochem.	• Small, disturbed samples in topsoil; • Bulk disturbed samples at change in strata; • 1no. per m BRE SD1 electrochem.
Cable percussion boreholes	• Undisturbed thin wall sample (UT100) from base of inspection pit, then 3m and every 2m thereafter; • Small, disturbed samples of topsoil, at change in strata or consistency and from SPT split spoon sampler; • Bulk disturbed samples over SPT range (minimum 1 per strata); • 1no. per m BRE SD1 electrochem.	• Small, disturbed samples of topsoil, at change in strata or consistency and from SPT split spoon sampler; • Bulk disturbed samples over SPT range (minimum 1 per strata); • 1no. per m BRE SD1 electrochem.
Rotary boreholes	Core sample at nominal 2m intervals.	Core sample at nominal 2m intervals.

3.3.5 Geo-environmental Sampling

A total of 716 no. samples from the Made Ground and natural strata were obtained for the purpose of this GIR. Soil samples were generally obtained at regular intervals within each stratum at each location.

Table 3-4 Summary of environmental sampling

Exploratory Hole Type	Fine grained soils	Coarse Grained soils
Trial pits	Environmental samples taken at • Topsoil; • 1no sample. at 1m bgl in the Made Ground; • 1no.sample in each stratum with a minimum of 1no. sample per m in Made Ground.	Environmental samples taken at • Topsoil; • 1no.sample at 1m bgl in the Made Ground; • 1no.sample in each stratum with a minimum of 1no. sample per m in Made Ground.
Inspection pits	Environmental samples taken at • Topsoil; • 1no. sample at 1m below Made Ground; • 1no. sample per m in Topsoil/ Made Ground.	Environmental samples taken at • Topsoil; • 1no. sample at 1m below Made Ground; • 1no. sample per m in Topsoil/ Made Ground.
Cable percussion borehole	Environmental samples taken at • 1no. sample at 1m below Made Ground; • 1no. sample per m in Made Ground.	Environmental samples taken at • 1no. sample at 1m below Made Ground; • 1no. sample per m in Made Ground.

Exploratory Hole Type	Fine grained soils	Coarse Grained soils
Rotary borehole	-	-

3.4 Borehole instrumentation and monitoring

Single 50mm internal diameter monitoring standpipes were installed in 35 no. exploratory holes, to monitor gas, groundwater levels, and to obtain groundwater samples as summarised in Table .

Vibrating wire piezometers were installed in 8 no. boreholes as summarised in Table 3-5.

The groundwater level monitoring data is presented in Section 5.

Table 3-5 Summary of Groundwater Standpipe Construction

		Top Seal		Bottom Seal		Well Screen		Response Zone		
Exploratory Hole ID	Standpipe diameter (mm)	From (m bgl)	To (m bgl)	From (m bgl)	To (m bgl)	From (m bgl)	To (m bgl)	From (m bgl)	To (m bgl)	Response Zone Strata[1]
E-BH01	50	21.5	22.5	-	-	23.7	30.7	23.5	30.9	WCFC/FCF
E-BH02	50	19.7	20.7	-	-	24.7	31.7	24.5	32	WFCF / FCF
E-BH04	50	22.0	23.1	-	-	25	33	23.1	34.3	GTD/WFCF
E-BH07	50	19.0	20.0	22.1	23.1	21	22	21	22.1	GGTD
E-BH10	50	20.3	21.4	-	-	25	32	22.4	32	GGTD / WFCF / FCF
E-BH11	50	18.5	19.45	-	-	20.8	22.9	19.45	23.3	GGTD
E-BH14A	50	0.8	1.75	-	-	2.3	4.3	1.75	5	TFD / TFD2
E-BH15	50	-	-	1.3	2.3	0.8	1.3	0.7	1.35	MG
E-BH18	50	24.1	25.1	-	-	28	34	27.9	34.1	WFCF / FCF
E-BH19	50									
E-BH20	50	0.5	0.8	4.0	5.0	1.5	3.75	1.4	4	MG2
E-BH21	50	23.8	24.8	-	-	28	35	24	35	GTD / WFCF / FCF
E-BH22	50	-	-	4.0	5.0	-	-	1.1	4	MG / TFD2
E-BH25	50	10.5	11.5	24.0	25.0	13.2	23.2	12.5	24	GGTD / GTD
W-BH01	50	15.3	16.3	-	-	18.7	22.7	16.3	27	GGTD / WFCF
W-BH09	50	16.5	17.5	-	-	19.7	27.7	17.5	31.5	GGTD / WFCF / FCF
W-BH10A	50	14.2	15.2	-	-	19.7	22.7	15.2	27.33	GGTD / WFCF / FCF
W-BH14	50	15.0	16.0	-	-	16.8	17.8	16	17.8	GGTD
W-BH17	50	19.5	20.5	-	-	21.7	28.7	20.5	28.7	WFCF / FCF
W-BH18	50	7.0	8.0	19.5	20.5	9.8	18.8	8	19.5	GTD / GGTD
W-BH20	50	19.7	20.7	-	-	22.8	24.8	20.7	28.68	GTD / WFCF / FCF
W-BH21	50	17.0	18.0	-	-	20	24	18	27.45	GGTD / WFCF / FCF

Exploratory Hole ID	Standpipe diameter (mm)	Top Seal From (m bgl)	Top Seal To (m bgl)	Bottom Seal From (m bgl)	Bottom Seal To (m bgl)	Well Screen From (m bgl)	Well Screen To (m bgl)	Response Zone From (m bgl)	Response Zone To (m bgl)	Response Zone Strata[1]
W-BH22	50	15.4	16.4	-	-	20.5	23.5	16.4	27	GGTD / WFCF / FCF
W-BH24	50	15.0	16.0	-	-	17.2	19.2	16	19.4	GGTD
W-BH26	50	0.5	0.6	-	-	0.7	1.7	0.6	1.8	TFD2
W-BH30	50	18.0	19.0	-	-	21.8	28.8	19	31.5	WFCF / FCF
W-BH31	50	16.0	16.7	-	-	17.8	18.8	16	19.2	GTD / GGTD
W-BH34	50	19.0	20.1	-	-	23	29	20.1	30	GTD / WFCF / FCF
W-BH35	50	15.7	16.7	-	-	19.7	26	16.7	26.7	WFCF / FCF

[1] Firm Tidal Flat Deposits (TFD2), Tidal Flat Deposits (TFD), Glacial Till Deposits (GTD), Granular Glacial Till Deposits (GGTD), Weathered Flamborough Chalk Formation (WFCF) & Flamborough Chalk Formation (FCF)

Table 3-6 Summary of vibrating wire piezometer installations

Exploratory Hole ID	Response Zone Depth (m bgl)	Response Zone Strata
E-BH05	7	Tidal Flat Deposits
E-BH17	6	Tidal Flat Deposits
E-BH26A	7	Tidal Flat Deposits
W-BH02	5	Tidal Flat Deposits
W-BH11	5	Tidal Flat Deposits
W-BH19	5	Tidal Flat Deposits
W-BH25	4	Tidal Flat Deposits
W-BH36	4.5	Tidal Flat Deposits

3.5 In-situ testing

Details of the in-situ testing carried out are provided in Table 3-7 and analysis of the in-situ test results is provided in Section 66.

Table 3-7 Summary of in-situ testing

Exploratory hole type	Number of in-situ tests			
	West Site	East Site – Hydrogen Production	East Site – Ammonia Storage	Total
Standard Penetration Tests (SPT) typically undertaken at 1.5m intervals or where core recovery was less than 90%.	572	226	207	1005
High Pressure Dilatometer (HPD) carried out approximately 2m below stiff clay in the Glacial Till and from 2m below intact bedrock, 5m below intact bedrock and 10m below intact bedrock.	12	4	-	16
Vertical Seismic Profile Surveys undertaken to a maximum depth of 34m bgl	4	3	-	7
Dynamic Cone Penetrometer Tests (DCP)	22	-	2	24
Down-hole Seismic Geophysical Survey	4	3		7
Hand Shear Vane	54	12	15	81

3.6 Laboratory testing

3.6.1 Geotechnical Testing

Geotechnical laboratory testing was undertaken by AECOM PC and Geotechnical Engineering Limited (GEL). The testing undertaken is summarised in Table 3-8.

Table 3-8 Summary of laboratory testing undertaken

Test Type	Test Standard	Number of Tests			
		West Site	East Site – Hydrogen Production	East Site – Ammonia Storage	Total
Natural water content	BS 1377:1990 Part 2: 3.2	297	95	100	492
Atterberg Limits	BS 1377:1990 Part 2: 4.3 & 5.3	278	69	74	432
Linear Shrinkage	BS 1377:1990 Part 2: 6.5	2	2	1	5
Particle Size Distribution (by wet sieving)	BS 1377:1990 Part 2: 9.2	123	43	30	199
Particle Size Distribution (sedimentation by pipette method)	BS 1377:1990 Part 2: 9.4	95	25	29	149
Unconsolidated Undrained Triaxial Compression	BS 1377:1990 Part 7: 8	41	24	19	84
Consolidated Undrained Triaxial Compression	BS 1377:1990 Part 7: 8	6	7	1	15

Test Type	Test Standard	Number of Tests			
		West Site	East Site – Hydrogen Production	East Site – Ammonia Storage	Total
One Dimensional Consolidation (Oedometer)	BS 1377:1990 Part 5: 3	101	38	41	180
Natural Water Content of a Rock Sample	IRSM Part 1 Methods for Rock Characterisation 1974-2006	28	21	23	72
Uniaxial Compressive Strength	IRSM Part 1 Methods for Rock Characterisation 1974-2006	37	14	17	68
Point Load Testing	ISRM Suggested Method for Point Load Strength 1974-2006	155	44	78	277
Rock Density			2	2	4
Compaction using 2.5kg rammer		13	-	1	13
Compaction using 4.5kg rammer	BS 1377:1990 Part 4: 3.5 7	2	-	2	4
Particle Density	BS EN ISO 17892-3 : 2015 : 5	33	6	8	47
Organic matter	UKAS 2183 Accredited	79	18	28	125
Carbonate Content	Chemtest Ltd in-house method	34	10	9	53
BRE Special Digest 1 (7) Suite D	BS 1377: 1990 Part 3: 5	99	26	40	165
Chloride	UKAS 2183 Accredited	92	16	33	141

3.6.2 Geo-environmental Testing

Geo-environmental laboratory testing was undertaken by i2 Analytical and it comprised testing a total of 209no. soil samples from the West Site and East Site (Hydrogen Production and Ammonia Storage sites) and 23no. groundwater samples and two surface water samples. The testing scheduled is presented in Table .

Table 3-9 Geo-environmental laboratory analyses

Testing suite	West Site	East Site Hydrogen Production	East Site Ammonia Storage	Surface Water Sample	Total
Soil					
Suite E Soil – General Arsenic, Barium, Boron, Beryllium, Cadmium, Copper, Chromium III, Chromium VI, Lead, Mercury, Nickel, Selenium, Vanadium, Zinc, Cyanide (Total), Cyanide (Free), Sulphate (water soluble), Sulphide, pH, Moisture content	123	51	35	-	209
Suite F Soil – TPH Total Petroleum Hydrocarbons (TPH) CWG with aliphatic and aromatic split (including BTEX)	102	40	24	-	166

Testing suite	West Site	East Site Hydrogen Production	East Site Ammonia Storage	Surface Water Sample	Total
Suite G Soil – Volatile and Semi Volatile Organic Compounds (VOC and sVOC)	45	23	23	-	91
Suite I Soil – Asbestos Screen Including Asbestos quantification following where individually specified*	10 (2)	12 (3)	8 (3)	-	30 (8)
Suite J Soil – Polychlorinated biphenyl (PCB) 7 congeners and PCB WHO 12 congeners (dioxin like PCBs)	19	21	7	-	45
Suite K Soil – Speciated Phenols	45	25	10	-	90
Polycyclic Aromatic Hydrocarbons (PAH)	102	41	25	-	168
Cyanide	24	23	15	-	62
BRE– Sulphide and Sulphate	42	30	13	-	85
FOC	36	18	16	-	70
Soil Leachate					
Suite M Soil Leachate -Antimony, Arsenic, Barium, Cadmium, Copper, Chromium (III + VI), Lead, Mercury, Molybdenum, Nickel, Selenium, Zinc, Sulphate (water soluble), Fluoride, Chloride, TDS	6	10	4	-	20
Soil Leachate – organics –Total Phenols	6	10	4	-	20
Groundwater					
Suite N Groundwater – Arsenic, Barium, Beryllium, Boron, Cadmium, Copper, Chromium (III+VI), Lead, Magnesium, Mercury, Nickel, Selenium, Vanadium, Zinc, Cyanide (total), Cyanide (free), pH, Ammoniacal Nitrogen as N, Ammonium as NH_4, Sulphate (water soluble), Nitrate, Nitrite,	12	5	4	-	21
Groundwater - PAH	11	5	3	-	19
Groundwater - Cyanide	4	5	3	-	12
Suite O Groundwater – TPH – CWG (carbon banding with aliphatic and aromatic split), BTEX (including MTBE)	11	5	3	-	19
Suite P Groundwater – Volatile and Semi Volatile Organic Compounds (VOC and sVOC)	5	5	3	-	13
Groundwater - Phenols	6	4	3	-	13
Groundwater – Hardness	10	3	5	-	18
Groundwater – Electrical Conductivity	11	5	6	-	22
Suite R Groundwater – PCB 7 congeners and PCB WHO 12 congeners (dioxin like PCBs)	3	3	3	-	9
Surface Water					
Suite F Surface Water -Arsenic, Boron, Cadmium, Chromium (III+VI), Copper, Lead, Mercury, Nickel, Phosphorus, Selenium, Zinc, Dissolved Organic Carbon, Total Organic Carbon, Cyanide Total, Electrical Conductivity, Chloride, Nitrate, Nitrite, Ortho Phosphate, Alkalinity, Ammoniacal Nitrogen as N, Sulphate, pH, BOD, COD, TSS	-	-	-	2	2

Testing suite	West Site	East Site Hydrogen Production	East Site Ammonia Storage	Surface Water Sample	Total
Surface Water - TPH	-	-	-	2	2
Surface Water - Phenols	-	-	-	2	2
Surface Water - Volatile and Semi Volatile Organic Compounds (VOC and sVOC)	-	-	-	2	2
Surface Water - PCBs	-	-	-	2	2
Surface Water - PFAS	-	-	-	2	2

** value in brackets indicates asbestos quantification tests*

3.7 Factual report

The results of the GI and laboratory testing undertaken by AECOM PC in 2022 and 2023 are presented in the Immingham GI Factual Report (AECOM, 2023) (Project number: 60687114).

4 Ground conditions

4.1 Identified ground conditions

The findings of the GI were used to assess the ground conditions underlying the site. Interpretation was undertaken considering descriptions of strata, testing results, published geology, site observations and engineering judgement.

The location of the exploratory holes in relation to the existing and proposed site layout is shown on the set of drawings in Appendix C. The stratigraphy is presented in the geological sections shown in Table 4-1Table .

Table 4-1 Summary of geological cross-sections

Site	Drawing No	Title
West Site	60687114_ACM_DR_RSGE_001_0	Geological Long Section 1
	60687114_ACM_DR_RSGE_002_0	Geological Long Section 2
	60687114_ACM_DR_RSGE_003_0	Geological Long Section 3
	60687114_ACM_DR_RSGE_004_0	Geological Long Section 4
East Site - Hydrogen Production and Ammonia Storage	60687114_ACM_DR_RSGE_005_0	Geological Long Section 1
	60687114_ACM_DR_RSGE_006_0	Geological Long Section 2
	60687114_ACM_DR_RSGE_007_0	Geological Long Section 3

These sections show the stratigraphy encountered during the GI including standard penetration test (SPT) data, Rock Quality Designation (RQD) along with groundwater strikes and groundwater rising levels after 20 minutes.

In the West Plot, Geological Long Sections 1, 2 and 3 are orientated north northeast – south southwest and Geological Long Section 4 is orientated north northwest – south southeast. In the East Site, Geological Long Section 1 is orientated north – south through both the East Site – Hydrogen Production and Ammonia Storage. Geological Long Section 2 is orientated east – west through the East Site - Ammonia Storage and Geological Long Section 3 is orientated north northwest – south southeast through the East Site - Hydrogen Production.

A review of the geological information has indicated that the distribution of MG varies within different areas of the site. All areas of the site are associated with previous construction activities as discussed in Section 2.3.2.3 MG was encountered in all areas of the site and was found to be laterally continuous within the East Site - Hydrogen Production and Ammonia Storage areas. MG was encountered in approximately half of the exploratory holes on the West Site, with Topsoil present in the other areas. MG was encountered at greater depths in the East Site – Hydrogen Production (up to 4m in E-BH20) than the other two sites due its previous use as a coal yard and several layers of resurfacing (Refer to Drawing 60687114_ACM_DR_RSGE_005_0). The type of MG encountered at West Site was described as firm clay with brick, chalk, flint and concrete, suggesting a re-worked stratum of the upper firm Tidal Flat Deposits. The East Site – Hydrogen Production and Ammonia Storage Area encountered MG consisting of gravel, sand and clay with brick, chalk, flint, concrete gravels. The East Site – Hydrogen Production found a layer of concrete or tarmacadam generally between 0.1m bgl and 0.75m bgl and also clinker found within the gravels.

MG is underlain by TFD that were encountered within all exploratory holes undertaken across the site, as shown in all Geological Sections. These predominantly comprised a soft to very soft clay with lenses and pockets of peat. A top layer of firm to stiff clay between 0.1m – 2.5m thick was recorded across the majority of the West Site and approximately half of the East Site – Hydrogen Production and Ammonia Storage Area.

Underlying the TFD are GTD that were encountered across the site, as shown in all Geological Sections. This predominantly comprised firm to stiff gravelly clay with gravels of chalk and flint. Granular GGTD were encountered throughout the GTD. However, a granular layer recorded near the base of the Glacial Till was found to be the most consistent, underlying the majority of the site, and has been included on the geological sections. It was recorded to be within 0.1m and 4.8m thick with the top of stratum encountered between -10.85m OD and -19.45m OD and consists of medium dense to dense sand or medium dense to very dense gravel of flint and chalk. Glacial Till across the East Site – Hydrogen Production Area comprises predominantly gravel within this basal granular layer, whereas in the East Site – Ammonia Storage Area and West Site consists of more sand.

Bedrock geology of the FCF was proven in 64no. exploratory holes. In instances where chalk has been classified as CIRIA Grade D (structureless) or recovered as a gravel or silt, the stratum has been assigned to the Weathered Flamborough Chalk Formation (WFCF). Instances where the FCF has been classified as CIRIA Grade C and above, the stratum has been classified as FCF. The WFCF was encountered within all exploratory holes that penetrated the FCF except for E-BH09, as shown in drawing 60687114_ACM_DR_RSGE_005_0. The WFCF is found as a consistent top layer of the FCF, ranging in thickness from 0.25m to 8.9m. The top surface of WFCF (the true top surface of FCF) appears to deepen moving from west to east, with local peaks and troughs, with an average top surface of 19.0m OD in the West Site, compared to the average top surface of 20.66m in the East Site – Ammonia Storage and 22.63m OD in the East Site – Hydrogen Production. FCF was proven to a maximum depth of 55m bgl in E-BH07 as shown in drawing 60687114_ACM_DR_RSGE_005_0.

A detailed summary of the strata, including material descriptions, strata codes, depth (m bgl), level (m OD), and thickness (m) is provided for the West Site, East Site-Hydrogen Production and East Site-Ammonia Storage Area in Table Section 4.2.

4.2 Ground Model

Table 4-2 Generalised Strata Succession and Strata Codes for West Site

Geological unit	Minimum top depth (mbgl)	Maximum top depth (mbgl)	Minimum top elevation (mOD)	Maximum top elevation (mOD)	Thickness range (m)	Occurrence (No. of holes)	Typical description
Topsoil (TS)	0	0	+1.25	+1.85	0.15 – 0.60	50	Grass over firm dark brown slightly sandy CLAY with frequent rootlets
Made Ground (MG)	0	0	+1.00	+2.75	0.25 – 2.10	67	Firm brown slightly gravelly CLAY with frequent rootlets and fragments of brick, flint, chalk and concrete
Firm Tidal Flat Deposits (TFD2)	0.15	1.30	+0.25	+1.55	0.20 – 2.50	101	Firm to stiff brown mottled orangish brown silty CLAY with rootlets
Tidal Flat Deposits (TFD)	0.25	10.00	-8.40	+1.50	0.40 – 11.70	105	Soft to very soft dark bluish grey CLAY (Spongy black pseudo-fibrous PEAT encountered as secondary deposits and as a primary deposit from 0.3m to 1m thickness in 6no. holes).
Glacial Till Deposits (GTD)	4.20	10.60	-8.75	-2.45	6.65– 17.60	62	Firm to stiff dark brown slightly sandy slightly gravelly silty CLAY. Gravel is of chalk and flint.
Granular Glacial Till Deposits (GGTD)	12.50	18.72	-17.32	-10.85	0.10 – 2.62	24	Brown and grey fine to coarse SAND Brown and white fine to coarse flint and chalk GRAVEL
Weathered Flamborough Chalk Formation (WFCF)	18.40	22.50	-24.65	-16.70	0.46 – 8.90	18	CHALK recovered as white and light orangish white GRAVEL CHALK recovered as white slightly sandy gravelly SILT
Flamborough Chalk Formation (FCF)	23.16	30.65	-29.05	-21.31	0.85 – 4.00 (proven thickness)	3	Very weak high density highly fractured white CHALK

Table 4-3 Generalised Strata Succession and Strata Codes for East Site – Hydrogen Production

Geological Unit	Minimum top depth (mbgl)	Maximum top depth (mbgl)	Minimum top elevation (mOD)	Maximum top elevation (mOD)	Thickness range (m)	Occurrence (No. of holes)	Typical description
Made Ground (MG)	0	0	+3.45	+4.05	0.35 – 4.00	34	Dark grey angular to subrounded GRAVEL of concrete, tarmac, brick and clinker CONCRETE and TARMACADAM Dark grey clayey gravelly fine to coarse SAND gravel of brick, concrete, tarmac, flint and chalk Firm dark greyish brown slightly sandy gravelly CLAY, gravel of brick, flint, tarmac and chalk
Firm Tidal Flat Deposits (TFD2)	0.40	3.00	+0.75	+3.15	0 – 2.30	15	Firm brown slightly sandy silty CLAY
Tidal Flat Deposits (TFD)	1.20	4.60	-0.85	+2.35	0.30 – 11.40	28	Very soft dark grey silty CLAY
Glacial Till Deposits (GTD)	6.14	14.20	-10.75	-2.59	5.30 – 14.15	26	Stiff to very stiff brown slightly gravelly silty CLAY
Granular Glacial Till Deposits (GGTD)	15.40	20.80	-17.25	-11.5	0.12 – 3.40	20	Medium dense brown GRAVEL of chalk and flint Medium dense fine and medium SAND
Weathered Flamborough Chalk Formation (WFCF)	23.35	27.75	-23.90	-19.8	0.25 – 4.60	12	Structureless CHALK composed of silty sandy GRAVEL Structureless CHALK composed of slightly sandy gravelly SILT
Flamborough Chalk Formation (FCF)	25.70	30.10	-26.20	-21.85	1.10 – 18.65 (proven thickness)	12	Weak medium to high density CHALK. Fractures are closely spaced.

Table 4-4 Generalised Strata Succession and Strata Codes for East Site – Ammonia Storage

Geological Unit	Minimum top depth (mbgl)	Maximum top depth (mbgl)	Minimum top elevation (mOD)	Maximum top elevation (mOD)	Thickness range (m)	Occurrence (No. of holes)	Typical description
Made Ground (MG)	0	0	+2.75	+3.30	0.25 – 2.00	31	Dark brown slightly sandy gravelly CLAY gravel of brick and flint Brown fine to coarse brick, concrete, flint and rare glass and wood GRAVEL Scrub over brown silty very gravelly fine to coarse SAND gravel of brick, concrete tarmac and flint
Firm Tidal Flat Deposits (TFD2)	0.30	1.20	+1.65	+2.70	0 – 2.10	16	Firm brown mottled orangish brown slightly sandy silty CLAY
Tidal Flat Deposits (TFD)	0.30	2.40	+0.60	+2.60	8.40 – 12.20	26	Very Soft brown mottled grey sandy silty CLAY
Glacial Till Deposits (GTD)	9.90	13.10	-10.10	-7.00	4.98 – 11.06	22	Firm to very stiff slightly sandy slightly gravelly CLAY gravel of flint and chalk
Granular Glacial Till Deposits (GGTD)	16.76	22.50	-19.45	-13.81	0.85 – 4.80	13	Brown very gravelly fine to coarse SAND gravel of chalk and flint Brown fine to coarse flint and chalk GRAVEL
Weathered Flamborough Chalk Formation (WFCF)	20.25	25.00	-22.00	-17.45	1.15 – 3.75	10	CHALK recovered as white slightly sandy slightly gravelly SILT Structureless CHALK recovered as slightly sandy chalk and flint GRAVEL
Flamborough Chalk Formation (FCF)	23.30	26.15	-23.15	-20.20	7.65 – 29.35 (proven thickness)	12	Very weak high density white CHALK fractures are closely spaced

4.2.1 Made Ground (MG)

MG in the West Site predominantly comprised firm brown slightly gravelly clay with frequent rootlets. The gravel was typically composed of brick, concrete, chalk and flint. It was encountered in 67no. exploratory holes undertaken in the West Site, from ground level to a maximum depth of 2.1m bgl (-0.4m OD) in W-TP09A. During the ground investigation, 9no. trial pits were terminated across the West Site due to encountering land drains between 0.7 and 1.25m bgl within this stratum.

MG in the East Site-Hydrogen Production Area comprised dark grey gravel and clayey gravelly sand, overlying firm dark greyish brown slightly sandy gravelly clay. The gravels typically comprised brick, flint, tarmac, clinker and concrete. MG was encountered from ground level to a maximum of 4m bgl (-0.1m OD) in E-BH20. MG is significantly deeper across this area due to the site being a former Coal yard as discussed in Section 2.32.3.

MG in the East Site-Ammonia Storage Area comprised mixtures of dark brown slightly sandy gravelly clay, brown fine to coarse gravel, and brown silty very gravelly fine to coarse sand. The gravels were typically composed of brick, flint, concrete and tarmac. MG was encountered from ground level to a maximum depth of 2m bgl in E-BH03, E-BH07 and E-BH12.

4.2.2 Firm Tidal Flat Deposits (TFD2)

In this report the uppermost layer of firm/stiff Tidal Flat Deposits has been identified separately as TFD2 to differentiate it from the underlying soft Tidal Flat Deposits (TFD) which have different engineering properties.

Borehole records show that the top of the TFD at the West Site comprises firm to stiff brown mottled orangish brown silty clay with rootlets of an average thickness of 1m, from a minimum top surface depth of 0.15m bgl (+1.5m OD) in W-BH32 to a maximum depth of 2.8m bgl (-1.15m OD) in W-TP21 below which the stratum comprised soft clay.

TFD2 in the East Site - Ammonia Storage Area predominantly comprised firm brown mottled orangish brown slightly sandy silty clay of 1.3m average thickness, present in approximately half of the exploratory holes undertaken. They were encountered ranging from 0.3m bgl in E-BH01, E-CTP01, E-CPT03, E-CPT06, E-CPT08 and E-TP04 to a maximum depth of 2.4m bgl (0.6m OD) in E-TP02.

TFD2 in the East Site – Hydrogen Production Area predominantly comprised firm brown slightly sandy silty clay. They were encountered ranging from 0.4m bgl (3.15m OD) in W-CPT15 to a maximum depth of 4.6m bgl (-0.85m OD) in E-BH22.

4.2.3 Tidal Flat Deposits (TFD)

TFD in the West Site predominantly comprised soft to very soft dark bluish grey clay. They were recorded at depths ranging from 0.25m bgl (+1.5m OD) in W-BH11A to a maximum depth of 9.44m bgl (-7.69m OD) in W-CPT18 with an average thickness of 4.1m. Peat was recorded in 6no. exploratory holes in layers of 0.3m-1m thickness, at depths between 4.7m in W-BH32, W-BH34 and W-BH35 to a maximum depth of 6.6m bgl (-5.1m OD) in W-BH18. Peat was also encountered as thin horizons interbedded within the TFD in 11no. exploratory holes, with its thickness ranging from 0.5m to 4.3m.

TFD in the East Site – Hydrogen Production Area predominantly comprised very soft dark grey silty clay. It was encountered ranging from 1.2m bgl (2.35m OD) in exploratory hole W-CPT15 to a maximum depth of 14.2m bgl (-10.75m OD) in exploratory hole E-BH14A with an average thickness of 8.3m. Peat was present as a secondary constituent in 7no. exploratory hole locations in the form of lenses and pockets.

TFD in the East Site – Ammonia Storage Area predominantly comprised very soft brown mottled grey sandy silty clay. They were encountered at depths ranging from 0.3m bgl in E-BH10 (+2.60m OD) and E-TP01 (+2.55m OD) to a maximum depth of 13.1m bgl (-10.1m OD) in E-BH09, with an average thickness of 8.6m. Peat was recorded in 2no. exploratory hole locations in the form of bands and lenses of average thickness of 1.2m.

4.2.4 Glacial Till Deposits (GTD)

GTD in the West Site predominantly comprised firm to stiff dark brown slightly sandy slightly gravelly silty clay. They were encountered at depths ranging from 4.66m bgl (-3.16 m OD) in W-CPT01 to a maximum depth of 22.5m bgl (-20.8m OD) in W-BH34.

GTD in the East Site – Hydrogen Production Area predominantly comprised stiff to very stiff brown slightly gravelly silty clay and were encountered at depths ranging from 9.92m bgl (-6.07m OD) in E-CPT21 to a maximum depth of 26.5 bgl (-22.45m OD) in E-BH21.

GTD in the East Site – Ammonia Storage Area predominantly comprised firm to very stiff slightly sandy slightly gravelly clay with gravel of flint and chalk. They were encountered at depths ranging from 9.9m bgl (-7.05m OD) in E-BH02 to a maximum depth of 26.5 mbgl (-22.45m OD) in E-BH21.

4.2.5 Granular Glacial Till Deposits (GGTD)

Borehole records indicated a cohesionless layer to the base of the GTD. The distribution of this layer is shown on the geological cross sections as Granular Glacial Till Deposits. The GGTD layer may not be laterally continuous as it was absent in E-BH22, W-BH15, W-BH17 and W-BH32.

GGTD in the West Site predominantly comprised brown and grey fine to coarse sand and brown and white fine to coarse flint and chalk gravel. They were encountered at depths ranging from 12.5m bgl (-10.85m OD) in W-CPT27 to a maximum depth of 19.7m bgl (-18.05m OD) in W-BH32.

GGTD in the East Site – Hydrogen Production Area predominantly comprised medium dense brown gravel of chalk and flint and medium dense fine and medium sand. They were encountered at depths ranging from 15.4m bgl (-11.5m OD) in E-BH20 to a maximum depth of 23.8m bgl (-20.2m OD) in E-BH15.

GGTD in the East Site – Ammonia Storage Area predominantly comprised brown very gravelly fine to coarse sand gravel of chalk and flint and brown fine to coarse flint and chalk gravel. They were encountered at depths ranging from 16.76m bgl (-13.81m OD) in E-CPT04 to a maximum depth of 23.5m bgl (-20.4m OD) in E-BH05.

4.2.6 Weathered Flamborough Chalk Formation (WFCF)

WFCF in the West Site predominantly comprised chalk recovered as white and light orangish white gravel and chalk recovered as white slightly sandy gravelly silt. It was encountered at depths ranging from 18.4m bgl in W-BH01 and W-BH09 to a maximum depth of 27.3m bgl (-25.95m OD) in W-BH01.

WFCF in the East Site – Hydrogen Production Area predominantly comprised structureless chalk composed of silty sandy gravel and structureless chalk composed of slightly sandy gravelly silt. It was encountered at depths ranging from 23.35m bgl (-19.8m OD) in E-BH17 to a maximum depth of 30.1m bgl (-26.2m OD) in E-BH26A.

WFCF in the East Site – Ammonia Storage Area predominantly comprised chalk recovered as white slightly sandy slightly gravelly silt and structureless chalk recovered as slightly sandy chalk and flint gravel. It was encountered at depths ranging from 20.25m bgl (-17.45m OD) in E-BH08 to a maximum depth of 26.15m bgl (23.15m OD) in E-BH12.

4.2.7 Flamborough Chalk Formation (FCF)

FCF in the West Site predominantly comprised very weak high density highly fractured white chalk. It was encountered at depths ranging from 23.16m bgl (-21.31m OD) in W-CPT09 to maximum depth 31.5m bgl (-29.9m OD) in W-BH02.

FCF in the East Site – Hydrogen Production predominantly comprised weak medium to high density chalk with closely spaced fractures. It was encountered at depths ranging from 25.7m bgl in E-BH17 to a maximum depth of 46.5m bgl (-42.75m OD) in E-BH24.

FCF in the East Site – Ammonia Storage Area predominantly comprised very weak high density white chalk with closely spaced fractures. It was encountered at depths ranging from 23.3m bgl (-20.2m OD) in E-BH11 to a maximum depth of 55m bgl (-52.1m OD) in E-BH07.

5 Hydrogeological conditions

5.1 Groundwater occurrence, flow and levels

Groundwater level measurements were taken from several boreholes, vibrating wire piezometers and standpipes (see Section 3). These were installed to intercept the geological units beneath the site at different depths at selected locations across the site, as shown in Appendix B (Figures B1 and B2). The data collected during the monitoring period (November 2022 to April 2023) have been used to determine the groundwater conditions beneath the site. Due to the duration of the monitoring period, long term seasonal conditions could not be assessed at the time of writing this report.

Eight of the boreholes have been equipped with multi-level vibrating wire piezometers (VWP) (see Section 3) to record real time groundwater level data across the site. The VWPs were mainly installed in the TFD. The data from the VWP have been compensated for barometric changes to inform this assessment.

The VWP base readings provided by the GI Contactor have been checked using linear gauge factors. The linear gauge factors have been conservatively adopted on the groundwater level interpretation discussed in this section. Groundwater level monitoring data from the VWPs and manually dipped standpipes from 36 piezometers covering the period between November 2022 and April 2023 were available for interpretation as part of this GIR.

5.2 Groundwater flow and level monitoring

The groundwater level monitoring data obtained from the boreholes and piezometers show that groundwater is present in all the geological units encountered below the site, as discussed in Section 3. Groundwater data from both the West Site and East Site have been considered separately in the relevant geological units as discussed below and where there is a clear correlation between the two sites, this has been discussed.

Table 5-2 summarises the groundwater level recorded from the boreholes and piezometers. The groundwater hydrographs for each geological unit are presented in Figure 5-1 to Figure 5-5 based on the available data. The groundwater condition in each unit is discussed further below.

Made Ground: Made Ground (MG) was encountered in a number of boreholes across the site (refer to Section 0). Three boreholes were installed with shallow response within the Made Ground for monitoring purposes in the eastern site where the Made Ground is thickest. All three installations are in the central part of the East Site. However, perched groundwater strikes were also noted in the Made Ground in a number of other boreholes during drilling, particularly in the East Site. No monitoring boreholes were installed in the Made Ground in the West Site.

The hydrograph below (Figure 5-1) showed a variable level of perched groundwater recorded in the central area of the East site. The levels varied from ground level or close to ground level in E-BH15 and up to 2.5m bgl in E-BH20. This is equivalent to 3.6m OD at E-BH15 and a lowest level of 1.4m OD in E-BH20. The data, although very limited showed a minor fluctuation in the perched groundwater levels between December 2022 and March 2023.

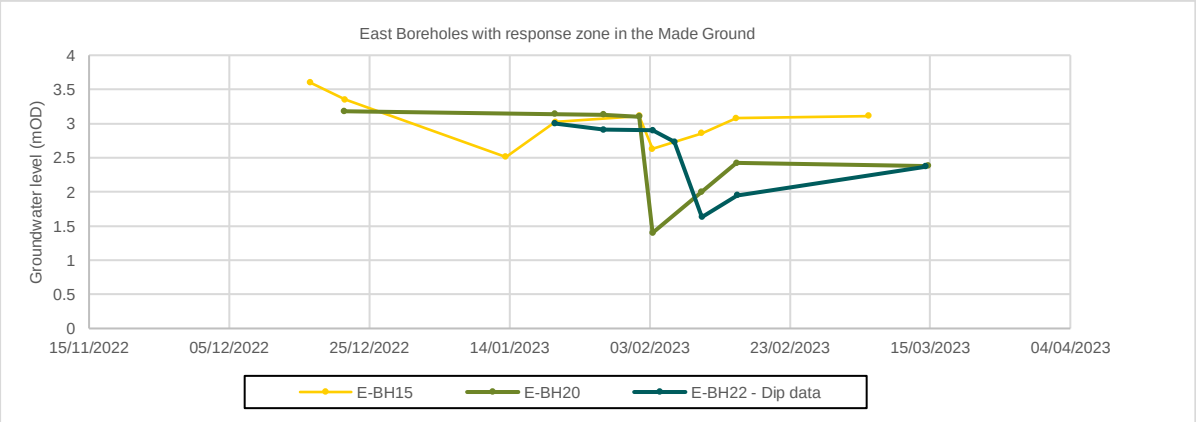


Figure 5-1 Monitored Groundwater levels within the Made Ground in the East Site

Tidal Flat Deposits: Tidal Flat Deposits (TFD) comprising predominantly sandy, silty Clay were encountered below the Made Ground across the entire site. In the West Site, five locations were installed with VWPs and one borehole had a response zone in the TFD. The groundwater hydrographs for these locations presented in Figure Figure 5-2

indicates that the data collected between January and March 2023 showed the groundwater level in the TFD varied between 0m OD and 1.48m OD in the VWP installations. The data shows a slightly varying response in the installations with a general minor fluctuation during the period. W-BH25 in the eastern section of the West Site showed a downward trend by more than 1m, while at least two other installations (W-BH02 and W-BH11) showed a slight rising trend during the monitoring period.

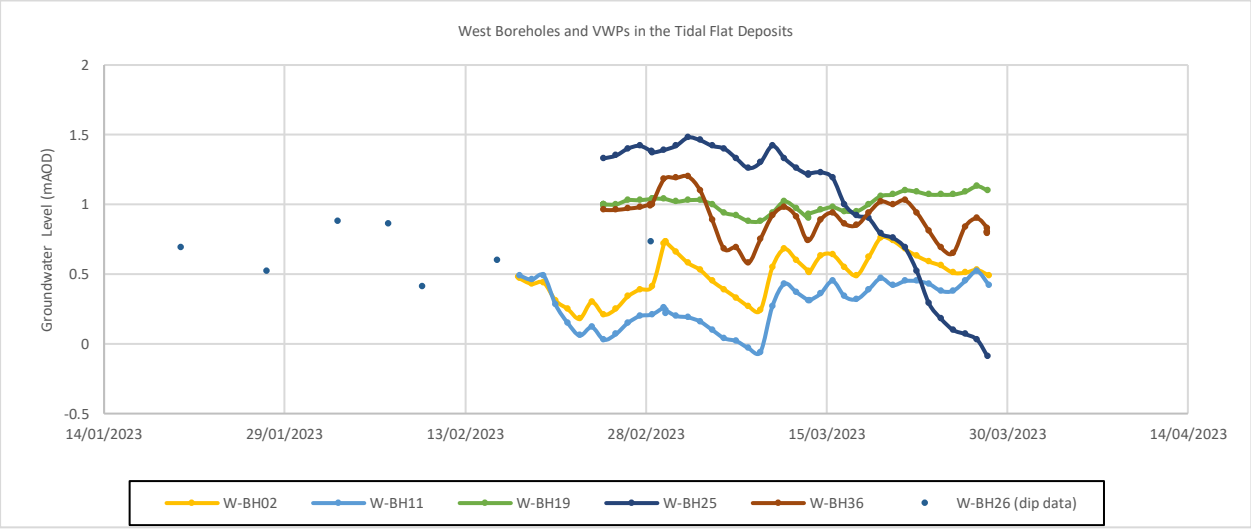


Figure 5-2 Monitored Groundwater levels within the Tidal Flat Deposits in the West Site

At the East Site, three locations were equipped with VWPs and one borehole installed with a response zone within the TFD. The hydrograph presented in Figure 5-3 below, showed higher groundwater level in the East Site compared with the West Site (Figure 5-2). Groundwater at the East Site varied from approximately 3.97m OD in E-BH17 along the eastern edge to approximately 1.63m OD in E-BH22 in the north-western corner of the plot. It should be noted that the current topography in the East Site is also generally higher than in the West Site by up to 2m (see Section 2.2). Similar to the East Site, the data shows a slightly varying response in the installations with a general fluctuation by more than 1.5m (E-BH17) during the monitoring period. Note that the late data from E-BH26A was discarded as the VWP installation was reportedly flooded which is likely to have affected the quality of the data as it is not consistent with the rest of the data collected.

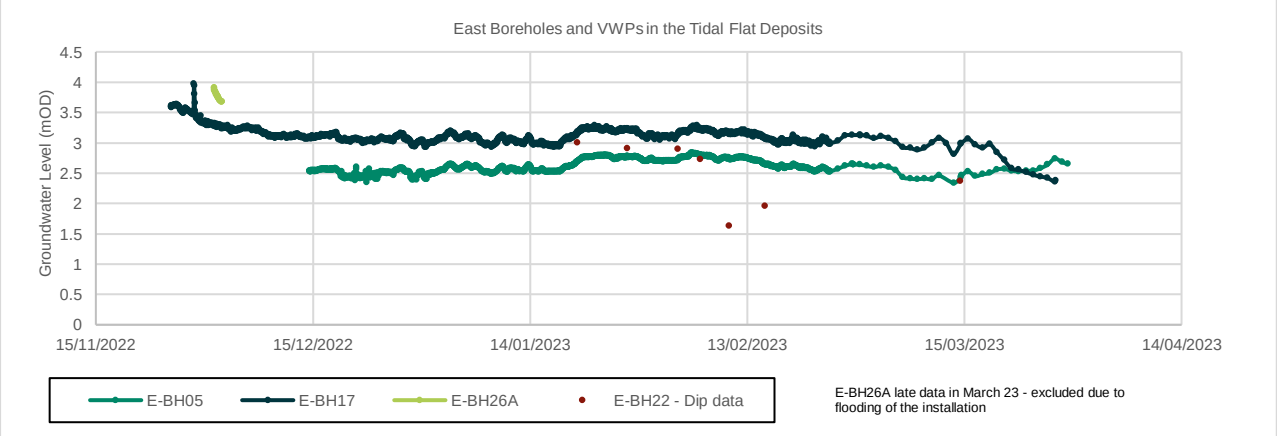


Figure 5-3 Monitored Groundwater levels within the Tidal Flat Deposits in the East Site

Glacial Till: Glacial Till is present across the site below the Tidal Flat Deposits. The Glacial Till is generally comprised of sandy gravelly Clays. The groundwater level in the permeable layers of the Glacial Till particularly in the West Site appears to be partially confined by the overlying cohesive layers. The available data is summarised in Table 5-2.

Table Table 5-2 indicates that the four boreholes (W-BH14, W-BH18, W-BH24 and W-BH31) installed in the Glacial Till in the West Site were artesian with the pressure head recorded just above the well head on at least three occasions. The interpreted piezometric head varied from 1.7m to 2.25m OD in April and May 2023, equivalent to at least 0.3m above ground level. However, the measured head in W-BH14 was slightly lower in January and

February 2023 (at 0.5m OD to 1.06m OD). Although there was limited data from these installations, there is no evidence of a significant variation / fluctuation in the piezometric levels except the slightly lower levels observed in W-BH14 in January / February 2023.

In the East Site, three boreholes were installed in the Glacial Till with limited monitoring data available from these locations (see Figure). The data suggests the levels are slightly similar to that recorded in the TFD varying from 2.65m OD in E-BH07 to 1.82m OD in E-BH25. This is approximately 0.25m to 2m bgl.

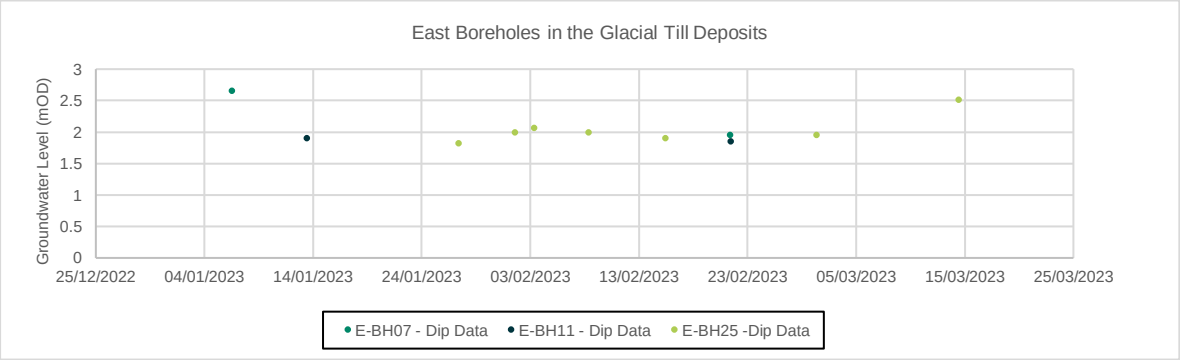


Figure 5-4 Monitored Groundwater levels within the Glacial Till in the East Site

Chalk: The Flamborough Chalk Formation underlies the entire site. In the East Site, the groundwater level in the six Chalk monitoring boreholes varied between 0.72m OD (2.18m bgl) in E-BH10 in the central part and 3.1m OD (0.45m bgl) in E-BH18 close to the eastern edge of the plot. Although at the time of writing, the data available only covers a period of four months (December 2022 to March 2023), the hydrograph presented in Figure 5-5 indicates that the groundwater level fluctuates by up to 2m during the period and this may be due to tidal influence given the proximity of the site to the coast. However, there is insufficient data to verify this at the time of writing.

In the West Site, all nine Chalk monitoring boreholes installed recorded artesian conditions during the monitoring period, except W-BH17 which recorded slightly lower levels (up to 1.46m bgl) on two occasions. The interpreted piezometric head in the Chalk boreholes based on the pressure gauges carried out in April and May 2023 varied from approximately 1.6 to 2.2m OD, equivalent to at least 0.3m above ground level (see Table 5-1). The available data suggests that the artesian head is similar to that recorded in the Glacial Till, and it is possible that the Chalk groundwater is in hydraulic continuity with the permeable layers of the Glacial Till.

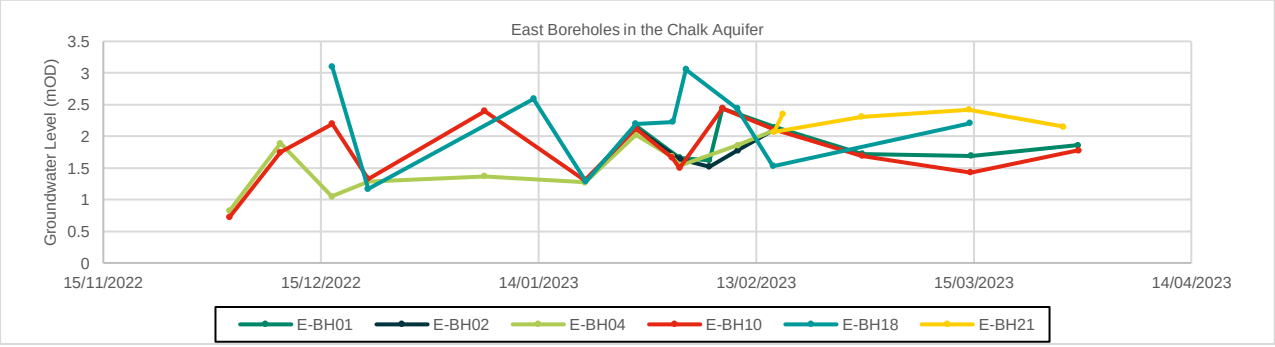


Figure 5-5 Monitored Groundwater levels within the Chalk in the East Site

The available groundwater monitoring data shows that groundwater flow across the entire site is generally in a north-easterly direction towards the coast (Humber estuary) with an estimated local hydraulic gradient ranging between 0.002 and 0.005 in the superficial deposits (including Made Ground) overlying the bedrock and 0.003 in the Chalk bedrock respectively.

Table 5-1 Summary of Piezometric Heads from Artesian Boreholes

Borehole ID	Recording instrument	Interpreted Piezometric Head			
		Average (m OD)	Max (m OD)	Min (m OD)	Stratum
W-BH01	Manual dip	1.60	1.60	1.60	Chalk
W-BH09	Manual dip	2.00	2.00	2.00	Chalk

Borehole ID	Recording instrument	Interpreted Piezometric Head			
		Average (m OD)	Max (m OD)	Min (m OD)	Stratum
W-BH10A	Manual dip	2.00	2.00	2.00	Chalk
W-BH17	Manual dip	2.05	2.05	2.05	Chalk
W-BH20	Manual dip	1.95	1.95	1.95	Chalk
W-BH21	Manual dip	2.15	2.15	2.15	Chalk
W-BH22	Manual dip	2.20	2.20	2.20	Chalk
W-BH30	Manual dip	2.20	2.20	2.20	Chalk
W-BH34	Manual dip	2.20	2.20	2.20	Chalk
W-BH35*	Manual dip	Artesian	Artesian	Artesian	Chalk
W-BH14	Manual dip	2.25	2.25	2.25	Glacial Till (Sand)
W-BH18	Manual dip	1.70	1.70	1.70	Glacial Till (Clay)
W-BH24	Manual dip	2.00	2.00	2.00	Glacial Till (Gravel)
W-BH31	Manual dip	1.95	1.95	1.95	Glacial Till (Gravel)

*No data provided for Artesian pressure head

Table 5-2 Summary of the Groundwater Level Monitoring Data

Borehole ID	Recording instrument	Groundwater level			
		Average (m OD)	Max (m OD)	Min (m OD)	Stratum
East Site boreholes					
E-BH01	Manual dip	1.91	2.44	1.62	Chalk
E-BH02	Manual dip	1.83	2.12	1.52	Chalk
E-BH04	Manual dip	1.54	2.10	0.82	Chalk
E-BH10	Manual dip	1.74	2.44	0.72	Chalk
E-BH18	Manual dip	2.18	3.10	1.17	Chalk
E-BH21	Manual dip	2.26	2.42	2.07	Chalk
E-BH07	Manual dip	2.30	2.65	1.95	Glacial Till (Gravel)
E-BH11	Manual dip	1.87	1.90	1.85	Glacial Till (Gravel)
E-BH25	Manual dip	2.03	2.51	1.82	Glacial Till (Gravel)
E-BH05	Vibrating Wire Piezometer	2.62	2.83	2.34	Tidal Flats (Clay)
E-BH14A	Manual dip		Dry at -0.65		Tidal Flats (Clay)
E-BH17	Vibrating Wire Piezometer	3.12	3.97	2.35	Tidal Flats (Clay)
E-BH26A	Vibrating Wire Piezometer	2.54	3.91	1.29	Tidal Flats (Clay)
E-BH15	Manual dip	3.03	3.60	2.51	Made Ground (Gravel)
E-BH20	Manual dip	2.59	3.18	1.40	Made Ground (Gravel/Clay)
E-BH22	Manual dip	2.50	3.00	1.63	Made Ground (Gravel and Tarmacadam) / Tidal Flats
West Site boreholes					
W-BH01	Manual dip	1.60	1.60	1.60	Chalk
W-BH09	Manual dip	2.00	2.00	2.00	Chalk
W-BH10A	Manual dip	2.00	2.00	2.00	Chalk
W-BH17	Manual dip	2.05	2.05	2.05	Chalk
W-BH20	Manual dip	1.95	1.95	1.95	Chalk
W-BH21	Manual dip	2.15	2.15	2.15	Chalk
W-BH22	Manual dip	2.20	2.20	2.20	Chalk

Borehole ID	Recording instrument	Groundwater level			Stratum
		Average (m OD)	Max (m OD)	Min (m OD)	
W-BH30	Manual dip	2.20	2.20	2.20	Chalk
W-BH34	Manual dip	2.20	2.20	2.20	Chalk
W-BH35*	Manual dip	Artesian	Artesian	Artesian	Chalk
W-BH14	Manual dip	2.25	2.25	2.25	Glacial Till (Sand)
W-BH18	Manual dip	1.70	1.70	1.70	Glacial Till (Clay)
W-BH24	Manual dip	2.00	2.00	2.00	Glacial Till (Gravel)
W-BH31	Manual dip	1.95	1.95	1.95	Glacial Till (Gravel)
W-BH02	Vibrating Wire Piezometer	0.50	0.76	0.18	Tidal Flats (Clay)
W-BH11	Vibrating Wire Piezometer	0.28	0.52	-0.06	Tidal Flats (Clay)
W-BH19	Vibrating Wire Piezometer	1.06	0.77	0.52	Tidal Flats (Clay)
W-BH25	Vibrating Wire Piezometer	1.03	1.48	-0.09	Tidal Flats (Clay)
W-BH26	Manual dip	0.67	0.88	0.41	Clay/ Tidal Flats
W-BH36	Vibrating Wire Piezometer	0.90	1.20	0.58	Tidal Flats (Clay)

5.2.1 Summary

The groundwater level data collected on the site confirms the presence of shallow groundwater across the site in the Made Ground particularly in the East Site, in the Tidal Flat Deposits with a minor fluctuation in the levels during the monitoring period. Artesian groundwater conditions exist within the Chalk and where present in the granular layers of the Glacial Till (i.e. water rises up the standpipe to above existing ground level). Multiple boreholes indicated artesian conditions where the monitored strata were Chalk and Glacial Till superficial deposits. The artesian conditions were mainly observed in the West Site.

Based on the data available, groundwater head will need to be controlled during the construction phase particularly during ground reprofiling, excavation and piling activities. Groundwater control measures and flow barriers will be required to enable dry working conditions. Additionally, where significant groundwater control is required within the Chalk aquifer, groundwater monitoring will be required during and post construction to ensure that there are no long-term impacts on the Principal aquifer due to the construction works. Depending on the volumes and duration of any dewatering activities, abstraction licence and Environmental Permit(s) may be required from the Environment Agency.

There are also risks of basal heave / uplift where the thickness / weight of the superficial deposits that confines the Chalk aquifer is insufficient to counter the artesian pressure. The groundwater in the Chalk also potentially responds to tidal fluctuation although there is insufficient data at this stage to verify that.

The available groundwater data suggests possible hydraulic continuity between groundwater in the Made Ground and the Tidal Flat Deposits. Groundwater in the Glacial Till does not appear to be in hydraulic continuity with groundwater in the overlying Tidal Flat Deposit. The data indicates similar groundwater heads in the Chalk and overlying Glacial Till and indicated that these strata may be in hydraulic continuity.

5.3 Aquifer hydraulic properties

Hydraulic conductivity values for the geological units have been estimated from in-situ permeability tests carried out at the site on selected boreholes. The tests comprise of falling head slug tests conducted based on British Standard BS EN ISO 22282-2:2012. A slug is used to create the fall in the water level in the borehole during the test. The tests (data and analysis results) are presented in Appendix A Fieldwork Data of the Draft Factual Report. A summary of the aquifer hydraulic conductivity values for each geological unit as derived from the tests are presented in Table 5-3 Hydraulic conductivity derived from falling head tests [K] (m/s).

Falling head tests were undertaken at three boreholes; two (E-BH01 and E-BH10) in the Chalk and one (E-BH25) in the Glacial Till. Each test was repeated three (3) times. The results were interpreted using two methods

(Hvorslev's and Velocity graph methods) to estimate the hydraulic conductivity of the strata. The data indicates that the Chalk generally had higher permeability than the Glacial Till (see Table 5-3).

The estimated hydraulic conductivity values are typical of the strata and is consistent with the literature values for matrix intergranular hydraulic conductivity values. However, Chalk permeability can vary significantly with the presence of fractures which is the dominant groundwater flow mechanism in the aquifer due to the higher secondary permeability. Additionally, falling head tests typically indicate the potential permeability within a few metres around the vicinity of the test locations and should therefore be used with caution for larger scale ground conditions interpretations especially in the bedrock where the presence of fractures can result in much greater flows.

Table 5-3 Hydraulic conductivity derived from falling head tests [K] (m/s)

Borehole	Tested strata	Test 1		Test 2		Test 3		Average
		Hvorslev's	Velocity Graph	Hvorslev's	Velocity Graph	Velocity Graph	Hvorslev's	
E-BH01	Chalk	2.80E-05	-	-	8.00E-05	7.60E-05	-	6.13E-05
E-BH10	Chalk	6.80E-05	-	4.80E-05	1.80E-04	2.60E-04	-	1.39E-04
E-BH25	Glacial Till	2.40E-06	9.40E-07	3.00E-06	2.00E-06	1.80E-06	3.00E-06	2.19E-06

Soakaway tests were also undertaken at four trial pits at shallow depths of 1.2m to assess the permeability and infiltration rates of the shallow soils at these locations. These were done at E-TP01SA and W-TP31S in Clay, W-TP025 and W-TP19SA in TFD. The data presented in Appendix A indicates that the very slow response / change in the water level during the tests undertaken in the trial pits in the clay and in one of the trial pits in the TFD (W-TP19SA) were insufficient to provide a meaningful interpretation. The interpreted results from trial pit W-TP025 indicates a permeability of 1.3E-05m/s in the TFD at that location.

5.4 Potential Tidal Influence

Tidal rivers and seas can affect groundwater level fluctuation in nearby aquifers. Given the proximity to the tidal Humber estuary, there is a potential for tidal influences on the groundwater level measurements particularly in the Chalk aquifer. There is small evidence of this potential effect in the Chalk groundwater level measured during the field work as shown on the hydrograph (see Figure 5-5). However, due to the short duration of the monitoring period, it is currently not possible to verify this. A review of the tidal monitoring data from the Environment Agency's nearest Chalk groundwater level was undertaken to assess this potential.

The Immingham Tidal Monitoring Station, operated by the Environment Agency, located approximately 1.2km northwest of the site, is the closest tidal station (National Tidal and Sea Level Facility).

Appendix B (Figure B3) shows the January 2023 – February 2023 tidal data from the Immingham station. The data shows the six-hourly diurnal tidal fluctuation of the seawater level. Records from the Environment Agency data shows that the usual range of the tidal data from this station is between 0.16m and 7.99m sea level. Accordingly, comparing the tidal data with the Chalk groundwater level collected from the site, it is considered that there is a potential for tidal fluctuations in the recorded groundwater level, however due to the short-term duration of the monitoring and frequency of monitoring, it is not possible to verify this at this stage.

A review of the Environment Agency's long term Chalk monitoring borehole further inland (Borehole, 5_106, located at NGR TA 21281495) and approximately 1.2km south-east from the Site shows that the Chalk groundwater level in the area responds to tidal variation with the levels varying by up to 2m due to tidal influence (see Appendix B (Figure B4)) (Environment Agency Hydrology Data Explorer).

Based on this observation, it is recommended that further groundwater level monitoring is carried out to verify both seasonal and tidal variations in the water levels and to ensure that any risks to the proposed development is adequately considered and appropriate mitigation measures implemented.

5.5 Seasonal variability

Groundwater monitoring has only been undertaken over a six-month monitoring period at the time of writing. This is insufficient to establish any seasonal variability of the groundwater level. It is recommended that further monitoring is undertaken for at least a full year if possible.

5.6 Groundwater quality

Electrical Conductivity (EC) values of the groundwater in each of the geological units were measured in-situ from selected boreholes using an EC probe which estimates the proportion of the salt/ionic solutes concentration in the groundwater. The range of average EC values measured within the groundwater from each geological unit is summarised in Table 5-4. Average EC values were greater in the East Site than in the West Site. The groundwater within the Tidal Flat Deposits has the greatest overall EC values.

Table 5-4 Summary of Electrical Conductivity

	East Site boreholes		
Strata	**Average (µS/cm)**	**Min (µS/cm)**	**Max (µS/cm)**
Made Ground	3000	2600	3400
Tidal Flat Deposits	5500	5500	5500
Glacial Till	1607	920	2600
Chalk	1295	570	2500

	West Site boreholes		
Strata	**Average (µS/cm)**	**Min (µS/cm)**	**Max (µS/cm)**
Glacial Till	420	400	480
Chalk	531	440	680

Groundwater quality samples collected during the field works are discussed in Section 7. The data generally showed some exceedances of Drinking Water Standards (DWS) with respect to some metals and inorganics such as Arsenic, Boron, Nickel and Selenium. Further detailed groundwater quality is summarised within Section 0.

6 Ground Properties

6.1 Physical properties

Figures D.1 to D.225 (Appendix D) show the laboratory test data from the AECOM 2023 GI completed by AECOM PC (see Document number: NS051-CV-REP-0A1-00012) and included in the associated AGS data. The data is predominantly plotted against ordnance datum level (m OD). The range of levels are kept consistent on the Sites to aid visual assessment of variation in depth and thickness of each material type.

Where groundwater levels in the boreholes were not recorded, the groundwater level recorded at the nearest borehole was used. This has been assumed to allow the best estimates for the correlated SPT $(N_1)_{60}$ values to be calculated for the granular materials. It should also be noted, for consistency, that this assumed groundwater level has been assumed for the calculations of the Young's Modulus and k0 values derived from the High-Pressure Dilatometer (HPD) testing.

The geotechnical parameters presented are considered 'moderately conservative' and have been derived using a cautious estimate of lower quartile (e.g., strength and stiffness parameters) and upper quartile (e.g., compressibility, plasticity parameters) values (where appropriate) from datasets obtained from in-situ and laboratory testing and empirical correlations supplemented by engineering judgement, where necessary.

The results have been used to provide preliminary characteristic geotechnical values for each material type for use in design.

6.1.1 Made Ground and Topsoil (MG)

6.1.1.1 Standard Penetration Testing

Figures D.1 to D.2 show the results of 17no. SPT tests that were completed within MG in the East Site – Hydrogen Production only. No SPTs were undertaken within MG in the other two sites. The uncorrected SPT N values range between 2 and 26, N_{60} values ranging between 2 and 20 and $(N_1)_{60}$ ranging between 2 and 31, indicating that the relative density of MG ranges from very loose (0 – 4 blows) to medium dense (10 – 30 blows), based on classifications in BS5930:2015+A1:2020.

6.1.1.2 Density

Based on in-situ SPT testing that has been completed within MG, the SPT $(N_1)_{60}$ lower quartile value of 8, indicates a density index, I_D, of loose to medium sands based on recommended values provided in Table F.1 in BS EN 1997-2. Therefore, based on the correlation with respect to Figure 1 in BS8004: 2015+A1:2020, a bulk density of 1.85 Mg/m^3 can be assumed. This interpretation is deemed appropriate based on on-site observations described on the exploratory hole logs.

6.1.1.3 Atterberg Tests

Atterberg Tests were carried out on samples recovered from the MG at the East Site - Hydrogen Production, the East Site - Ammonia Storage and the West Site, as shown in Figures D.7 to D.9, D.11 to D.13 and D.15 to D.17 respectively.

For the East Site - Hydrogen Production, Atterberg Limit tests were undertaken on 12no. samples of MG, recovered from depths of 0.3m to 3m bgl (+0.9m to +3.15m OD). The data, plotted on a plasticity chart in Figure D.5, shows a large proportion of the samples are classified as clays of intermediate to high plasticity with one sample exhibiting low plasticity.

For the East Site - Ammonia Storage, Atterberg Limit tests were undertaken on 15no. samples of MG, recovered from depths of 0.1m to 1.5m bgl (+2.70m OD to +1.85m OD). Figure D.6 shows that three samples are classified as clay of intermediate to high plasticity while the other samples plot as high plasticity.

For the West Site, Atterberg Limit tests were undertaken on 31no. samples of MG, recovered from depths up to 1.6m bgl (+1.75m OD). Most of the samples are classified as silts and clays of very high plasticity, with 16% of the samples (5no.) classified as clay of intermediate to high plasticity.

6.1.1.4 Natural Moisture Content

The natural moisture content, liquid and plastic limits are plotted against level for all strata at the West Site and East Site (Hydrogen Production & Ammonia Storage).

Figure D.6 to D.9 for the East Site – Hydrogen Production show results from 18no. moisture content tests and 12no. liquid and plastic limit tests. Within the top 2m of MG, the water content is just below or at the plastic limit

indicating that the MG at the East Site – Hydrogen Production is of stiff consistency. This is likely to be due to seasonal drying of the soils despite the GI being undertaken over the autumn and winter period (November 2022 to February 2023). Alternatively, the samples may have partially dried out whilst being stored before testing was undertaken. At depths greater than 2m, MG exhibits water contents above the plastic limit indicative of firm to stiff consistency soils.

Figure D.10 to D.13 for the East Site – Ammonia Storage show results from 15no. moisture content tests and 15no. liquid and plastic limit tests. Like the wider East Site, the data shows the top 1m of the MG to comprise stiff consistency soils. At greater depth, the water content lies between the plastic limit and the liquid limit, consistent with firm to stiff consistency soils.

Figure D.14 to D.17 for the West Site show results from 34no. moisture content tests and 31no. liquid and plastic limit tests. Moisture contents lie between the plastic limit and the liquid limit, and are typically closer to the plastic limit than the liquid limit consistent with stiff to firm soils. A couple of moisture contents within the top 0.5m bgl lie below the plastic limit, indicative of stiff consistency soil, or sample disturbance (material dried out).

6.1.1.5 Particle Size Distribution

Particle size distribution (PSD) curves for MG are shown on Figures D.18 to D.20. 11 no. of samples were taken from the East Site – Hydrogen Production, 6 no. of samples from the East Site – Ammonia Storage, and 6 no. from the West Site. The figures show gradings for MG comprising predominantly fines across the sites, except for the East Site – Hydrogen Production where half of the samples comprise sands and gravels. The fines-dominant samples generally comprise 90-100% silt and/or clay combined, with minor sand and gravel components generally less than 10%. The coarse-dominant samples in the East Site – Hydrogen Production comprise gravels (6% to 71%), sands (2% to 25%), silts (0% to 68%) and clays (0% to 55%).

It is noted that in the East Site – Hydrogen Production some of the PSD samples exhibit cobble size content exceeding the 75mm sieve with up to 64% retained during grading. However, in the West Site, the majority of PSD samples contains high fines content with 73% to 100% passing the 63µm sieve during grading. These observations indicate that MG is highly variable across the entire site displaying variable grain size distributions. For East Site – Hydrogen Production, the uniformity coefficient (C_u) ranges from 10 to 300 (mean 98.3) with the coefficient of curvature (C_c) ranging from 1.9 to 38 (mean 13.6), whereas for East Site – Ammonia Storage, single values have been recorded for both the uniformity coefficient (C_u) at 90 and the coefficient of curvature (C_c) at 1.9. No C_u or C_c values are recorded for the MG at the West Site. Based on literature provided in BS EN 1997-2:2007, this suggests that MG in the East Site – Hydrogen Production are medium to well-graded.

6.1.1.6 Undrained Shear Strength

Undrained shear strength (c_u) in cohesive MG was derived by correlation with SPT 'N_{60}' values. This has been achieved following CIRIA C143 guidance, based on the Stroud (1989) correlation $c_u = f_1 N_{60}$ assuming an f_1 value of 5. Furthermore, in-situ Hand Shear Vane (HSV) tests were carried out on MG. Additionally, CPTu testing carried out in all three sites, was used to derive undrained shear strength plots of MG.

For the East Site - Hydrogen Production no HSV tests were carried out and SPTs were carried out in granular MG. From CPTs in cohesive MG, c_u ranged from 1kPa to 143kPa . CPT derived c_u plots in MG for the East Site - Hydrogen Production are shown in Figure D.27, that for East Site – Ammonia Storage in Figure D.28 and that for West Site in Figure D.29.

For the East Site - Ammonia Storage 74No. HSV tests were carried out with resulting peak c_u values ranging from 18kPa to 120kPa. CPT derived c_u values ranged from 1kPa to 99kPa. CPT derived Cu plots in MG for the East Site- Ammonia Storage are shown in Figure D.28 plotted against HSV Cu values.

For the West Site, 343 No. HSV tests were carried out giving a range of peak undrained shear strength between 26kPa and 130kPa. No SPT tests were carried out in the MG/TS of the West Site. Figure D.29 show how the CPT derived undrained shear strength plots against the HSV undrained shear strength. CPT c_u values ranged from 1kPa to 196kPa.

6.1.1.7 Effective Stress Strength

The peak effective angle of shearing resistance (φ'_{pk}) of MG is plotted against elevation in Figures D.21 for the East Site – Hydrogen Production only, as SPT tests were not carried out on MG in other locations. These values have been estimated following guidance in CIRIA C143 using the empirical correlation suggested by Peck et al, (1974), based on $(N_1)_{60}$ values, with φ'_{pk} ranging from 27.5° to 36.5° (mean of 31°; lower quartile of 29.5°).

The effective angle of shearing resistance at constant volume (φ'_{cv}) for the cohesive MG has been derived using the plasticity index (I_p) range between 8% to 39% for the East Site – Hydrogen Production, 22% to 40% for the East Site – Ammonia Storage and 20% to 44% for the West Site. The φ'_{cv} was obtained in accordance with the recommendations of BS8004: 2015 using the Santamarina & Diaz-Rodriguez (2003) correlation:

$$\varphi'_{cv} = \left(42° - 12.5log_{10}I_p\right) for\ 5\% \leq I_p \leq 100\%$$

The range of φ'_{cv} obtained is between 22° and 30.5° (mean of 25° and lower quartile of 24°) for the East Site - Hydrogen production, between 22° and 25° (mean of 23.5° and lower quartile of 23°) for the East Site – Ammonia Storage and 21.5° and 25.5° (mean of 22° and lower quartile of 21.5°) for the West Site.

6.1.1.8 Drained Stiffness

A range of drained Young's modulus (E′) for granular MG (Figure D.22) have been estimated in East Site – Hydrogen Production following correlation in CIRIA C143 of Stroud (1989) where at a given average strain level beneath a foundation, the mean vertical effective stiffness (E′) of a normally consolidated material could be correlated with the N_{60} value:

$E' = 1 \times N_{60}$ = 2 – 20 MPa (mean 9MPa; lower quartile 6 MPa)

Care should be taken in using the stiffness values given above, since they are linear properties derived from an assumed relationship, and as such they do not reflect the non-linear nature of soil stiffness. The actual stiffness values will be strain- and stress-dependent and as a result the design values should be selected as appropriate for the design application.

6.1.1.9 One-dimensional Consolidation Tests

One-dimensional consolidation testing has been undertaken on 2no. MG samples in the East Site – Hydrogen Production and 1no. in the East Site – Ammonia Storage, with results shown in Figures D.30 to D.34 The anticipated effective stress range for the East Site – Hydrogen Production and the East Site – Ammonia Storage are 40 to 59kPa, and 21 to 30 kPa respectively.

The coefficient of volume compressibility (m_v) and root-time coefficient of consolidation (c_v) values have been estimated from the 25 - 50kPa and 50 - 100kPa pressure ranges of the oedometer testing for the East Site – Hydrogen Production, and 12.5 - 25kPa and 25 - 50kPa pressure ranges for the East Site – Ammonia Storage. Based on this assessment, the range of m_v values for the East Site – Hydrogen Production is 0.32 m^2/MN to 0.71 m^2/MN in the stress range of 25 - 50 kPa, and 0.28 m^2/MN to 0.53 m^2/MN in the 50 - 100kPa range; the m_v values East Site – Ammonia Storage is 0.85 m^2/MN in the 12.5 - 25kPa pressure range, and 0.71 m^2/MN in the 25 - 50kPa pressure range.

The range of value for c_v has been determined, for the East Site, to be 0.67 m^2/yr to 4 m^2/yr at the 25 - 50kPa stress range, and 0.52 m^2/yr to 1.2 m^2/yr in the 50 - 100kPa pressure range, while the c_v value for the East Site – Ammonia Storage are 1.1 m^2/yr in the 12.5 - 25kPa pressure range, and 1.2 m^2/yr for the 25 - 50kPa pressure range.

The range of compression index (C_c) ($\Delta e/\log(\Delta\sigma)$ at maximum pressure) is 0.269 to 0.319 for East Site – Hydrogen Production and 0.326 (a single value calculated) for the East Site – Ammonia Storage. The swelling (C_s) indices were not recorded during the current AECOM 2022/23 FEED GI.

The coefficient of secondary consolidation (c_a) was calculated on 1no. sample in the East Site – Hydrogen Production, giving a range of 0.0012 m^2/yr to 0.0051 m^2/yr.

6.1.1.10 Geotechnical Calculated Values

The calculated values for the combined Made Ground and Topsoil are summarised in Table 6-1.

Table 6-1 Calculated values for Made Ground and Topsoil (MG)

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
Uncorrected SPT N value	-	2 – 26 (M: 11.1) (LQ: 7)	-	-
SPT N_{60} [2]	-	2 – 20 (M: 9) (LQ: 6)	-	-

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
SPT $(N1)_{60}$	-	2 – 31 (M: 13.5) (LQ: 8.2)	-	-
Relative Density, I_D	-	Loose – Medium (Sand Faction) [2] Medium – Stiff (Clay Faction)	-	-
Bulk density, ρ	Mg/m^3	1.85 [3]	-	-
Water content	%	10 – 41 (M: 24)	24 – 52 (M: 36)	1 – 50 (M: 38)
Plastic Limit	%	16 – 34 (M: 25)	22 – 31 (M: 27)	21 – 37 (M: 32)
Liquid Limit	%	31 – 65 (M: 48)	46 – 68 (M: 27)	42 – 78 (M: 70)
Plasticity Index	%	2 – 39 (M: 23)	22 – 40 (M: 30)	20 – 44 (M: 38)
Uniformity coefficient, C_u	-	10 – 300 (M: 98) (UQ: 100)	90	-
Coefficient of curvature C_c	-	1.9 – 38 (13.6) (UQ: 19.7)	1.9	-
$c_{u,pk}$ (in-situ hand shear vane test)	kPa	-	18-120 (M: 73) (LQ: 60)	26-130 (M: 66) (LQ: 54)
c_u (CPT)	kPa	1 – 143 (M: 20) (LQ: 5)	1-99 (M: 16) (LQ: 3)	1-196 (M: 21) (LQ: 11)
$\varphi'_{pk,\ granular}$ (estimated from SPT $(N1)_{60}$ value)	degrees	27.5 – 36.5 (M: 31) (LQ: 29.5)	-	-
$\varphi'_{cv,cohesive}$ (estimated from PI)	degrees	22 – 30.5 (M: 25) (LQ: 24)	22 – 25 (M: 23.5) (LQ: 23)	21.5 – 25.5 (M: 22) (LQ: 21.5)
$E'_{granular}$ (estimated from $1.2*N_{60}$)	MPa	2 – 20 (M: 9) (Lower quartile 6)		-
m_v	m^2/MN	25 - 50kPa: 0.32-0.71 (M: 0.51) (UQ: 0.71) 50 - 100kPa: 0.28 - 0.53 (M: 0.41) (UQ: 0.53)	12.5 - 25kPa: (M: 0.85) 25 - 50kPa: (M:0.71)	-
c_v	m^2/yr	25 - 50kPa: 0.67-4 (M: 2.34) (LQ: 0.67) 50 - 100kPa: 0.55 - 1.2 (M: 0.88) (LQ: 0.55)	12.5 - 25kPa: (M: 1.1) 25 - 50kPa: (M: 1.2)	-

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
c_a	m^2/yr	0.0012 – 0.0051 (M: 0.0032) (UQ: 0.0042)	-	-
c_c	-	0.269 – 0.319 (M: 0.293) (UQ: 0.297)	0.326	-
c_s	-	-	-	-

Notes
[1] Values reported as minimum, maximum (M: Mean) (LQ: Lower Quartile or UQ: Upper Quartile – where appropriate).
[2] Value obtained from Table F.1 of BS EN 1997-2.
[3] Value obtained from Figure 1 of BS8004: 2015+A1:2020.

6.1.2 Firm Tidal Flat Deposits (TFD2)

6.1.2.1 Standard Penetration Testing

Figures D.35 to D.40 show results of the 3no. SPT tests that have been completed within the granular TFD2 at the East Site – Hydrogen Production, 2no. at the East Site – Ammonia Storage and 3no. at the West Site. SPT N_{60} values greater than 100 have been discounted as these are deemed to be attributed to potential obstructions/ hard strata, not representative of the actual soil behaviour. The uncorrected SPT N values across all three sites ranged from 1 to 9, whilst the N_{60} values ranged from 2 to 7.

6.1.2.2 Density

The bulk and dry density of TFD2 were determined from 3no. UU triaxial tests and 3no. oedometer tests in the East Site – Hydrogen Production, from 2no. UU triaxial tests and 3no. oedometer tests in the East Site – Ammonia Storage, and from 9no. UU triaxial tests and 14no. oedometer tests in the West Site. The bulk density values range from 1.6 Mg/m^3 to 1.93 Mg/m^3 whilst the dry density values range from 1.04 Mg/m^3 to 1.47 Mg/m^3.

6.1.2.3 Atterberg Tests

Atterberg Tests were carried out on samples recovered from the TFD2 the in East Site – Hydrogen Production, East Site – Ammonia Storage and West Site, as shown in Figures D.45 to D.47, D.49 to D.51 and D.53 to D.55 respectively.

For the East Site – Hydrogen Production, Atterberg Limit tests were undertaken on 3no. samples of TFD2. The three samples were classified as clay of intermediate to high plasticity.

For the East Site – Ammonia Storage area, Atterberg Limit tests were undertaken on 8no. samples of TFD2, which were classified as clay with intermediate to very high plasticity.

For the West Site, Atterberg Limit tests were undertaken on 49no. samples of TFD2. The data is consistent with the samples predominantly classified as clay of intermediate to very high plasticity (84% of the samples exhibit high plasticity).

6.1.2.4 Natural Moisture Content

The natural water content, liquid and plastic limits are plotted against level for the West Site and the East Sites (Hydrogen Production & Ammonia Storage).

Figures D.52 to D.55 for the West Site shows results from 51no. moisture content tests and 49no. liquid and plastic limit tests. The water content of TFD2 lies between the plastic limit and the liquid limit, and typically closer to the plastic limit than the liquid limit consistent with firm to stiff consistency soils (firmer within the top 1m of the stratum).

Figure D.44 and D.47 for the East Site – Hydrogen Production show results from 4no. moisture content tests and 3no. liquid and plastic limit tests. The natural moisture content ranges from 26% to approximately 40%, and falls between the plastic and liquid limits, typically closer to the plastic limit, thus indicating firm consistency.

Figure D.48 and D.51 for the East Site – Ammonia Storage show results from 10no. moisture content tests and 8no. liquid and plastic limit tests. Like the wider West and East Sites, the water content of TFD2 lies between the plastic limit and the liquid limit, and typically closer to the plastic limit than the liquid limit consistent with firm to stiff consistency soils.

6.1.2.5 Particle Size Distribution

The PSD curves for TFD2 are shown on Figures D.56 to D.58 for the three sites. Testing was undertaken on 1 no. sample from the East Site – Hydrogen Production, 6 no. samples from the East Site – Ammonia Storage, and 35 no. from the West Site. The figures show that the samples comprise predominantly fines with 80% to 100% passing the 63µm sieve, with minor sand (0% to 4%) and almost zero gravel content, except for two samples where gravel constitutes 15% of the material, suggesting that the material may be locally gravelly. The clay content range between 29% and 56%, proving the cohesive nature of the deposit. There are no uniformity coefficient (C_u) nor coefficient of curvature (C_c) recorded for this stratum.

6.1.2.6 Effective Stress Strength

The effective angle of shearing resistance at constant volume (φ'_{cv}) has been derived using the plasticity index (I_p) values, found to vary between 24% and 46%, based on the recommendations of BS8004: 2015 using the Santamarina & Diaz-Rodriguez (2003) correlation. The φ'_{cv} values obtained for the East Site – Hydrogen Production were found between 23° and 24° (mean of 23.5°; lower quartile of 23°). For the East Site – Ammonia Storage, the values were estimated between 21.5° and 26° (mean of 23°; lower quartile of 22.5°), and for the West Site between 21° and 24.5° (mean of 22.5°; lower quartile of 20°). All φ'_{cv} values are presented in Figures D.60, D.62 and D.64.

6.1.2.7 Undrained Shear Strength

Undrained shear strengths (c_u) for TFD2 for the East Site – Hydrogen Production have been inferred from a combination of testing as follows:

- 3 no. Unconsolidated Undrained (UU) triaxial tests in compression: c_u values obtained from the UU triaxial tests range from 23 kPa to 45 kPa (average 36 kPa; lower quartile 32 kPa).
- 3 no. SPTs, using the Stroud (1989) correlation $c_u = f_1 N_{60}$ assuming an f_1 value of 5 from the CIRIA C143 guidance using SPT N_{60} values. C_u values using this methodology range from 8 kPa to 37 kPa (average 27 kPa; lower quartile 22 kPa).
- 9 no. CPTs: c_u values obtained ranged from 7 kPa to typically less than 200 kPa (absolute maximum: 926kPa; average 139 kPa; lower quartile 86 kPa).
- The average c_u from UU triaxial tests, SPT testing and HSV tests is 31 kPa with a lower quartile of 26 kPa. All c_u values are plotted against the CPT derived c_u in Figure D.65.

Undrained shear strengths (c_u) for TFD2 for the East Site – Ammonia Storage have been inferred from a combination of testing as follows:

- 2 no. UU triaxial tests: c_u values obtained from the UU triaxial tests are 21 kPa and 37 kPa corresponding to very soft to soft material (average 29 kPa; lower quartile 25kPa). The samples are described as “firm becoming soft”
- 2 no. SPTs, using the Stroud (1989) correlation $c_u = f_1 N_{60}$ assuming an f_1 value of 5 from the CIRIA C143 guidance using SPT N_{60} values: c_u values using this methodology range are both 5 kPa.
- 78 no. HSV tests: c_u values obtained ranged from 16kPa to 135 kPa (average 65 kPa; lower quartile 53 kPa).
- 8 no. CPTs: c_u values obtained ranged from 1 kPa to 110 kPa (average 29 kPa; lower quartile 6 kPa).
- The average c_u from UU triaxial tests, SPT and HSV tests is 62 kPa with a lower quartile of 50 kPa. All c_u values are plotted against the CPT derived c_u in Figure D.66.

Undrained shear strengths (c_u) in TFD2 for the West Site have been inferred from a combination of testing as follows:

- 8 no. UU triaxial tests: c_u values obtained from the UU triaxial tests range from 8 kPa to 110 kPa corresponding to very soft to stiff material (average 32 kPa; lower quartile 20 kPa). Majority of the samples are described as “firm becoming soft”, corresponding to c_u values varying between 8 kPa and 28 kPa (very low strength), except for 1 no. test with c_u value of 110 kPa (high strength).
- 3 no. SPTs, using the Stroud (1989) correlation $c_u = f_1 N_{60}$ assuming an f_1 value of 5 from the CIRIA C143 guidance using SPT N_{60} values. C_u values using this methodology range from 4 kPa to 21 kPa (average 14 kPa; lower quartile 10 kPa).
- 617 no. HSV tests: c_u values obtained ranged from 22 kPa to 130 kPa (average 68 kPa; lower quartile 54 kPa)
- 36 no. CPTs: c_u values obtained ranged from 1 kPa to 110 kPa (average 24 kPa; lower quartile 6 kPa).

- The average c_u from UU triaxial tests, SPT and HSV tests is 68 kPa with a lower quartile of 52 kPa. All c_u values are plotted against the CPT derived c_u in Figure D.67.

6.1.2.8 Undrained Stiffness

Considering the empirical correlation with c_u applicable for strain levels associated with shallow foundations, using the method given by Jamiokowski et al. (1979) within Tomlinson's Pile Design and Construction book, where

$$E_u = 300c_u$$

the following undrained Young's modulus for TFD2 was derived for each site:

E_U = 2.3 – 11.0 Mpa (mean 8.0 Mpa; lower quartile 6.5 Mpa) East Site – Hydrogen Production

= 1.2 – 11.1 Mpa (mean 4.9 Mpa; lower quartile 1.2 Mpa) East Site – Ammonia Storage

= 1.2 – 33.0 Mpa (mean 8.2 Mpa; lower quartile 4.6 Mpa) West Site

Care should be taken in using the stiffness values given above, since they are linear properties derived from an assumed relationship, and as such they do not reflect the non-linear nature of soil stiffness. The actual stiffness values will be strain- and stress-dependent and as a result the design values should be selected as appropriate for the design application.

6.1.2.9 One-dimensional Consolidation Tests

One-dimensional consolidation testing has been undertaken on 23no. TFD2 samples in the East Site – Hydrogen Production, 27no. in the East Site – Ammonia Storage and 59no. in the West Site. The test plots are presented in Figures D.70 to D.78.

The anticipated effective stress ranges for TFD2 are 41 kPa to 82 kPa in the East Site – Hydrogen Production, 17 kPa to 30kPa for the East Site – Ammonia Storage and 30 kPa to 45kPa for the West Site. The coefficient of volume compressibility (m_v) and root-time coefficient of consolidation (c_v) values have been estimated from the 25-50kPa and 50-100kPa pressure ranges of the oedometer testing across all three site areas.

For the East Site – Hydrogen Production, the range of m_v value is 0.3 to 0.91 m^2/MN but typically less than 0.33 m^2/MN in the 25-50kPa stress range, and 0.26 to 0.68 m^2/MN but typically less than 0.33m^2/MN in the 50-100kPa stress range. The range of c_v values is 1.4 to 8.7 m^2/yr for the 25-50kPa stress range, and 1.1 to 4.3 m^2/yr for the 50-100kPa stress range. Note that a sample has yielded consistently higher m_v and c_v values which is likely subject to sample disturbance and the data presented has ignored results from this sample.

For the East Site – Ammonia Production, the range of m_v value is 0.31 to 0.79 m^2/MN in the 25-50kPa stress range, and 0.31 to 0.61 m^2/MN in the 50-100kPa stress range. The range of c_v value is 7.6 to 14 m^2/yr for the 25-50kPa stress range, and 3 to 27 m^2/yr for the 50-100kPa stress range.

For the West Site, the range of m_v value is 0.3 to 0.97 m^2/MN in the 25-50kPa stress range, and 0.32 to 0.67 m^2/MN in the 50-100kPa stress range.The range of c_v value is 0.56 to 28 m^2/yr for the 25-50kPa stress range and 0.73 to 16 m^2/yr for the 50-100kPa stress range.

The range of compression index (C_c) ($\Delta e/\log(\Delta\sigma)$ at maximum pressure) is 0.236 to 0.409 in the East Site – Hydrogen Production, 0.22 to 0.33 in the East Site – Ammonia Storage, and 0.199 to 0.542 for the West Site. Since there were no unloading/reloading stages there were no swelling (C_s) indices calculated.

The coefficient of secondary consolidation (c_a) was calculated on 2no. samples from the East Site – Hydrogen Production, 2no. samples from the East Site – Ammonia Storage and 9no. samples from the West Site. The range of values was found to be between 0.001 m^2/yr and 0.0073 m^2/yr, with a mean value of 0.0035 m^2/yr, for the East Site – Hydrogen Production; between 0.0002 m^2/yr and 0.004 m^2/yr, with a mean value of 0.00178 m^2/yr, for the East Site – Ammonia Storage; and between 0.0001 m^2/yr and 0.0053 m^2/yr with a mean value of 0.00398 m^2/yr for the West Site.

6.1.2.10 Compaction

Compaction curves for TFD2 are shown in Figures D.68 and D.69 for the East Site – Ammonia Storage and the West Site respectively. In the East Site – Ammonia Storage area, maximum dry densities ($\rho_{d,max}$) of 1.83Mg/m^3 to 1.87Mg/m^3 occur at an optimum moisture content of 13% to 14% using a 4.5kg hammer, while $\rho_{d,max}$ of 1.45Mg/m^3 occurs at an optimum moisture content of 27% using a 2.5kg hammer. In the West Site, $\rho_{d,max}$ of 1.76Mg/m^3 occur at an optimum moisture content of 17% using a 4.5kg hammer, while $\rho_{d,max}$ of 1.33Mg/m^3 to 1.59Mg/m^3 occurs at an optimum moisture content of 24% to 32% using a 2.5kg hammer.

The mean water content of 36.82% in East Site – Ammonia Storage and 35.12% in West Site indicate that TFD2 in both locations are wetter than optimum moisture contents for each location.

6.1.2.11 Geotechnical Calculated Values

The calculated values for TFD2 are summarised in Table 6-2.

Table 6-2 Calculated values for Firm Tidal Flat Deposits (TFD2)

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
Uncorrected SPT N value	-	2 – 9 (M: 6.7)	1	1 – 5 (M: 3.3)
SPT N_{60}	-	2 – 7 (M: 5.3)	0.8	0.8 – 4.2 (M: 2.7)
Bulk density, ρ	Mg/m^3	1.72 – 1.89 (M: 1.84)	1.79 – 1.92 (M: 1.86)	1.6 – 1.93 (M: 1.77)
Dry density, ρ_d	Mg/m^3	1.17 – 1.39 (M: 1.33)	1.23 – 1.44 (M: 1.35)	1.04 – 1.47 (M: 1.23)
Water content	%	26 – 40 (M: 33)	26 – 55 (M: 37)	24 – 53 (M: 35)
Plastic Limit	%	22 – 26 (M: 24)	21 – 29 (M: 25)	21 – 37 (M: 26)
Liquid Limit	%	49 – 58 (M: 53)	40 – 73 (M: 57)	45 – 80 (M: 61)
Plasticity Index	%	27 – 32 (M: 29)	19 – 44 (M: 31)	24 – 46 (M: 35)
Uniformity coefficient, C_u	-	No value	No value	No value
Coefficient of curvature C_c	-	No value	No value	No value
c_u (UU triaxial tests)	kPa	23 – 45 (M: 36.3) (LQ: 32)	21 – 37 (M: 29) (LQ: 25)	8 – 110 (M: 32.4) (LQ: 20.3)
$c_u = f_1$ x SPT N 'f_1' = 5	kPa	8 - 37 (M: 26.5) (LQ: 21.5)	5 (2 samples with repeated values)	5 – 20.9 (M: 13.6)
c_u (CPT)	kPa	7 - 200 (M: 139) (LQ: 86)	1 - 110 (M: 29) (LQ: 6)	1 - 110 (M: 24) (LQ: 6)
φ'_{cv} (derived from I_p)	degrees	23 – 24 (M: 23.5) (LQ: 23)	21.5 – 26 (M: 23) (LQ: 22.5)	21 – 24.5 (M: 22.5) (LQ: 20)
Eu (derived from 300c_u)	MPa	2.3 – 11.0 (M: 8.0) (LQ: 6.5)	1.2 – 11.1 (M: 4.9) (LQ: 1.2)	1.2 – 33.0 (M: 8.2) (LQ: 4.6)
Maximum dry density $\rho_{d, max}$ [2]	Mg/m^3	-	1.45 – 1.87	1.33 – 1.76
Optimum Moisture Content [2]	%	-	13 – 27	17 – 32
m_v	m^2/MN	25-50kPa: 0.3-0.91 (M: 0.46) (UQ: 0.48) 50-100kPa: 0.26-0.68	25-50kPa: 0.31-0.79 (M: 0.49) (UQ: 0.59)	25-50kPa: 0.3-0.97 (M: 0.62) (UQ: 0.75) 50-100kPa: 0.32-0.67

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
		(M: 0.38) (UQ: 0.4)	50-100kPa: 0.31-0.61 (M: 0.42) (UQ: 0.48)	(M: 0.49) (UQ: 0.59)
c_v	m^2/yr	25-50kPa: 1.4-8.7 (M: 3.55) (LQ: 1.63) 50-100kPa: 1.1-4.3 (M: 2.65) (LQ: 1.18)	25-50kPa: 7.6-14 (M: 11.2) (LQ: 9.8) 50-100kPa: 3-27 (M: 12.4) (LQ: 5.15)	25-50kPa: 0.56-28 (M: 7.55) (LQ: 2.05) 50-100kPa: 0.73-16 (M: 6.33) (LQ: 2.3)
c_a	m^2/yr	0.001 – 0.0073 (M: 0.0035) (UQ: 0.0057)	0.0002 – 0.004 (M: 0.00178) (UQ: 0.003)	0.0001 – 0.0053 (M: 0.00248) (UQ: 0.00398)
C_c	-	0.236-0.409 (M: 0.307) (UQ: 0.382)	0.22-0.33 (M: 0.265) (UQ: 0.324)	0.199-0.542 (M: 0.345) (UQ: 0.435)
C_s	-	-	-	

Notes
[1] Values reported as minimum, maximum (M: Mean) (L: Lower Quartile or UQ: Upper Quartile – where appropriate).
[2] Values obtained from both 2.5kg and 4.5kg hammers are reported, details are included in the report text.

6.1.3 Tidal Flat Deposits (TFD)

6.1.3.1 Standard Penetration Testing

Figures D.79 to D.84 show the results of 49no. SPTs that have been undertaken within the TFD at the East Site – Hydrogen Production, 39no. SPTs at East Site – Ammonia Storage and 47no. at the West Site. The uncorrected SPT N values ranged from 0 to 24 for all three sites, whilst the N_{60} values ranged from 0 to 27.

6.1.3.2 Density

The bulk and dry density of TFD were determined from 8no. UU triaxial tests, 3no. CU(multistage) triaxial tests and 23no. oedometer tests in the East Site – Hydrogen Production, from 8no. UU triaxial tests and 24no. oedometer tests in the East Site – Ammonia Storage, and from 45no. oedometer tests in the West Site. The bulk density values were found to range from 1.25 Mg/m^3 to 2.16 Mg/m^3, whilst the dry density values were found to range from 0.63 Mg/m^3 to 1.82 Mg/m^3. The low bulk and dry density values are associated with samples with high organic content, or rich in peat content. Based on Figure 2 in BS8002:2015 the TFD samples recovered has a low undrained shear strength, a weight density of 15 to 19kN/m^3 can be assumed, hence a dry densities of 1.52 to 1.93 Mg/m^3 can be considered.

6.1.3.3 Atterberg Tests

Atterberg Tests were carried out on samples recovered from TFD at the East Site - Hydrogen Production, the East Site - Ammonia Storage and the West Site, as shown in Figures D.89 to D.91, Figures D.93 to D.95, and Figures D.97 to D.99 respectively.

For the East Site – Hydrogen Production, Atterberg Limit tests were undertaken on 21no. samples. The samples were mainly classified as clay of intermediate to very high plasticity. 3no. samples, recovered from E-BH16, E-BH19 and E-BH21, are classified as very high to extremely high plasticity silt.

For the East Site - Ammonia Storage, Atterberg Limit tests were undertaken on 37no. samples. Except for two samples with high decomposed content, all samples were classified as clay with low to high plasticity.

For the West Site, Atterberg Limit tests were undertaken on 104no. samples, 90% of which were classified as clay of intermediate to high plasticity. There was also one clay-based sample that exhibited low plasticity and two that exhibited very high plasticity. A small number of samples either sat on the A line with high plasticity or were classed as silts with very high to extremely high plasticity.

6.1.3.4 Natural Moisture Content

The natural water content, liquid and plastic limits are plotted against level for all strata at the West Site and the East Sites (Hydrogen Production & Ammonia Storage).

For the East Site – Hydrogen Production, Figure D.88 shows results from 34no. moisture content tests and 21no. liquid and plastic limit tests. Moisture contents in the top 5m of TFD, obtained from different tests (natural moisture content, undrained triaxial and oedometer testing) vary between 25% and 74%. These values lie above the plastic limit, though typically closer to the plastic limit than the liquid limit. The data generally suggests soft to firm consistency Tidal Flat Deposits in the upper 5m. Below this, the moisture content has a range of 17% to 98% and the values generally lie closer to and above the liquid limit, confirming soft to very soft soils.

For the East Site – Ammonia Storage, Figure D.92 shows results from 45no. moisture content tests and 37no. liquid and plastic limit tests. Like the wider East Site, the data shows that TFD are soft to firm across the top 2m – the moisture content lies above the plastic limit, though typically closer to the liquid limit than the plastic limit. At greater depths (>2m), the moisture content lies close to and above the liquid limit. This data suggests very soft to soft consistency.

For the West Site, Figure D.96 shows results from 106no. moisture content tests and 104no. liquid and plastic limit tests. The data shows that TFD are firm to stiff at the top of the stratum and at five isolated locations of increasing depth. The former may be due to TFD2 samples being logged as the relatively softer Tidal Flat Deposits. All other moisture contents within the TFD lie above the plastic limit, though typically closer to the liquid limit than the plastic limit. At greater depths, the moisture content lies close to and above the liquid limit. This data suggests very soft to soft consistency.

6.1.3.5 Particle Size Distribution

The PSD curves for TFD are shown on Figures D.100 to D.102. Testing was undertaken on 9 no. samples from the East Site – Hydrogen Production, 10 no. samples from the East Site – Ammonia Storage, and 28 no. samples from the West Site. The figures show that the samples comprise predominantly fines with 30% to 99% passing the 63µm sieve, with some sand content (generally 2% to 20%) and minor gravel content (from nil up to 10%). There are a small number of samples which exhibit a higher percentage of sand material, comprising 41% to 60% of materials, though it is noted that these samples have been obtained close to the glacial till deposits that may contain higher granular content, thus the potential of cross-sampling between the two lithologies. No data was available to determine the uniformity coefficient (C_u) and coefficient of curvature (C_c).

6.1.3.6 Effective Stress Strength

The effective angle of shearing resistance at constant volume (φ'_{cv}) has been derived using plasticity index (I_p) values that range between 13% and 49% across the three sites using the recommendations of BS8004: 2015 using the Santamarina & Diaz-Rodriguez (2003) correlation. The φ'_{cv} values obtained for the East Site – Hydrogen Production are between 21° and 27° (mean of 23.5°; lower quartile of 22.5°), for the East Site – Ammonia Storage the values are between 21° and 28° (mean of 24.5°; lower quartile of 24°), and for the West Site the values range from 20.5° to 28° (mean of 24°; lower quartile of 23°). All values are displayed in Figures D.104, D.106 and D.108 respectively.

6.1.3.7 Undrained Shear Strength

Undrained shear strengths (c_u) for Tidal Flat Deposits for the East Site – Hydrogen Production have been inferred from a combination of testing as follows:

- 8 no. Unconsolidated Undrained (UU) triaxial tests in compression: c_u values obtained from the UU triaxial tests range from 4 kPa to 71 kPa (average 28 kPa; lower quartile 18 kPa).
- 47 no. SPTs, using the Stroud (1989) correlation $c_u = f_1 N_{60}$ assuming an f_1 value of 5 from the CIRIA C143 guidance using SPT N_{60} values: c_u values using this methodology range from 4 kPa to 103 kPa (average 21 kPa; lower quartile 8 kPa).
- 15 no. HSV tests: c_u values obtained ranged from 11 kPa to 82 kPa (average 42 kPa; lower quartile 14 kPa).
- 13no. CPTs: c_u values obtained ranged from 7 kPa to 109 kPa (absolute maximum: 710kPa ;average 46 kPa; lower quartile 28 kPa).
- The average c_u from UU triaxial tests, SPT and HSV tests is 26 kPa with a lower quartile of 9 kPa. All c_u values are plotted against the CPT derived c_u in Figure D.109.

Undrained shear strengths (c_u) for TFD for the East Site – Ammonia Storage have been inferred from a combination of testing as follows:

- 8 no. UU triaxial tests: c_u values obtained range from 3 kPa to 160 kPa corresponding to very low to high strength material (average 38 kPa; lower quartile 11 kPa). Majority of the samples were described as "soft or very soft" corresponding to c_u values ranging between 3 kPa and 49 kPa (very low strength), except for 1 no. test with c_u value of 160 kPa (high strength).
- 39 no. SPTs, using the Stroud (1989) correlation $c_u = f_1 N_{60}$ assuming an f_1 value of 5 from the CIRIA C143 guidance using SPT N_{60} values: c_u values using this methodology range between 4 kPa and 70 kPa (average 18 kPa; lower quartile 5 kPa).
- 36 no. HSV tests: c_u values obtained ranged from 10kPa to 110 kPa (average 41 kPa; lower quartile 14 kPa).
- 10 no. CPTs: c_u values obtained ranged from 7 kPa to 110kPa (absolute maximum: 530kPa; average 36 kPa; lower quartile 14 kPa).
- The average c_u from UU triaxial tests, SPT and HSV tests is 30 kPa with a lower quartile of 10 kPa. All c_u values are plotted against the CPT derived c_u in Figure D.110.

Undrained shear strengths (c_u) for cohesive TFD for the West Plot have been inferred from a combination of testing as follows:

- 11 no. UU triaxial tests: c_u values obtained from the UU triaxial tests range from 2 kPa to 34 kPa corresponding to very low strength material (average 15 kPa; lower quartile 9 kPa). Majority of the samples are described as "very soft or soft".
- 46 no. SPTs, using the Stroud (1989) correlation $c_u = f_1 N_{60}$ assuming an f_1 value of 5 from the CIRIA C143 guidance using SPT N_{60} values: c_u values using this methodology range from 4 kPa to 133 kPa (average 22 kPa; lower quartile 4 kPa).
- 169 no. HSV tests: c_u values obtained ranged from 8 kPa to 110 kPa (average 34 kPa; lower quartile 14 kPa).
- 36 no. CPTs: c_u values obtained ranged from 1 kPa to 240 kPa (average 22 kPa; lower quartile 14 kPa).
- The average c_u from UU triaxial tests, SPT and HSV tests is 31 kPa with a lower quartile of 12 kPa. All c_u values are plotted against the CPT derived c_u in Figure D.111.

6.1.3.8 Undrained Stiffness

Considering the empirical correlation with c_u applicable for strain levels associated with shallow foundations, using the method given by Jamiokowski et al. (1979) within Tomlinson's Pile Design and Construction book, where

$$E_u = 300 c_u$$

the following undrained Young's modulus for TFD was derived for each site:

E_U = 1.2 – 31.0 MPa (mean 6.7 MPa; lower quartile 2.5 MPa) East Site – Hydrogen Production

= 0.9 – 48.0 MPa (mean 6.3 MPa; lower quartile 1.4 MPa) East Site – Ammonia Storage

= 0.6 – 39.9 MPa (mean 6.2 MPa; lower quartile 1.2 MPa) West Site

Care should be taken in using the stiffness values given above, since they are linear properties derived from an assumed relationship, and as such they do not reflect the non-linear nature of soil stiffness. The actual stiffness values will be strain- and stress-dependent and as a result the design values should be selected as appropriate for the design application.

6.1.3.9 One-dimensional Consolidation Tests

One-dimensional consolidation testing has been undertaken on 23no. TFD samples in the East Site – Hydrogen Production, 24no. in the East Site – Ammonia Storage and 45no. in the West Site. Test results are presented in figures D.113 to D.123.

The anticipated effective stress range for TFD is between 60kPa and 200kPa for the East Site – Hydrogen Production, 6kPa and 210kPa for the East Site – Ammonia Storage, and 30kPa and 150kPa for the West Site.

For the East Site – Hydrogen Production, the range of m_v values is 0.26 to 0.9 m^2/MN in the stress range of 50-100 kPa, and 0.085 to 1.1 m^2/MN in the 100-200kPa stress range. The range of c_v value has been determined as 0.59 to 34 m^2/yr at the 50-100kPa stress range, and 0.20 to 35 m^2/yr in the 100-200kPa pressure range.

For the East Site – Ammonia Storage the range of m_v values is 0.26 to 3.9 m^2/MN for 25-50kPa stress range, 0.25 to 1.4 m^2/MN for the 50-100kPa stress range and 0.036 to 0.83 m^2/MN for the 100-200kPa stress range. The range of c_v values is 0.37 to 22 m^2/yr in the 25-50kPa pressure range, 0.39 to 40 m^2/yr for the 50-100kPa pressure range and 0.31 to 51 m^2/yr for the 100-200kPa pressure range.

For the West Site, the range of m_v values is 0.047 to 1.9 m^2/MN for the 50-100kPa stress range and 0.027 to 1.5 m^2/MN for the 100-200kPa stress range. The range of c_v values is 0.23 to 8 m^2/yr at the 50-100kPa stress range and 0.2 to 6 m^2/yr in the 100-200kPa pressure range.

The compression index (C_c) ($\Delta e/\log(\Delta\sigma)$ at maximum pressure) has a range of 0.016 to 1.67 (but is typically less than 0.45) in the East Site – Hydrogen Production, 0.02 to 0.59 in the East Site – Ammonia Storage and 0.01 to 2.189 for the West Site. The swelling (C_s) indices were calculated in the East Site – Ammonia Storage and West Site, with values ranging from 0.03 to 0.1 and 0.066 to 0.166 respectively.

The coefficient of secondary consolidation (c_a) is recorded in 13no. samples in the East Site – Hydrogen Production, 11no. samples in the East Site – Ammonia Storage and 29no. samples in the West Site. The range of values are 0.0004 m^2/yr to 0.016 m^2/yr in the East Site – Hydrogen Production, 0.023 m^2/yr to 0.588 m^2/yr for the East Site – Ammonia Storage, and 0.0001 m^2/yr to 71 m^2/yr for the West Site.

6.1.3.10 Carbonate Content

2no. Carbonate Content tests (as $\%CO_2$) were completed on TFD samples, returning values ranging from <0.1% to 4%.

6.1.3.11 Compaction

Compaction curves for TFD are shown in Figure D.112. In the West Site, $\rho_{d,max}$ of 1.75Mg/m^3 occurs at an optimum moisture content of 13% using a 4.5kg hammer, while $\rho_{d,max}$ of 1.39Mg /m^3 occurs at an optimum moisture content of 32% using a 2.5kg hammer. The mean water content of TFD in the West Site generally of 50% indicates that the stratum is wetter than the optimum moisture content.

6.1.3.12 Geotechnical Calculated Values

The calculated values for TFD are summarised in Table 6-3.

Table 6-3 Calculated values for Tidal Flat Deposits (TFD)

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
Uncorrected SPT N value	-	0 – 17 (M: 4) (LQ: 1)	1 – 13 (M: 3.5) (LQ: 1)	0 – 24 (M: 4.2) (LQ: 1)
SPT N_{60}	-	0 – 20.7 (M: 4.41) (LQ: 1.37)	0.8 – 13 (M: 4.04) (LQ: 1.18)	0 – 26.6 (M: 4.3) (LQ: 0.79)
Bulk density, ρ	Mg/m^3	1.33 – 2.05 (M: 1.8)	1.65 – 2.16 (M: 1.81)	1.25 – 2.02 (M: 1.71)
Dry density, ρ_d	Mg/m^3	0.63 – 1.69 (M: 1.2)	1.01 – 1.82 (M: 1.28)	0.48 – 1.63 (M: 1.13)
Water content	%	17 – 98 (M: 48)	2.6 – 142 (M: 45)	3 – 99 (M: 52)
Plastic Limit	%	19 – 46 (M: 27)	18 – 62 (M: 24)	14 – 50 (M: 27)
Liquid Limit	%	35 – 91 (M: 57)	31 – 110 (M: 48)	32 – 95 (M: 56)
Plasticity Index	%	15 – 46 (M: 30)	13 – 48 (M: 24)	15 – 49 (M: 29)
Uniformity coefficient, C_u	-	No value	No value	No value

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
Coefficient of curvature C_c	-	No value	No value	No value
c_u (UU triaxial tests)	kPa	4 – 71 (M: 28) (LQ: 18)	3 – 49 (one further sample 160) (M: 38) (LQ: 11)	2 – 34 (M: 15) (LQ: 9)
$c_u = f_1$ x SPT N 'f_1' = 5	kPa	4 - 103 (M: 21) (LQ: 8)	4 - 70 (M: 18) (LQ: 5)	4 - 133 (M: 22) (LQ: 4)
c_u (CPT)	kPa	7 - 109 (M: 46) (LQ: 28)	7 - 110 (M: 36) (LQ: 14)	1 - 240 (M: 22) (LQ: 14)
φ'_{cv} (derived from I_p)	degrees	21 – 27 (M: 23.5) (LQ: 22.5)	21 – 28 (M: 24.5) (LQ: 24)	20.5 – 28 (M: 24) (LQ: 23)
Eu (derived from $300c_u$)	MPa	1.2 – 31.0 (M: 6.7) (LQ: 2.5)	0.9 – 48.0 (M: 6.3) (LQ: 1.4)	0.6 – 39.9 (M: 6.2) (LQ: 1.2)
Maximum dry density $\rho_{d, max}$ [2]	Mg/m^3	-	-	1.39 – 1.75
Optimum Moisture Content [2]	%	-	-	13 – 32
m_v	m^2/MN	50-100kPa: 0.26-0.9 (M: 0.62) (UQ: 0.82) 100-200kPa: 0.085-1.1 (M: 0.47) (UQ: 0.55)	25-50kPa: 0.26-3.9 (M: 1.47) (UQ: 1.85) 50-100kPa: 0.25-1.4 (M: 0.76) (UQ: 0.92) 100-200kPa: 0.036-0.83 (M: 0.43) (UQ: 0.56)	50-100kPa: 0.047-1.9 (M: 0.82) (UQ: 1.1) 100-200kPa: 0.027-1.5 (M: 0.56) (UQ: 0.63)
c_v	m^2/yr	50-100kPa: 0.59-34 (M: 4.87) (LQ: 1.1) 100-200kPa: 0.29-35 (M: 5.36) (LQ: 0.89)	25-50kPa: 0.37-22 (M: 3.3) (LQ: 0.95) 50-100kPa: 0.39-40 (M: 5.05) (LQ: 1.2) 100-200kPa: 0.31-51 (M: 5.30) (LQ: 1.33)	50-100kPa: 0.23-8 (M: 1.47) (LQ: 0.42) 100-200kPa: 0.2-6 (M: 1.32) (LQ: 0.38)
c_a	m^2/yr	0.0004 – 0.016 (M: 0.0048) (UQ: 0.0082)	0.023 – 0.588 (M: 0.322) (UQ: 0.46)	0.0001 - 71 (M: 0.780) (UQ: 7.975)
C_c	-	0.016 – 1.67 (M: 0.435) (UQ: 0.435)	0.02 – 0.59 (M: 0.32) (UQ: 0.41)	0.01 – 2.19 (M: 0.45) (UQ: 0.52)
C_s	-	-	0.03 – 0.1 (M: 0.066) (UQ: 0.113)	0.066 – 0.166 (M: 0.116) (UQ: 0.186)

Notes
[1] Values reported as minimum, maximum (M: Mean) (LQ: Lower Quartile/ UQ: Upper Quartile where appropriate).
[2] Values obtained from both 2.5kg and 4.5kg hammers are reported, details are included in the report text.

6.1.4 Glacial Till Deposits (GTD)

6.1.4.1 Standard Penetration Testing

Figures D.124 to D.129 show the SPT test results undertaken within the GTD with 71 no. tests in the East Site – Hydrogen Production, 58no. tests in the East Site – Ammonia Storage and 204no. tests in the West Site. The uncorrected SPT N values ranged from 7 to 50, whilst the N_{60} values ranged from 7 to 106.

Figures D.166 to D.171 show results of the SPT tests carried out on the granular GTD (GGTD) with 11no. tests carried out in the East Site-Hydrogen Production, 18no. tests in the East Site – Ammonia Storage and 52no. tests in the West Site respectively. The uncorrected SPT N values ranged from 3 to 50, the N_{60} values ranged from 4 to 87 and the $(N_1)_{60}$ values ranging from 2 and 35. The relative density of the GGTD ranges from loose (4 – 10 blows) to dense (30 – 50 blows), based on classifications in BS5930:2015+A1:2020.

6.1.4.2 Density

The bulk and dry density of GTD are determined from 10no. UU triaxial tests, 4no. CU (multistage) triaxial tests and 12no. oedometer tests in the East Site – Hydrogen Production, 9no. UU triaxial tests and 13no. oedometer tests in the East Site – Ammonia Storage, and 23no.UU triaxial tests, 5no. CU triaxial tests, and 42no. oedometer tests in the West Site. The bulk density values range from 2.03 Mg/m^3 to 2.30 Mg/m^3, whilst the dry density values range from 1.60 Mg/m^3 to 2.01 Mg/m^3.

The bulk and dry density of GGTD are based on in-situ SPTs. The SPT $(N_1)_{60}$ lower quartile values of 6.6 to 9 across the sites indicate a density index, I_D, of loose to medium sands based on recommended values provided in Table F.1 in BS EN 1997-2. Therefore, based on the correlation with respect to Figure 2 in BS8004: 2015+A1:2020, a bulk density of 1.85 Mg/m^3 can be assumed. This interpretation is deemed appropriate based on on-site observations described on the exploratory hole logs.

6.1.4.3 Atterberg Tests

Atterberg Tests were carried out on samples recovered from the GTD at the East Site -Hydrogen Production, East Site - Ammonia Storage and West Site as shown on Figures D.134 to D.136, D.138 to D.140 and D.142 to D.144 respectively, with plasticity charts presented in Figures D.130 to D.132.

For the East Site - Hydrogen Production, Atterberg Limit tests were undertaken on 21no. samples of GTD, which were classified as clay of low to intermediate plasticity, as shown on Figure D.130.

For the East Site - Ammonia Storage area, Atterberg Limit tests were undertaken on 25no. samples of cohesive GTD and the data is plotted on a plasticity chart in Figure D.131 showing that all the samples are clay based, exhibiting mostly low plasticity, with one sample exhibiting intermediate plasticity. This is similar to that observed for the wider East Site.

For the West Site, Atterberg Limit tests were undertaken on 91no. samples of GTD, which were predominantly classified as low to intermediate plasticity clay with only two samples exhibiting high plasticity clay.

6.1.4.4 Natural Moisture Content

The natural moisture content, liquid and plastic limits are plotted against level for all strata at the West Site and East Site (Hydrogen Production & Ammonia Storage).

For the East Site – Hydrogen Production, Figure D.133 shows the results from 27no. moisture content tests and 21no. liquid and plastic limit tests. The water content in the GTD ranges from 13.5% to 33% (~10-18% in the GGTD). The values lie at or below the plastic limit for GTD, thus suggesting firm to stiff consistency soils.

For the East Site – Ammonia Storage, Figure D.137 shows the results from 29no. moisture content tests and 25no. liquid and plastic limit tests. Like the wider East Site, moisture content values lie at or below the plastic limit, thus suggesting firm to stiff consistency soils.

For the West Site Figure D.141 shows results from 94no. moisture content tests and 91no. liquid and plastic limit tests. Moisture content values for GTD lie at or near to the plastic limit, suggesting firm to stiff consistency soils. Atterberg results from one sample in the GGTD show a similar trend as shown in Figure D.172. At the top of the GTD, moisture contents lie between the plastic and liquid limits or above the liquid limit. This may be attributed to mislogging of the overlying softer Tidal Flat Deposits.

6.1.4.5 Particle Size Distribution

The PSD curves for GTD are carried out on both cohesive and granular samples. The curves for the cohesive samples are shown on Figures D.145, D.146 and D.147, while the curves for the granular samples are shown on

Figures D.179 to D.181. Testing was undertaken on 7 no. samples from the East Site – Hydrogen Production, 4 no. samples from the East Site – Ammonia Storage, and 28 no. samples from the West Site. The figures show that the samples comprise predominantly fines with 30% to 85% passing the 63µm sieve, with considerable sand content (generally 10% to 58%) and some gravel content (6% to 26%). No data was available to determine the uniformity coefficient (C_u) and coefficient of curvature (C_c).

For the GGTD, testing was undertaken on 9 no. samples taken from the East Site – Hydrogen Production, 8 no. samples taken from the East Site – Ammonia Storage, and 24 no. samples taken from the West Site. The figures show gradings comprising predominantly sand and gravel sized fragments: in the East Site – Hydrogen Production, with sand content ranging from 23% to 89%(mean 51%) and gravel content ranging from 1% to 58% (mean 30%). In the East Site – Ammonia Storage, sand content rangec from 24% to 74% (mean 48%) and gravel content from 1% to 70% (mean 38%). In the West Site, sand content ranged from 15% to 63% (mean 36%) and gravel content ranged from 7% to 80% (mean 49.1%). The uniformity coefficient (C_u) ranges from 2.9 to 90.9 (mean 34) in the East Site – Hydrogen Production, from 8 to 70 (mean 31.3) in the East Site – Ammonia Storage, and from 6 to 70 (mean 27.2) in the West Site. The coefficient of curvature (C_c) ranges from 0.5 to 2.6 (mean 1.18) in the East Site – Hydrogen Production, 0.3 to 13.6 (mean 4.25) in the East Site – Ammonia Storage, and 0.4 to 7.4 (mean 2) in the West Site. Based on literature provided in BS EN 1997-2:2007, this suggests that the GGTD are medium to well graded material.

6.1.4.6 Effective Stress Strength

The effective angle of shearing resistance at constant volume (φ'_{cv}) for GTD has been derived using plasticity index (I_p) values that ranges between 4% and 27% using the recommendations of BS8004: 2015 and the Santamarina & Diaz-Rodriguez (2003) correlation. The φ'_{cv} values obtained for the East Site – Hydrogen Production are 24.0° to 28.5° (mean of 26.5°; lower quartile of 26.0°), for the East Site – Ammonia Storage the values are 25.0° to 32.0° (mean of 27.0°; lower quartile of 26.5°), and for the West Site the values are 22.5° to 34.5° (mean of 26.5°; lower quartile of 26.0°). All values are displayed in Figures D.149, D.151 and D.153.

Peak effective angle of shearing resistance (φ'_{pk}) from SPT tests on GGTD samples range from 28.5° to 38.5° (mean of 31.5°; lower quartile of 29.5°) for the East Site – Hydrogen Production, 28.0° to 36.5° (mean of 31.0°; lower quartile of 29.0°) for the East Site – Ammonia Storage, and 27.5° to 45.5° (mean of 33.0°; lower quartile of 30.0°) for the West Site. All values are displayed in Figures D.182 to D.184.

Effective angle of shearing resistance (φ') for GGTD was also calculated from the CPTs carried out in each plot using both the Kulhawy and Mayne (1990) correlation and Robertson and Campanella (1983) correlation. For the East Site – Hydrogen Production, φ' from Robertson and Campanella derivation ranged from 25.5° to 43.5° (mean of 38.5°; lower quartile of 35.5°), whilst φ' from Kulhawy and Mayne derivation ranged from 27.5° to 46° (mean of 39.°; lower quartile of 36.5°). These are plotted against SPT derived φ'_{pk} values on Figure D.185 and Figure D.186 respectively.

For the East Site – Ammonia Storage, φ' from Robertson and Campanella derivation ranged from 30.5° to 42.5° (mean of 38°; lower quartile of 35.5°), whilst φ' from Kulhawy and Mayne derivation ranged from 32.0° to 44.5° (mean of 39°; lower quartile of 36°). These are plotted against SPT derived φ'_{pk} values on Figure D.187.

For the West Site, φ' from Robertson and Campanella derivation ranged from 17° to 45° (mean of 38°; lower quartile of 36.5°) and from Kulhawy and Mayne derivation φ' ranged from 19.5° to 46° (mean of 39°; lower quartile of 37°). These are plotted against SPT derived φ'_{pk} values on Figure D.188 and Figure D.189 respectively.

6.1.4.7 Undrained Shear Strength

Undrained shear strengths (c_u) for GTD for the East Site – Hydrogen Production have been inferred from a combination of testing as follows:

- 10 no. UU triaxial tests: c_u values obtained from the UU triaxial tests range from 47 kPa to 140 kPa (average 97 kPa; lower quartile 82 kPa).
- 83 no. SPTs, using the Stroud (1989) correlation $c_u = f_1 N_{60}$ assuming an f_1 value of 5 from the CIRIA C143 guidance using SPT N_{60} values: c_u values using this methodology range from 60 kPa to 430 kPa (average 143 kPa; lower quartile 110 kPa).
- 13 no. CPTs: c_u values obtained ranged from 35 kPa to 350 kPa (absolute maximum 2223 kPa; average 149 kPa; lower quartile 99 kPa).
- The average c_u from UU triaxial test and SPT is 140 kPa with a lower quartile of 110kPa. All c_u values are plotted against the CPT derived c_u in Figure D.154.

Undrained shear strengths (c_u) for GTD for East Site – Ammonia Storage have been inferred from a combination of testing as follows:

- 9 no. UU triaxial tests: c_u values obtained from the UU triaxial tests range from 64 kPa to 160 kPa (average 115 kPa; lower quartile 100 kPa). Majority of the samples are described as “firm to very stiff”.
- 59 no. SPTs, using the Stroud (1989) correlation $c_u = f_1 N_{60}$ assuming an f_1 value of 5 from the CIRIA C143 guidance using SPT N_{60} values: c_u values using this methodology range between 42 kPa and 518 kPa (average 162 kPa; lower quartile 123 kPa)
- 8 no. CPTs: c_u values obtained ranged from 26 kPa to 300 kPa (absolute maximum: 1978 kPa; average 155 kPa; lower quartile 100 kPa).
- The average c_u from UU triaxial tests and SPT is 156 kPa with a lower quartile of 112 kPa. All c_u values are plotted against the CPT derived c_u in Figure D.155.

Undrained shear strengths (c_u) in GTD for the West Plot have been inferred from a combination of testing as follows:

- 22 no. UU triaxial tests: c_u values obtained from the UU triaxial tests range from 51 kPa to 430 kPa (average 131 kPa; lower quartile 80 kPa). Majority of the samples are described as “firm or stiff” with one sample described as “very stiff” (120kPa).
- 212 no. SPTs, using the Stroud (1989) correlation $c_u = f_1 N_{60}$ assuming an f_1 value of 5 from the CIRIA C143 guidance using SPT N_{60} values: c_u values using this methodology range from 36 kPa to 530 kPa (average 133 kPa; lower quartile 95 kPa).
- 36 no. CPTs: c_u values obtained ranged from 14 kPa to 450 kPa (absolute maximum: 1821 kPa; average 134 kPa; lower quartile 78 kPa).
- The average c_u from UU triaxial tests and SPT testing is 133 kPa with a lower quartile of 94 kPa. All c_u values are plotted against the CPT derived c_u in Figure D.156.

6.1.4.8 One-dimensional Consolidation Tests

One-dimensional consolidation testing has been undertaken on 12no. GTD samples from the East Site- Hydrogen Production, 13no. samples from the East Site – Ammonia Storage and 42no. samples from the West Site. The anticipated effective stress ranges are 285 to 493 kPa for the East Site – Hydrogen Production, 115 to 320 kPa for the East Site – Ammonia Storage and 199 to 398kPa for the West Site.

For the East Site – Hydrogen Production, the range of m_v values is found as 0.023 to 0.065 m^2/MN at 200-400kPa stress range, and 0.0068 to 0.036 m^2/MN for the 400-800kPa stress range. The range of value for c_v is 0.54 to 13 m^2/yr at the 200-400kPa stress range, and 2.4 to 11m^2/yr at the 400-800kPa stress range.

For the East Site – Ammonia Storage, the range ofm_v value is 0.074 to 0.52 m^2/MN at 100-200kPa stress range and 0.0058 to 0.11 m^2/MN at 200-400kPa stress range. The range of c_v value is 1.9 to 8.9 m^2/yr at 100-200kPa stress range and 1.6 to 9.3 m^2/yr at 200-400kPa stress range.

For the West Site, the range of of m_v value is 0.06 to 0.27 m^2/MN at 100-200kPa stress range and 0.032 to 0.16 m^2/MN at 200-400kPa stress range. The range of c_v value is 1 to 40 m^2/yr at 100-200kPa stress range and 0.98 to 31 m^2/yr at 200-400kPa stress range.

The compression index (C_c) ($\Delta e/\log(\Delta\sigma)$ at maximum pressure) has a range of 0.060 to 0.123 for the East Site – Hydrogen Production, 0.073 to 0.169 for the East Site – Ammonia Storage and 0.063 to 0.143 for the West Site. The swelling (C_s) indices were only calculated in the East Site – Hydrogen Production and the West Site, with a range of 0.016 to 0.03 and 0 to 0.033 respectively.

The coefficient of secondary consolidation (c_a) was recorded for 1no. sample in the West Site, providing a range of 0.0004 m^2/yr to 0.0018 m^2/yr.

6.1.4.9 Stiffness

Considering the empirical correlation with c_u applicable for strain levels associated with shallow foundations, using the method given by Jamiokowski et al. (1979) within Tomlinson’s Pile Design and Construction book, where

$$E_u = 400 c_u$$

the drained and undrained Young’s modulus for GTD was derived for each site.

A range of drained Young's modulus (E') for GGTD have been estimated following correlation in CIRIA C143 of Stroud (1989) where at a given average strain level beneath a foundation, the mean vertical effective stiffness (E') of a normally consolidated material could be correlated with the N_{60} value. Stroud recommended a value of 1 for ratio E' / N_{60} for normally consolidated soils for q_{net}/q_{ult} of 0.1. This has been adopted to derive the following range of E':

$$E' = 1.N_{60}$$

Table 6-4 below summarises the stiffness values calculated for each site.

Table 6-4 Summary of Stiffness for Glacial Till Deposits

Granular Till Deposits	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
E_u – Cohesive (GTD)	15.2 – 210.3 (M: 71.0) (LQ: 46.2)	16.8 – 207.2 (M: 62.3) (LQ: 44.6)	14.3 – 212.1 (M: 53.2) (LQ: 37.7)
E'– Granular (GGTD)	9.3 – 63.5 (M: 27.9) (LQ: 18.0)	6.3 – 48.8 (M: 24.3) (LQ: 13.7)	3.5 – 86.9 (M: 31.0) (LQ: 14.6)

Care should be taken in using the stiffness values given above, since they are linear properties derived from an assumed relationship, and as such they do not reflect the non-linear nature of soil stiffness. The actual stiffness values will be strain- and stress-dependent and as a result the design values should be selected as appropriate for the design application.

Apart from estimation using SPT N values, four pressuremeter tests were conducted approximately 2m into the stiff clay of GTD, as summarised in SEQ Table * ARABIC \s 1 . The tests were undertaken by In Situ Site Investigation Limited using the 95mm diameter High Pressure Dilatometer (HPD) specially designed for soft to weak rock.

Table 6-5 Summary of pressuremeter tests

BH ID	Ground Level (m OD)	Test Depth (m BGL)	Test Depth (m OD)	P_o[1] (KPa)	σ'_H / σ'_V[2] (KPa)	G_{hh}[3] MPa	E_s MPa
E-BH23	+3.96	19.00	-15.04	230	0.43	9.0	21.6
W-BH05	+1.45	11.20	-9.75	102	0.47	5.0	12.0
W-BH06	+1.76	15.00	-13.24	221	0.64	11.0	26.5
W-BH15	+1.64	19.60	-17.96	146	0.17	7.8	18.7

Notes:

[1] The cavity reference pressure, P_o, is also the best estimate of σ_{ho}, the total horizontal insitu stress

[2] σ'_H/σ'_V is the ratio of the effective horizontal insitu stress to effective vertical insitu stress

[3] The secant shear modulus parameter G_{hh} is reported for the average of all the loops at a shear strain of 10^{-3} (0.1%). The technical literature generally recommends these strain levels for purposes of shallow foundation and deep piled foundation analysis. Corresponding values for secant Young's modulus E_s, assuming linear elasticity formulae, are also reported.

The drained stiffness of the GTD has also been calculated by applying the assumed Poisson's Ratio of 0.2 to the m_v values obtained in the oedometer testing using the following correlations:

$$E_{oed} = 1/m_v$$

$$E' = \left[\frac{(1+v)(1-2v)}{1-v}\right] E_{oed}$$

A comparison of the drained stiffness values derived from the four pressuremeter tests and the corresponding stiffness values calculated from the oedometer testing on samples obtained in the same boreholes, at similar elevations, is outlined in Table 6-6. It should be noted that the stiffness from the pressuremeter testing has been derived from a shear strain of 10^{-2} which represents a more appropriate strain level for purposes of comparison with oedometer testing results.

Data shows that stiffness values obtained from oedometer testing are lower than those from pressuremeter testing in E-BH23 and W-BH06, but higher in W-BH05, W-BH15 and W-BH04. The reasoning for higher stiffness in pressuremeter tests is likely due to several factors:

- Pressuremeter tests analyse the horizontal stress/strain relationship, whereas the oedometer testing measures the vertical stress/strain relationship. As GTD are likely overconsolidated, then horizontal effective stresses are expected to be greater than the equivalent vertical effective stresses.
- Variations in stiffness can also be attributed to the presence of large fragments of granular material adjacent to the walls of the pressuremeter test.
- It is possible the samples used for the oedometer testing are slightly disturbed compared to the in-situ soil where the pressuremeter testing was undertaken, thus resulting in underestimating the stiffness value.
- The value of the drained Poisson's Ratio (v') may vary from the value of 0.2 used in the above calculation.
- In-situ test is undertaken quite fast thus potentially causing the results to represent undrained stiffness rather than drained stiffness calculated from oedometer testing.

Table 6-6 Comparison of the pressuremeter and oedometric stiffnesses

Pressuremeter Testing					Oedometer Testing				
BH ID	Ground Level (m OD)	Test Depth (m BGL)	Test Depth (m OD)	E_s [2] [3]	BH ID	Ground Level (m OD)	Test Depth (m BGL)	Test Depth (m OD)	E'
E-BH23	+3.96	19.00	-15.04	10.8	E-BH23	+3.96	20.00	-16.04	7.6
W-BH05	+1.45	11.20	-9.75	6.0	W-BH05	+1.45	9.00	-7.55	9.4
W-BH06	+1.76	15.00	-13.24	13.8	W-BH06	+1.76	11.2	-9.44	7.0
W-BH15	+1.64	19.60	-17.96	9.1	W-BH04[1]	+1.45	16.7	-15.25	28.6

Notes:

[1] No corresponding oedometer test was completed from a sample in W-BH15. Therefore, the oedometer test completed at W-BH04 is deemed as an appropriate comparison owing to the similarity in sample elevation.

[2] The secant shear modulus parameter G_{hh} is reported for the average of all the loops at a shear strain of 10^{-2}. Corresponding values for secant Young's modulus E_s, assuming linear elasticity formulae, are also reported.

[3] The E_s and E' values are both considered as the drained stiffness.

6.1.4.10 Carbonate Content

51no. Carbonate Content tests (as $\%CO_2$) were completed on GTD samples (11no. in cohesive GTD and 40no. in GGTD). The tests returned carbonate content values ranging from <0.1% to 32%.

6.1.4.11 Geotechnical Calculated Values

The calculated values for Glacial Till Deposits are summarised in Table .

Table 6-7 Calculated values for Glacial Till Deposits (GTD)

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
Uncorrected SPT N value	-	7 – 50 (M: 26.3) (LQ: 18)	8 – 48 (M: 28.8) (LQ: 23)	8 – 50 (M: 21) (LQ: 17)
SPT N_{60}	-	8 – 105 (M: 33.9) (LQ: 21.8)	8 – 104 (M: 32.4) (LQ: 24.7)	7 – 106 (M: 26.6) (LQ: 19)
Bulk density, ρ	Mg/m^3	2.10 – 2.30 (M: 2.20)	2.03 – 2.28 (M: 2.17)	2.04 – 2.24 (M: 2.17)
Dry density, ρ_d	Mg/m^3	1.73 – 1.97 (M: 1.9)	1.60 – 2.01 (M: 1.86)	1.64 – 1.97 (M: 1.86)

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
Water content	%	14 – 33 (M: 19)	12 – 25.9 (M: 17)	9 – 70 (M: 19)
Plastic Limit	%	13 – 20 (M: 15)	13 – 19 (M: 15)	12 – 28 (M: 16)
Liquid Limit	%	25 – 47 (M: 33)	20 – 41 (M: 30)	18 – 62 (M: 33)
Plasticity Index	%	12 – 27 (M: 17)	6 – 22 (M: 15)	4 – 35 (M: 17)
Uniformity coefficient, C_u	-	No value	No value	No value
Coefficient of curvature C_c	-	No value	No value	No value
c_u (UU triaxial tests)	kPa	47 – 140 (M: 97) (LQ: 82)	64 – 160 (M: 115) (LQ: 100)	51 – 430 (M: 131) (LQ: 80)
$c_u = f_1$ x SPT N 'f_1' = 4.5	kPa	60 – 430 (M: 143) (LQ: 110)	42 – 518 (M: 162) (LQ: 123)	36 – 530 (M: 133) (LQ: 95)
c_u (CPT)	kPa	1 – 350 (M: 149) (LQ: 99)	26 – 300 (M: 155) (LQ: 100)	14 – 450 (M: 134) (LQ: 78)
φ'_{cv} (derived from I_p)	Degrees	24 – 28.5 (M: 26.5) (LQ: 26)	25 – 32 (M: 27) (LQ: 26.5)	22.5 – 34.5 (M: 26.5) (LQ: 26)
Eu - Cohesive (derived from 400c_u)	MPa	15.2 – 210.3 (M: 71.0) (LQ: 46.2)	16.8 – 207.2 (M: 62.3) (LQ: 44.6)	14.3 – 212.1 (M: 53.2) (LQ: 37.7)
m_v [4]	m^2/MN	200-400kPa: 0.023-0.065 (M: 0.049) (UQ: 0.057) 400-800kPa: 0.0068-0.036 (M: 0.028) (UQ: 0.033)	100-200kPa: 0.074 – 0.519 (M: 0.13) (UQ: 0.16) 200-400kPa: 0.058 – 0.11 (M: 0.09) (UQ: 0.096)	100-200kPa: 0.06 – 0.27 (M: 0.12) (UQ: 0.15) 200-400kPa: 0.032-0.16 (M: 0.08) (UQ: 0.097)
c_v [4]	m^2/yr	200-400kPa: 0.54 – 13 (M: 4) (LQ: 2.55) 400-800kPa: 2.4 – 11 (M: 4.65) (LQ: 3.48)	100-200kPa: 1.9 – 8.9 (M: 5.08) (LQ: 3) 200-400kPa: 1.6 – 9.3 (M: 4.37) (LQ: 3)	100-200kPa: 1 – 40 (M: 6.6) (LQ: 2.9) 200-400kPa: 0.98 – 31 (M: 5.2) (LQ: 2.75)
c_a [4]	m^2/yr	-	-	0.0004 – 0.0018 (M: 0.000983) (UQ: 0.0015)
C_c	-	0.06 – 0.123 (M: 0.097) (UQ: 0.115)	0.073 – 0.169 (M: 0.103) (U UQ: 0.127)	0.063 – 0.143 (M: 0.102) (UQ: 0.118)
C_s	-	0.016 – 0.03 (M: 0.025)	-	0 – 0.033 (M: 0.017) (UQ: 0.030)
Carbonate Content Value	$\%CO_2$	<0.1 – 7.7 (M: 3.9)	<0.1 – 24 (M: 9.6)	<0.1 – 7 (M: 2.71)

(UQ: 5.8) (UQ: 14.3) (UQ: 3.1)

Notes
[1] Values reported as minimum, maximum (M: Mean) (LQ: Lower Quartile/ UQ: Upper Quartile – where appropriate).

Table 6-8 Calculated values for Granular Glacial Till Deposits (GGTD)

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
Uncorrected SPT N value	-	8 – 39 (M: 22.8) (LQ: 16)	6 – 45 (M: 22.6) (LQ: 12.8)	3 – 50 (M: 20.5) (LQ: 27.3)
SPT N_{60}	-	9 – 64 (M: 34.6) (LQ: 23.8)	6 – 49 (M: 24.3) (LQ: 13.7)	4 – 87 (M: 31.0) (LQ: 14.6)
SPT $(N1)_{60}$	-	4 – 35 (M: 17.1) (LQ: 9.1)	3 – 30 (M: 12.3) (LQ: 6.6)	2 – 55 (M: 19) (LQ: 9)
Relative Density, I_D[2]	-	Loose – medium	Loose – medium	Loose – medium
Bulk density, ρ[3]	Mg/m^3	1.85	1.85	1.85
Water content	%	9.8 – 18 (M: 14.4)	8.7	9 – 15 (M: 12)
Uniformity coefficient, C_u	-	2.9 – 90.9 (M: 34) (UQ: 45)	20 – 70 (M: 31.3) (UQ: 37.5)	20 – 70 (M: 27.2) (UQ: 30)
Coefficient of curvature C_c	-	0.5 – 2.6 (M: 1.18) (UQ: 1.79)	0.3 – 13.6 (M: 4.25) (UQ: 5.35)	0.4 – 7.4 (M: 2) (UQ: 3.11)
$φ'_{pk}$ (estimated from SPT $(N1)_{60}$ value)	degrees	28.5 – 38.5 (M: 31.5) (LQ: 29.5)	28.0 – 36.5 (M: 31.0) (LQ: 29.0)	27.5 – 45.5 (M: 33.0) (LQ: 30.0)
φ′ (estimated from CPT) – Robertson and Campanella (1983)	degrees	25.5 – 43.5 (M: 38.5) (LQ: 36)	30.5 – 42.5 (M: 38) (LQ: 35.5)	17 – 45 (M: 38) (LQ: 36.5)
φ'(estimated from CPT) – Kulhawy and Mayne (1990)	degrees	27.5 – 46 (M: 39) (LQ: 36.5)	32 – 44.5 (M: 39) (LQ: 36)	19.5 – 46 (M: 39) (LQ: 37)
E' (estimated from $1*N_{60}$)	MPa	9.3 – 63.5 (M: 27.9) (LQ: 18.0)	20.5 – 48.8 (M: 24.3) (LQ: 13.7)	3.5 – 86.3 (M: 31.0) (LQ: 14.6)
Carbonate Content Value	$\%CO_2$	<0.1 – 11 (M: 3.61) (UQ: 5.47)	<0.1 – 4.5 (M: 0.87) (UQ: 0.6)	<0.1 – 32 (M: 8.13) (UQ: 11.50)

Notes
[1] Values reported as minimum, maximum (M: Mean) (LQ: Lower Quartile / UQ: Upper Quartile – where appropriate).
[2] Value obtained from Table F.1 of BS EN 1997-2.
[3] Value obtained from Figure 1 of BS8004: 2015+A1:2020.

6.1.5 Flamborough Chalk Formation (FCF)

6.1.5.1 Standard Penetration Testing

71 no. SPTs (10no. in the East Site – Hydrogen Production, 6no. in the East Site – Ammonia Storage, 55no. in the West Site) have been completed within weathered Flamborough Chalk Formation (WFCF), whilst 61no. SPTs were carried out in the unweathered FCF (5no. in the East Site – Hydrogen Production, 12no. in the East Site – Ammonia Storage, 44no. in the West Site). The SPT plots are presented in figures D.190 to D.195 for the weathered rock, and figures D.201 to D.206 for the unweathered rock. For each location the set of plots presented include one plot

displaying the uncorrected and extrapolated SPT N values, and the second plot displaying SPT N_{60} values against elevation. The uncorrected SPT N values range from 9 to 163 for the weathered chalk, and 11 to 83 for the unweathered chalk. The corrected SPT N values range from 11 to 160 for the weathered chalk, and 12 to 3250 for the unweathered chalk.

6.1.5.2 Density

4no. rock density tests were completed on the unweathered FCF as part of the AECOM 2022/23 FEED GI, 2no. in the East Site – Hydrogen Production and 2no. in the East Site – Ammonia Storage. The bulk density recorded range from 2.08 and 2.09 Mg/m^3. No dry density was recorded. The results are presented in Figures D.208 and 210 respectively.

6.1.5.3 Atterberg Tests

One Atterberg Limit test was undertaken on WFCF in the West Site, logged as a gravelly silt. The test was completed on the sample recovered at exploratory hole W-BH28 at 20m bgl to 20.45m bgl (-18.3m OD to -18.75m OD). The data is plotted on a plasticity chart in Figure D.197 to D.200, indicating that the layer has a low plasticity.

6.1.5.4 Natural Moisture Content

2no. samples were tested for natural water content for the WFCF for the West Site and are plotted in Figures D.197. The moisture content ranges from 20 to 22%.

Rock moisture content tests were carried out for the unweathered FCF on 20no. samples recovered from the East Site – Hydrogen Production, 23no. of samples from the East Site – Ammonia Storage and 2no. from the West Site. The rock moiture content values are presented in Figures D.207 to D.212. The water content generally ranges from 14 to 24%.

6.1.5.5 Drained Stiffness

High Pressure Dilatometer (HPD) testing was undertaken at twelve borehole locations across the East and West Sites, as summarised in Table 6-9. The tests were undertaken by In Situ Site Investigation Limited using the 95mm diameter High Pressure Dilatometer specially designed for soft to weak rock. They were conducted at varying depths within the weathered and intact Flamborough Chalk Formation to obtain the stiffness of the ground by application of radial pressure and establishing a relationship between the applied pressure and resulting deformation. It should be noted that the recorded stiffness values are horizontal values and the FCF is likely to exhibit some form of anisotropy. The HPD results are presented in terms of Shear Modulus, G_{hh}, and Modulus of Elasticity, E_s, which was estimated based on the correlation in Equation 1.

Table 6-9 Summary of pressuremeter tests

BH ID	Ground Level (m OD)	CIRIA Grade	Test Depth (m BGL)	Test Depth (m OD)	P_o [1] (kPa)	σ'_H / σ'_v [2] (kPa)	G_{hh} [3] MPa	E_s MPa
E-BH23	+3.96	Dm	28.00	-24.04	612	1.44	87	208
		B4	31.00	-27.04	781	1.83	310	743
		B3	36.50	-32.54	1594	4.00	754	1809
W-BH05	+1.45	Weathered/Limited recovery	23.10	-21.65	334	0.58	70	168
		Weathered/Limited recovery	27.70	-26.25	706	1.89	187	448
		B3	32.50	-31.05	2001	6.21	542	1301
		B3	34.20	-32.75	3899	12.51	987	2368
W-BH06	+1.76	C4	27.10	-25.65	528	1.17	175	420
		B4	32.30	-30.85	2235	7.03	943	2263
W-BH15	+1.64	Probably weathered/No recovery	23.00	-21.55	483	1.38	89	213
		Structured/Limited recovery	26.40	-24.95	959	3.29	324	778
		B3	32.40	-30.95	2083	6.79	596	1430

Notes:

[1] The cavity reference pressure, P_o, is also the best estimate of σ_h, the total horizontal insitu stress

[2] σ'_H/σ'_V is the ratio of the effective horizontal insitu stress to effective vertical insitu stress

[3] The secant shear modulus parameter G_{hh} is reported for the average of all the loops at a shear strain of 10^{-3}. Corresponding values for secant Young's modulus E_s are also reported.

Drained stiffness has also been caclulated for WFCF and FCF by using the Stroud (1989) correlation as shown in CIRIA C143. Stroud recommended a value of 1 for the ratio E' / N_{60} for normally consolidated soils at q_{net}/q_{ult} of 0.1. This value has been adopted to derive the following range of E' for WFCF:

$$E' = 1.N_{60}$$

Stroud also has sugested that conservative predictions of the immediated settlement of foundations in structured chalk (FCF) can be made on the basis that:

$$E' = 5.N_{60}$$

Table 6-10 below shows the resulting stiffness moduli for each formation and each respective site from both SPT correlation and pressuremeter testing

Table 6-10 Stiffness moduli for WFCF and FCF

Parameter	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
E′ – WFCF (MPa) SPT Derived	12 - 160 (M: 45) (LQ: 16)	18 - 72 (M: 48) (LQ: 22)	11 - 163 (M: 44) (LQ: 25)
E′ – WFCF (MPa) Pressuremeter Testing	208 (Single test)	No Testing	168 – 448 (M: 276) (LQ: 191)
E′ – FCF (MPa) SPT Derived	95 - 2625 (M: 1050) (LQ: 375)	70 - 2320 (M: 870) (LQ: 330)	110 - 2625 (M: 680) (LQ: 270)
E′ – FCF (MPa) Pressuremeter Testing	743 – 1809 (M: 1276) (LQ: 1010)	No Testing	420 – 2368 (M: 1427) (LQ: 909)

6.1.5.6 Uniaxial Compressive Strength

Directly measured UCS values were taken from 10no. samples from the East Site – Hydrogen Production, 17no. samples from the East Site – Ammonia, and 32no. samples from the West Site. UCS values range from 1.4 MPa to 11.4 MPa across the sites. Point load tests were carried out on 44no. samples in the East Site – Hydrogen Production which are shown in Figure D.215, 78no. samples in the East Site – Ammonia Storage shown in Figure D.218 and 146no. samples in the West Site shown in Figure D.221, giving point load indices, I_{s50}, of up to 12.4. Based on Huggins and Hitch (2018) a K correlation factor of 18 was selected for chalk, to derive UCS values from the I_{s50} data, which reached up to 12.4 MPa. Both measured and correlated UCS values are shown on Figures D.214, D.217 and D.220 with the characteristic UCS value of 2.5MPa.

6.1.5.7 Geotechnical Calculated Values

The calculated values for weathered Flamborough Chalk Formation are summarised in Table 6-11 , whilst the values for the unweathered Flamborough Chalk Formation are summarised in Table 6-12.

Table 6-11 Calculated values for weathered Flamborough Chalk Formation

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
Uncorrected SPT N value	-	11-45 (M: 22) (LQ: 14.3)	17-50 (M: 36.8) (LQ: 33.8)	9-83 (M: 30.5) (LQ: 22)
SPT N_{60}	-	12-160 (M: 44.6) (LQ: 16.1)	18-72 (M: 48.3) (LQ: 21.5)	11-163 (M: 44.3) (LQ: 25.1)

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
SPT $(N_1)_{60}$	-	5 – 70 (M: 19.5) (LQ: 7)	20 – 34 (M: 23.8) (LQ: 21.5)	7-85 (M: 23.9) (LQ: 13.9)
E′ (derived from 1*N60)	MPa	12 - 160 (M: 45) (LQ: 16)	18 - 72 (M: 48) (LQ: 22)	11 - 163 (M: 44) (LQ: 25)
Natural Water Content	%	-	-	20.5 – 21.9 (M: 21.2)
Plastic Limit	%	-	-	18
Liquid Limit	%	-	-	25
Plasticity Index	%	-	-	7

Notes.
[1] Values reported as minimum, maximum (M: Mean) (LQ: Lower Quartile – where appropriate).

Table 6-12 Calculated values for unweathered Flamborough Chalk Formation

Parameter	Unit	East Site – Hydrogen Production	East Site – Ammonia Storage	West Site
Uncorrected SPT N value	-	19-42 (M: 31.6) (LQ: 27)	13-48 (M: 37.2) (LQ: 32.3)	21-82 (M: 39.7) (LQ: 30.8)
SPT N_{60} [2]	-	19-888 (M: 240.5) (LQ: 77.8)	14-3250 (M: 297.4) (LQ: 71.1)	22-840 (M: 151.6) (LQ: 54.4)
SPT $(N_1)_{60}$[2]	-	7 – 316 (M: 83) (LQ: 31.7)	6 – 1050 (M: 100.3) (LQ: 28.1)	11 – 282 (M: 61.3) (LQ: 27)
Rock Water Content	%	18.7 – 23.1 (M: 21.0)	14.3 – 22.1 (M: 19.4)	18.9 – 24.2 (M: 21.9)
Bulk density, ρ (derived from UCS test)	Mg/m^3	2.08 – 2.09	2.09	-
E′ (derived from 5*N60)	MPa	95 - 2625 (M: 1050) (LQ: 375)	70 - 2320 (M: 870) (LQ: 330)	110 - 2625 (M: 680) (LQ: 270)
UCS (measured)	MPa	1.8 – 4.8 (M: 3.47) (LQ: 2.84)	1.8 – 7.1 (M: 4.45) (LQ: 2.76)	1.4 – 11.4 (M: 4.92) (LQ: 3.05)
UCS (derived from PL I_{s50})	MPa	0.5 – 10.3 (M: 4.09) (LQ: 2.16)	0 – 12.4 (M: 4.35) (LQ: 2.52)	0 – 10.4 (M: 3.49) (LQ: 1.98)
$I_{s(50)}$	MPa	0.03 – 0.6 (M: 0.23) (LQ: 0.12)	0 – 0.7 (M: 0.24) (LQ: 0.14)	0 – 0.6 (M: 0.19) (LQ: 0.11)

Notes.
[1] Values reported as minimum, maximum (M: Mean) (LQ: Lower Quartile, UQ: Upper Quartile – where appropriate).
[2] SPT N_{60} and $(N_1)_{60}$ values are calculated with extrapolated N values.

6.1.6 Characteristic Values

The characteristic values for all strata for each site area, the East Site – Hydrogen Production, the East Site – Ammonia Storage and the West Site are presented in Table 6-13,

Table 6-14 and

Table 6-15 respectively. It should be noted that for the characteristic values of coefficient of volume compressibility (m_v) and root-time coefficient of consolidation (c_v) are provided for the anticipated range of in-situ pressures.

Table 6-13 Characteristic Preliminary Geotechnical Design Parameters for East Site - Hydrogen Production

Strata	Bulk Density, ρ (Mg/m^3)	Dry Density, ρ_d (Mg/m^3)	Plasticity Index (%)	Undrained Shear Strength, c_u (kN/m^2)	Peak Angle of Shearing Resistance, ϕ'_{pk} (°)	Constant Angle of Shearing Resistance, ϕ'_{cv} (°)	Undrained Stiffness, Eu (MPa)	Drained Stiffness, E′ (MPa)	Coefficient of volume compressibility m_v (m^2/MN)	Root-time coefficient of consolidation c_v (m^2/yr)	Coefficient of secondary consolidation c_a	Compression Index C_c	Swelling Index C_s
Made Ground	1.85	-	8 – 39 (M: 23)	1 – 143	27.5 – 36.5 (M: 31) (LQ: 29.5)	22 – 30.5 (M: 25) (LQ: 24)	-	1.9 - 24.6 (M: 10.8) (LQ: 6.8)	25-50kPa: 0.32-0.71 (M: 0.51) (UQ: 0.71) 50-100kPa: 0.28-0.53 (M: 0.41) (UQ: 0.53)	25-50kPa: 0.67-4 (M: 2.34) (LQ: 0.67) 50-100kPa: 0.55-1.2 (M: 0.88) (LQ: 0.55)	0.0012 – 0.0051 (M: 0.0032) (UQ: 0.0042)	0.269 – 0.319 (M: 0.293) (UQ: 0.297)	-
Firm Tidal Flat Deposits	1.72 – 1.89 (M: 1.84)	1.17 – 1.39 (M: 1.33)	27 – 32 (M: 29)	8 – 45 (M: 31) (LQ: 26)	-	23 – 24 (M: 23.5) (LQ: 23)	2.3 – 11.0 (M: 8.0) (LQ: 6.5)	-	25-50kPa: 0.3-0.91 (M: 0.46) (UQ: 0.48) 50-100kPa: 0.26-0.68 (M: 0.38) (UQ: 0.4)	25-50kPa: 1.4-8.7 (M: 3.55) (LQ: 1.63) 50-100kPa: 1.1-4.3 (M: 2.65) (LQ: 1.18)	0.001 – 0.0073 (M: 0.0035) (UQ: 0.0057)	0.236-0.409 (M: 0.307) (UQ: 0.382)	-
Tidal Flat Deposits	1.33 – 2.05 (M: 1.8)	0.63 – 1.69 (M: 1.2)	15 – 46 (M: 30)	4 – 103 (M: 26) (LQ: 9)	-	21 – 27 (M: 23.5) (LQ: 22.5)	1.2 – 31.0 (M: 6.7) (LQ: 2.5)	-	50-100kPa: 0.26-0.9 (M: 0.62) (UQ: 0.82) 100-200kPa: 0.085-1.1 (M: 0.47) (UQ: 0.55)	50-100kPa: 0.59-34 (M: 4.87) (LQ: 1.1) 100-200kPa: 0.29-35 (M: 5.36) (LQ: 0.89)	0.0004 – 0.016 (M: 0.0048) (UQ: 0.0082)	0.016 – 1.67 (M: 0.44) (UQ: 0.44)	-
Glacial Till Deposits	2.10 – 2.30 (M: 2.20)	1.73 – 1.97 (M: 1.9)	12 – 27 (M: 17)	47 – 430 (M: 140) (LQ: 110)	-	24 – 28.5 (M: 26.5) (LQ: 26)	15.2 – 210.3 (M: 71.0) (LQ: 46.2)	-	200-400kPa: 0.023-0.065 (M: 0.049) (UQ: 0.057) 400-800kPa: 0.0068-0.036 (M: 0.028) (UQ: 0.033)	200-400kPa: 0.54 – 13 (M: 4) (LQ: 2.55) 400-800kPa: 2.4 – 11 (M: 4.65) (LQ: 3.48)	-	0.06 – 0.123 (M: 0.097) (UQ: 0.115)	0.016 – 0.03 (M: 0.025)
Granular Glacial Till Deposits	1.85	-	-	-	28.5 – 38.5 (M: 31.5) (LQ: 29.5)	-	-	9.3 – 63.5 (M: 27.9) (LQ: 18.0)	-	-	-	-	-

Strata	Bulk Density, ρ (Mg/m^3)	Dry Density, ρ_d (Mg/m^3)	Plasticity Index (%)	Undrained Shear Strength, c_u (kN/m^2)	Peak Angle of Shearing Resistance, ϕ'_{pk} (°)	Constant Angle of Shearing Resistance, ϕ'_{cv} (°)	Undrained Stiffness, Eu (MPa)	Drained Stiffness, E′ (MPa)	Coefficient of volume compressibility m_v (m^2/MN)	Root-time coefficient of consolidation c_v (m^2/yr)	Coefficient of secondary consolidation c_a	Compression Index C_c	Swelling Index C_s
Flamborough Chalk Formation	2.08 – 2.09	-	-	-	-	-	-	WFCF: 12 - 160 (M: 45) (LQ: 16) FCF: 95 - 2625 (M: 1050) (LQ: 375)	-	-	-	-	-

Table 6-14 Characteristic Preliminary Geotechnical Design Parameters for East Site – Ammonia Storage

Strata	Bulk Density, ρ (Mg/m^3)	Dry Density, ρ_d (Mg/m^3)	Plasticity Index (%)	Undrained Shear Strength, c_u (kN/m^2)	Peak Angle of Shearing Resistance, ϕ'_{pk} (°)	Constant Angle of Shearing Resistance, ϕ'_{cv} (°)	Undrained Stiffness, Eu MPa	Drained Stiffness, E′ MPa	Coefficient of volume compressibility m_v (m^2/MN)	Root-time coefficient of consolidation c_v (m^2/yr)	Coefficient of secondary consolidation c_a	Compression Index C_c	Swelling Index C_s
Made Ground	-	-	22 – 40 (M: 30) (LQ: 33)	18-120	-	22.0 – 25.0 (M: 23.5) (LQ: 23.0)	-	-	12.5-25kPa: (M: 0.85) 25-50kPa: (M: 0.71)	12.5-25kPa: (M: 1.1) 25-50kPa: (M: 1.2)	-	0.326	-
Firm Tidal Flat Deposits	1.79 – 1.92 (M: 1.86)	1.23 – 1.44 (M: 1.35)	19 – 44 (M: 31)	5 – 135 (M: 62) (LQ: 50)	-	21.5 – 26.0 (M: 23.0) (LQ: 22.5)	1.2 – 11.1 (M: 4.9) (LQ: 1.2)	-	25-50kPa: 0.31-0.79 (M: 0.49) (UQ: 0.59) 50-100kPa: 0.31-0.61 (M: 0.42) (UQ: 0.48)	25-50kPa: 7.6-14 (M: 11.2) (LQ: 9.8) 50-100kPa: 3-27 (M: 12.4) (LQ: 5.15)	0.0002 – 0.004 (M: 0.00178) (LQ: 0.003)	0.22-0.33 (M: 0.265) (UQ: 0.324)	-
Tidal Flat Deposits	1.65 – 2.16 (M: 1.81)	1.01 – 1.82 (M: 1.28)	13 – 48 (M: 24) (UQ: 26)	3 – 160 (M: 30) (LQ: 10)	-	21.0 – 28.0 (M: 24.5) (LQ: 24.0)	0.9 – 48.0 (M: 6.3) (LQ: 1.4)	-	25-50kPa: 0.26-3.9 (M: 1.47) (UQ: 1.85) 50-100kPa: 0.25-1.4 (M: 0.76) (UQ: 0.92) 100-200kPa: 0.036-0.83 (M: 0.43) (UQ: 0.56)	25-50kPa: 0.37-22 (M: 3.3) (LQ: 0.95) 50-100kPa: 0.39-40 (M: 5.05) (LQ: 1.2) 100-200kPa: 0.31-51 (M: 5.30) (LQ: 1.33)	0.023 – 0.588 (M: 0.322) (LQ: 0.46)	0.02 – 0.59 (M: 0.32) (UQ: 0.41)	0.03 – 0.1 (M: 0.066) (UQ: 0.113)
Glacial Till Deposits	2.03 – 2.28 (M: 2.17)	1.6 – 2.01 (M: 1.86)	6 – 22 (M: 15) (UQ: 16)	64 – 518 (M: 156) (LQ:112)	-	25.0 – 32.0 (M: 27.0) (LQ: 26.5)	16.8 – 207.2 (M: 62.3) (LQ: 44.6)	-	100-200kPa: 0.074 – 0.519 (M: 0.13) (UQ: 0.16) 200-400kPa: 0.058 – 0.11 (M: 0.09) (UQ: 0.096)	100-200kPa: 1.9 – 8.9 (M: 5.08) (LQ: 3) 200-400kPa: 1.6 – 9.3 (M: 4.37) (LQ: 3)	-	0.073 – 0.169 (M: 0.103) (U UQ: 0.127)	-
Granular Glacial Till Deposits	1.85	-	-	-	28.0 – 36.5 (M: 31.0) (LQ: 29.0)	-	-	20.5 – 48.8 (M: 24.3) (LQ: 13.7)	-	-	-	-	-

Strata	Bulk Density, ρ (Mg/m^3)	Dry Density, ρ_d (Mg/m^3)	Plasticity Index (%)	Undrained Shear Strength, c_u (kN/m^2)	Peak Angle of Shearing Resistance, ϕ'_{pk} (°)	Constant Angle of Shearing Resistance, ϕ'_{cv} (°)	Undrained Stiffness, Eu MPa	Drained Stiffness, E′ MPa	Coefficient of volume compressibility m_v (m^2/MN)	Root-time coefficient of consolidation c_v (m^2/yr)	Coefficient of secondary consolidation c_a	Compression Index C_c	Swelling Index C_s
Flamborough Chalk Formation	2.09	-	-	-	-	-	-	WFCF:18 - 72 (M: 48) (LQ: 22) FCF:70 - 2320 (M: 870) (LQ: 330)	-	-	-	-	-

Table 6-15 Characteristic Preliminary Geotechnical Design Parameters for West Site

Strata	Bulk Density, ρ (Mg/m^3)	Dry Density, ρ_d (Mg/m^3)	Plasticity Index (%)	Undrained Shear Strength, c_u (kN/m^2)	Peak Angle of Shearing Resistance, ϕ'_{pk} (°)	Constant Angle of Shearing Resistance, ϕ'_{cv} (°)	Undrained Stiffness, Eu (MPa)	Drained Stiffness, E' (MPa)	Coefficient of volume compressibility m_v (m^2/MN)	Root-time coefficient of consolidation c_v (m^2/yr)	Coefficient of secondary consolidation c_a	Compression Index C_c	Swelling Index C_s
Made Ground	-	-	20 – 44 (M: 38)	26-130	-	21.5 – 25.5 (M: 22) (LQ: 21.5)		-	-	-	-	-	-
Firm Tidal Flat Deposits	1.6 – 1.93 (M: 1.77)	1.04 – 1.47 (M: 1.23)	24 – 46 (M: 35)	4 – 130 (M: 68) (LQ: 52)	-	21 – 24.5 (M: 22.5) (LQ: 20)	1.2 – 33.0 (M: 8.2) (Lower Quartile 4.6)	-	25-50kPa: 0.3-0.97 (M: 0.62) (UQ: 0.75) 50-100kPa: 0.32- 0.67 (M: 0.49) (UQ: 0.59)	25-50kPa: 0.56-28 (M: 7.55) (LQ: 2.05) 50-100kPa: 0.73-16 (M: 6.33) (LQ: 2.3)	0.0001 – 0.0053 (M: 0.00248) (UQ: 0.00398)	0.199-0.542 (M: 0.345) (UQ: 0.435)	-
Tidal Flat Deposits	1.25 – 2.02 (M: 1.71)	0.48 – 1.63 (M: 1.13)	15 – 49 (M: 29)	2 –110 (M: 31) (LQ: 12)	-	20.5 – 28 (M: 24) (LQ: 23)	0.6 – 39.9 (M: 6.2) (Lower Quartile 1.2)	-	50-100kPa: 0.047-1.9 (M: 0.82) (UQ: 1.1) 100-200kPa: 0.027- 1.5 (M: 0.56) (UQ: 0.63)	50-100kPa: 0.23-8 (M: 1.47) (LQ: 0.42) 100-200kPa: 0.2-6 (M: 1.32) (LQ: 0.38)	0.0001 - 71 (M: 0.780) (UQ: 7.975)	0.01 – 2.189 (M: 0.45) (UQ: 0.52)	0.066 – 0.166 (M: 0.116) (UQ: 0.186)
Glacial Till Deposits	2.04 – 2.24 (M: 2.17)	1.64 – 1.97 (M: 1.86)	4 – 35 (M: 17)	51 – 530 (M: 133) (LQ: 94)	-	22.5 – 34.5 (M: 26.5) (LQ: 26)	14.3 – 212.1 (M: 53.2) (LQ: 37.7)	-	100-200kPa: 0.06 – 0.27 (M: 0.12) (UQ: 0.15) 200-400kPa: 0.032- 0.16 (M: 0.08) (UQ: 0.097)	100-200kPa: 1 – 40 (M: 6.6) (LQ: 2.9) 200-400kPa: 0.98 – 31 (M: 5.2) (LQ: 2.75)	0.0004 – 0.0018 (M: 0.000983) (UQ: 0.0015)	0.063 – 0.143 (M: 0.102) (UQ: 0.118)	0 – 0.033 (M: 0.017) (UQ: 0.030)
Granular Glacial Till Deposits	1.85	-	-	-	27.5 – 45.5 (M: 33.0) (LQ: 30.0)	-	-	3.5 – 86.3 (M: 31.0) (LQ: 14.6)	-	-	-	-	-
Flamborough Chalk Formation	-	-	-	-	-	-		WFCF: 11 - 163 (M: 44) (LQ: 25) FCF: 110 - 2625 (M: 680) (LQ: 270)	-	-	-	-	-

6.2 Dynamic Soil Properties

Downhole seismic tests were carried out in 7no. boreholes to determine push wave velocity (V_p) and shear wave velocity (V_s) versus depth. The results were used to calculate the variation versus depth of the dynamic soil properties outlined in Table 6-16 and Table 6-17 for the East Site – Hydrogen production and the West Site respectively. The formulae used to calculate the dynamic soil properties using V_p and V_s are described below.

- Small strain shear modulus (MPa): $\mu = \rho V_s^2$
- Poisson's ratio:$\vartheta = \frac{V_P^2 - 2V_S^2}{2(V_P^2 - V_S^2)}$
- Small Strain Young's Modulus (MPa): $E = \frac{\rho V_S^2(3V_p^2 - 4V_s^2)}{V_P^2 - V_S^2}$
- Bulk Modulus (MPa):$K = \rho(V_p^2 - \frac{4}{3}V_s^2)$

It is recommended that future users of this data perform their own sensitivity analyses to appreciate the impact on the calculated results of different assumed bulk density (ρ) values. The bulk densities used for the calculations are based on the mean densities from lab testing carried out on samples retrieved from the ground investigation. For the East Site – Hydrogen Production, the bulk densities assumed were: MG 1.85 Mg/m^3, TFD2 1.76 Mg/m^3,TFD 1.77 Mg/m^3, GTD and GGTD 2.18 Mg/m^3, WFCF and FCF 2.08 Mg/m^3. For the West Site, the bulk densities assumed were: MG 1.85 Mg/m^3, TFD2 1.77 Mg/m^3,TFD 1.7 Mg/m^3, GTD and GGTD 2.16 Mg/m^3, WFCF and FCF 2.07 Mg/m^3.

Table 6-16 Variation of V_p and V_s versus depth of the dynamic soil properties – East Site- Hydrogen Production

	Derived Values						
Property	**MG**	**TFD**	**TFD2**	**GTD**	**GGTD**	**WFCF**	**FCF**
Vs (m/s)	87 – 111 (97)	85 – 139 (112)	95 – 98 (97)	143 – 640 (308)	207 – 348 (280)	595 – 789 (680)	737 – 1280 (896)
Vp (m/s)	1324 – 1442 (1384)	883 – 1379 (1210)	1356 – 1366 (1361)	1163 – 2314 (1653)	1413 – 1766 (1586)	1835 – 2062 (1966)	2049 – 2562 (2253)
Small Strain Shear Modulus (MPa)	14.0 – 22.8 (17.6)	12.8 – 34.2 (22.4)	15.9 – 16.9 (16.3)	44.6 – 893 (236)	93.4 – 264 (177)	736 – 1295 (968)	1130 – 3408 (1717)

	Derived Values						
Property	**MG**	**TFD**	**TFD2**	**GTD**	**GGTD**	**WFCF**	**FCF**
Poisson's ratio	0.50	0.49 – 0.50 (0.50)	0.50	0.45 – 0.49 (0.48)	0.48 – 0.49 (0.48)	0.41 – 0.44 (0.43)	0.22 – 0.44 (0.40)
Small strain Young's Modulus (MPa)	42.0 – 68.2 (52.6)	38.2 – 102.2 (66.9)	47.6 – 50.6 (49.1)	133 – 2598 (696)	279 – 781 (524)	2123 – 3656 (2770)	3221.5 – 8339 (4744)
Bulk Modulus (MPa)	3213 – 3828 (3525)	1363 – 3320 (2589)	3214 – 3262 (3238)	2838 – 10803 (5786)	4178 – 6447 (5284)	6022 – 7481 (6761)	5026 – 10642 (8319)

Table 6-17 Variation of V_p and V_s versus depth of the dynamic soil properties – West Site

Property	**TFD**	**GTD**	**GGTD**	**WFCF**	**FCF**
Vs (m/s)	78 – 151 (107)	162 – 536 (269)	134 – 473 (320)	409 – 1027 (711)	564 – 1151 (972)
Vp (m/s)	1324 – 1821 (1608)	1562 – 2273 (1877)	1539 – 1855 (1721)	1668 – 2041 (1911)	1794 – 2659 (2152)
Small strain shear modulus (MPa)	10 – 39 (20.1)	57– 620 (168)	39– 483 (236)	346 – 2183 (1123)	658 – 2742 (1844)
Poisson's ratio	0.50	0.45 – 0.50 (0.49)	0.46 – 0.50 (0.48)	0.33 – 0.47 (0.41)	0.34 – 0.45 (0.38)
Small strain Young's Modulus (MPa)	31 – 116 (60.2)	170 – 1803 (498)	116 – 1414 (698)	1017 – 5810 (3120)	1903 – 7595 (5069)
Bulk Modulus (MPa)	2966 – 5586 (4402)	5192 – 10967 (7485)	5064 – 7177 (6096)	5003 – 7280 (6092)	5784 – 10979 (7223)

Note:

1. Values reported as minimum, maximum (mean). These relate to the minimum, maximum and mean of the ‘average values’ obtained from each borehole.
2. Values of bulk density are representative of the in-situ conditions as determined by the GI and displayed in section 6.1.

6.3 Dynamic Cone Penetrometer Testing – TRL DCP

Twenty-four Transport Research Laboratory – Dynamic Cone Penetrometer (TRL – DCP) tests were undertaken in 24 no. holes across the site at depths up to 1.57m bgl within the MG and TFD, to determine the California Bearing Ratio (CBR) values. 412 no. recordings were taken with CBR values ranging from 2% to 88%. The CBR values were calculated using Equation 6.39.3 in CD 225: Design for new pavement foundations, 2009 as shown below:

$$CBR = 10^{(2.48-1.057\ x\ \log_{10} P)}$$

Where P is the penetration rate in mm per blow.

CBR obtained can be used to determine the subgrade surface modulus (CD 225: Design for new pavement foundations, 2009) using the subgrade surface modulus conversion formula as shown below:

$$E = 17.6CBR^{0.64}$$

Table 6-18 and Table 6-19 below show the results of the TRL – DCP tests carried out for the East Site – Ammonia Storage area and the West Site respectively where the proposed plant roads and paved areas are going to be located. Figures D.222 to D.225 show the cumulative blows plotted against penetration and CBR against penetration for both sites.

Table 6-18 TRL-DCP results – East Site – Ammonia Storage

Location ID	Geology	CBR Range [%]	Average CBR [%]	Lower quartile CBR [%]	E Range [MPa]	Average E [MPa]	Lower quartile E [MPa]
E-TP02 DCP	MG/TFD2	2 – 9	5	4	29 – 50	46	40
E-TP04 DCP	MG/TFD2	2 – 8	4	3	30 – 65	44	37

Table 6-19 TRL-DCP results – West Site

Location ID	Geology	CBR Range [%]	Average CBR [%]	Lower quartile CBR [%]	E Range [MPa]	Average E [MPa]	Lower quartile E [MPa]
W-TP01 DCP	MG/TFD2	3 – 35	14	5	33 – 86	72	52
W-TP03 DCP	MG/TFD2	1 – 55	24	12	21 – 86	86	86
W-TP04 DCP	MG/TFD2	2 – 8	4	4	30 – 67	45	40
W-TP05 DCP	MG/TFD2	2 – 39	15	9	26 – 86	77	84
W-TP06 DCP	MG	3 – 30	15	6	36 – 86	84	86
W-TP07 DCP	MG/TFD2	2 – 4	3	3	28 – 42	57	35
W-TP08 DCP	MG/TFD2	3 – 11	6	4	34 – 82	55	43
W-TP09 DCP	MG	2 – 11	5	4	25 – 79	49	44
W-TP10 DCP	MG/TFD2	2 – 6	4	4	25 – 53	43	40
W-TP12 DCP	MG/TFD2	2 – 6	4	3	30 – 55	42	39
W-TP13 DCP	MG/TFD2	2 – 15	6	3	30 – 86	53	39

Location ID	Geology	CBR Range [%]	Average CBR [%]	Lower quartile CBR [%]	E Range [MPa]	Average E [MPa]	Lower quartile E [MPa]
W-TP14 DCP	MG	3 – 5	4	3	33 – 50	45	37
W-TP16 DCP	MG/TFD2	3 – 17	6	4	35 – 86	54	44
W-TP17 DCP	MG/TFD2	2 – 6	4	4	31 – 58	45	41
W-TP18 DCP	MG/TFD2	3 – 14	6	3	32 – 86	54	38
W-TP23 DCP	MG/TFD2	2 – 5	4	3	30 – 50	47	37
W-TP24 DCP	MG/TFD2	2 – 6	4	3	27 – 56	39	35
W-TP26 DCP	MG/TFD2	2 – 10	5	3	24 – 77	45	35
W-TP27 DCP	MG	2 – 6	4	2	26 – 54	48	32
W-TP28 DCP	MG/TFD	2 – 5	3	3	28 – 47	36	31
W-TP29 DCP	MG/TFD2	2 – 6	3	3	28 – 56	36	31
W-TP30 DCP	MG/TFD	2 – 10	5	3	30 – 75	51	40

The subgrade surface modulus conversion is only valid for CBR values in the range of 2% to 12%. Therefore, CBR derived stiffness moduli are capped to 86MPa. A conservative CBR of 3% may be adopted for the pavement design with a corresponding subgrade surface modulus of 36MPa for both the West Site and East Site- Hydrogen Storage. The full data set of all TRL- DCP tests can be found in the Factual report in Appendix A.

The subgrade stiffness modulus and CBR values are expected to be higher in the Tidal Flat Deposits underlying the Made Ground, where the Made Ground thickness might be less than the excavation needed for pavement construction.

6.4 Electrical Resistivity

Vertical electrical profiling using the Wenner resistivity sounding method was carried out at 10no. locations to a depth of approximately 15 m bgl. The results, including plots of ‘Apparent Resistivity (Ohm-m)’ versus ‘A-spacing’ at each location, are presented in Appendix F of the Factual Report.

6.5 Chemical Properties

One hundred and sixty-five, BRE Special Digest 1 Full Suite tests were carried out on geotechnical samples in accordance with BS 1377: 1990 Part 3: 5 tested to determine the Design Sulphate (DS) and Aggressive Chemical Environment for Concrete (ACEC) classifications following BRE Special Digest 1.

Table 6-20, Table 6-21 and Table 6-22 show the results for each formation for the East Site - Hydrogen Production, West Side and East Site – Ammonia Storage respectively. For each parameter, the range of results is shown with the characteristic value in brackets. The characteristic values are calculated from the mean of the upper 20th percentile of all the values as per Section C5 of BRE SD1. The characteristic value has been tested against Table C2 of BRE SD1: 2005 for brownfield sites to determine the DS and ACEC Class for each formation of each location. Although the West Site is predominantly greenfield, some Made Ground was observed in a number of locations, therefore brownfield conditions were assumed. All three sites have at least a stratum, typically MG, TFD and GGTD, with Design Class DS – 4, AC – 4 . This implies that both deep and shallow foundations in all three Sites will be exposed to ground with high potential for sulphates, therefore it is recommended that a DS – 4 Design Sulphate Class, AC – 4 Aggressive Chemical Environment for Concrete Class is adopted for all three sites. It must be noted that the design sulphate class in many icases was calculated at DS-5 as a result of a characteristic total potential sulphate higher than 2.4%. However, because water soil extract sulphate class was in DS-3 or lower it is advised by BRE Special Digest 1 that the overall design class is lowered to DS-4 as only part of the total potential sulphate is likely to be oxidised.

Table 6-20 Chemical properties East Site – Hydrogen Production

Formation	No of Samples	Groundwater	Water soluble sulphate (mg/l)	Water/soil extract Magnesium mg/l)	Acidity/alkalinity in Soil (pH)	Total potential sulphate (as % SO4)	DS Class	ACEC Class
Made Ground	11	Mobile	30 – 2000 (1850)	30 – 47 (47)	7.1 – 9.5 (7.5)	0.3 – 11.1 (6.8)	DS – 4	AC – 4
TFD	7	Static	30 – 600 (530)	70	7.5 – 8.7 (7.5)	0.18 – 7.80 (4.58)	DS – 4	AC – 3s
GTD	5	Static	50 – 310 (185)	30	7.7 – 8.6 (7.7)	0.42 – 1.29 (1.11)	DS – 3	AC – 2s
GGTD	2	Mobile	10 – 790 (400)	10	8.7 – 9.1 (8.7)	0.18 – 0.51 (0.51)	DS – 2	AC – 2
FCF	1	Mobile	0	-	8.5	0.09	DS – 1	AC – 1

Table 6-21 Chemical Properties East Site – Ammonia Storage

Formation	No of Samples	Groundwater	Water soluble sulphate (mg/l)	Water/soil extract Magnesium mg/l)	Acidity/alkalinity in Soil (pH)	Total potential sulphate (as % SO4)	DS Class	ACEC Class
MG	10	Mobile	20 – 650 (500)	n/a	8.0 – 9.8 (8)	0.06 – 2.52 (1.64)	DS – 4	AC – 4
TFD	14	Static	10 – 850 (715)	30 – 70 (70)	7.8 – 8.8 (8.0)	0.06 – 5.10 (3.51)	DS – 4	AC – 3s
GTD	8	Static	40 – 120 (110)	-	8.2 – 8.8 (8.2)	0.244 – 1.56 (1.47)	DS – 4	AC – 3s
GGTD	3	Mobile	40	-	8.5 – 9.2 (8.5)	0.15	DS – 1	AC – 1
FCF	5	Mobile	-	-	8.5 – 8.9 (8.5)	0.03 – 0.15 (0.15)	DS – 1	AC – 1

Table 6-22 Chemical Properties West Site

Formation	No of Samples	Groundwater	Water soluble sulphate (mg/l)	Water/soil extract Magnesium mg/l)	Acidity/alkalinity in Soil (pH)	Total potential sulphate (as % SO4)	DS Class	ACEC Class
Made Ground	16	Mobile	10 – 1000 (670)	10 – 20 (20)	7.6 – 8.7 (7.7)	0.09 – 1.86 (1.32)	DS – 4	AC – 4
TFD	40	Static	10 – 1500 (1121)	10 – 90 (90)	5.9 – 8.6 (7.5)	0.03 – 6.9 (4.14)	DS – 4	AC – 3s
GTD	12	Static	20 – 160 (160)	10 – 20 (20)	8.0 – 8.8 (8.1)	0.12 – 1.86 (1.54)	DS – 4	AC – 3s
GGTD	12	Mobile	20 – 620 (570)	30 – 40 (40)	7.9 – 9.1 (8.2)	0.3 – 3.6 (3.3)	DS – 4	AC – 4
FCF	19	Mobile	-	-	8.5 – 9.2 (8.6)	0.03 – 1.11 (0.6)	DS – 2	AC – 2

7 Soil and Groundwater Chemistry

7.1 AECOM 2022 ground investigation contaminant distribution

7.1.1 General

Based on the samples obtained from the GI, an assessment of the soils and groundwater beneath the site has been undertaken and is presented in Appendix F and G. This includes human health and controlled waters generic quantitative risk assessments (GQRA). The key findings of these GQRA are summarised below, highlighting the key contaminants requiring consideration. Full details of all the contaminants identified at the site and assessment thereof, are provided within Appendices F, G, H and I. An updated Conceptual Site Model and environmental risk assessment are provided in Appendix E. The soil data were screened against Generic Assessment Criteria (GAC) for a commercial / industrial end use using a 0.58-1.45% TOC. No exceedances of the GAC protective of human health were identified within soils. The only contaminant identified at concentrations indicating significant human health risk in soils comprised asbestos. Therefore, the following discussion is focused on the presence of asbestos and contaminants within soil leachate and groundwater.

7.1.2 Asbestos

The asbestos distribution within the soils is presented in Figure 9-3 and Figure 9-4 in Appendix F.

Asbestos was detected in two soil samples of Made Ground in E-BH10 and E-BH25 as part of the 2023 GI. Overall, thirty samples were scheduled for asbestos analysis of which eight were scheduled for quantification analysis. Chrysotile was identified in both samples where asbestos was detected. The sample from E-BH10 recorded a <0.001 mass %. Therefore, this is lower than the hazardous material threshold of 0.1 mass %.

The results of the 2023 GI were assessed in context with the previous investigations undertaken at the site. Figure in F presents the historical data in terms of asbestos detections. An investigation undertaken by RSK in 2020 recorded two positive identifications of asbestos in the form of chrysotile (<0.001 mass %) within Made Ground at 0.3m bgl and 0.5m bgl encroaching on the area of the pipeline corridor. It should be noted that no investigation was undertaken as part of the AECOM 2023 GI within the area of the pipeline corridors.

The risk to ground workers from inhalation of asbestos fibres during ground disturbance has been assessed to be Low. Of the thirty samples scheduled for analysis, twenty-six were analysed within Made Ground samples, and four were scheduled within clays of the Tidal Flat Deposits . A survey by a specialist in asbestos identification in soils is advised to ensure appropriate samples are taken for testing as part of the remedial works. Asbestos control measures will be required during development/construction works. Mitigation and monitoring will be required to eliminate, reduce, control or manage the risk, or in the last resort provide suitable personal protective equipment (PPE)/respiratory protective equipment (RPE) for ground workers. Mitigation will also be required to minimise the risk of off-site migration.

A Low risk from exposure by inhalation of asbestos fibres has been assessed for future site users of the Site assuming Made Ground is exposed within landscaped areas. This risk could be mitigated by evaluation of “releasability” of fibres during soil disturbance (activity-based testing). However, in practice it is expected that most of the development will comprise hardstanding and therefore provision of a designed cover layer, marker layer/anti dig layer is advised in areas of soft landscaping.

It should be noted that asbestos would pose a negligible risk to human health where it is located below hardstanding as there would be no exposure via inhalation of fibres; therefore, the principal risks occur for exposure during construction and to future site users from asbestos in landscaped areas, and the risk for maintenance workers coming in contact with contaminated soils within service corridors. However, such risks to future site users could be mitigated by placing up to 600mm of asbestos free soil above those containing asbestos, and by placing services in “clean corridors”.

7.1.3 pH

pH levels within the Made Ground soils have been identified at levels above pH 11.5 which are considered to be corrosive and thus may risks to human health. Two samples of Made Ground identified a pH of 11.9 (E-BH04) and 11.7 (E-CPT06). The distribution of pH levels within the soils is presented in Figure 9-1 and Figure 9-2 in Appendix F. High pH in dust in soil is a potential hazard for construction workers therefore control of dust will be particularly

important during groundworks. It should also be noted that a high pH in groundwater from made ground in E-BH15 was recorded at 10.5. The remainder locations all recorded normal pH levels.. Control measures during ground works should be considered such as minimisation of simultaneously open cut areas, damping down and water spraying as part of a managed system of dust control.

7.1.4 Chlorinated Hydrocarbons

Three exceedances of chloroform were recorded in groundwater within Glacial Till Deposits and the Flamborough Chalk Formation at concentrations between 22.5µg/l and 33.8µg/l which is one order of magnitude above the EQS Coastal criteria (2.5µg/l). Two exceedances were located in boreholes within the East Site-Ammonia Storage site (E-BH02 and E-BH07) and one exceedance was recorded within the East Site-Hydrogen Production (E-BH25).

7.1.5 PAHs

EQS exceedances of PAHs in groundwater were only recorded within Made Ground in E-BH15 (East Site-Hydrogen Production). Naphthalene was recorded at 7.5µg/l and anthracene was recorded at 0.13µg/l in E-BH15. These exceedances are the same order of magnitude as the EQS criteria (2µg/l for naphthalene and 0.1µg/l for anthracene) and are therefore considered to be marginal. No exceedances of the EQS or DWS criteria were recorded within soil leachate samples from Made Ground, Tidal Flat Deposits, Glacial Till Deposits and the Flambourogh Chalk Formation. . PAH EQS exceedances were recorded for fluoranthene, benzo(a)pyrene, benzo(g,h,i)perylene and benzo(b)fluoranthene in surface water samples during both monitoring rounds. The exceedances of benzo(b)fluoranthene (0.014µg/l) and fluoranthene (0.0244µg/l) from the first monitoring round are marginal as they are within the same order of magnitude as the EQS criteria. The maximum concentration of benzo(a)pyrene (0.0212µg/l) and benzo(g,h,i)perylene (0.014µg/l) from the first monitoring round are two orders of magnitude above the EQS of 0.00017µg/l and 0.00082µg/l respectively. Exceedances of fluoranthene, benzo(a)pyrene, benzo(g,h,i)perylene and benzo(b)fluoranthene were recorded in surface water samples from the second surface water monitoring round. The maximum concentration of fluoranthene was recorded at 0.0263µg/l at SW2, with exceedances of 0.0124 and 0.202µg/l at SW1 and SW3 respectively. Exceedances of benzo(a)pyrene (0.0197µg/l) and benzo(g,h,i)perylene (0.0084µg/l) were recorded at SW2 only. Two exceedances of benzo(b)fluoranthene were recorded at SW2 (0.0239µg/l) and SW3 (0.0194µg/l). Compared to the first monitoring round, the maximum recorded concentrations of PAHs were lower during the second monitoring round. No exceedances of benzo(a)pyrene or benzo(g,h,i)perylene were recorded within soil samples, soil leachate or groundwater. Therefore, there may be a potential off-site source(s) of PAHs upstream of Habrough Marsh Drain and the North Beck Drain.

As no DWS exceedances were recorded in groundwater, there is not considered to be a risk to groundwater associated with PAHs.

7.1.6 TPH

An isolated DWS exceedance of C12-C16 aromatics was recorded within Tidal Flat Deposits at 100µg/l within E-BH14A (East Site-Hydrogen Production). This is considered a marginal exceedance of the DWS (90µg/l). No further hydrocarbon exceedances were recorded in soil leachate and groundwater or surface water samples. As the Tidal Flat Deposits are designated as an Unproductive Aquifer, there is not considered to be a risk to groundwater. No exceedances of the EQS Coastal criteria were recorded for hydrocarbons, therefore, there is not considered to be a risk to surface water.

7.1.7 Metals

Multiple exceedances of metals were recorded across soil leachate, groundwater and surface water samples.

7.1.7.1 Arsenic

Two DWS exceedances of arsenic were recorded in groundwater within Made Ground in the East Site-Hydrogen Production at E-BH14A and E-BH20. The highest concentration was recorded in E-BH15 within Made Ground (21.8µg/l). As the exceedances are within the same order of magnitude as the DWS, they are considered marginal. No exceedances were recorded in soil leachate and surface water samples.

7.1.7.2 Boron

Two DWS exceedances of boron were recorded in groundwater within Made Ground / Tidal Flat Deposits and Chalk in the East Site-Ammonia Storage and East Site-Hydrogen Production at E-BH04 and E-BH22. The highest concentration was recorded in E-BH22 within Made Ground / Tidal Flat Deposits (3,800µg/l). As the exceedances

are within the same order of magnitude as the DWS, they are considered marginal. No exceedances were recorded in soil leachate and surface water samples.

7.1.7.3 Cadmium

An isolated marginal exceedance of cadmium was recorded at SW2 (0.272µg/l) within the same order of magnitude as the EQS (0.2µg/l) during the second monitoring round. As the exceedance is within the same order of magnitude as the EQS, it is considered marginal. No exceedances of cadmium were recorded in groundwater, soil leachate and soil samples on site. Therefore, given the lack of exceedances on site and the industrial nature of the surrounding area to SW2, it is likely associated with an off-site source or indicative of the general background concentration.

7.1.7.4 Copper

Four EQS exceedances of copper were recorded in the East Site for groundwater within Made Ground, Tidal Flat Deposits and Glacial Till Deposits, with the highest concentration recorded in Made Ground at E-BH15 (17µg/l). The EQS exceedances of copper are fairly widespread across the East and West Site, with eighteen out of twenty samples recording an exceedance above the EQS of 3.76µg/l with a maximum concentration of 32µg/l in E-BH25. Surface water sample SW2 recorded an exceedance of copper at 3.97µg/l during the first monitoring round and 5.62µg/l during the second monitoring round. As the exceedances are within the same order of magnitude or one order of magnitude above the EQS criteria, the risk to surface waters is considered marginal.

7.1.7.5 Iron

An isolated exceedance of iron was recorded at SW2 (1920µg/l) within the same order of magnitude as the EQS (1000µg/l). No exceedances of iron were recorded in groundwater, soil leachate and soil samples from the wider site. As a result of the lack of iron exceedances on site and the industrial nature of the surrounding area, this is likely associated with an off-site source., or may be indicative of natural background conditions

7.1.7.6 Nickel

Eight EQS exceedances of nickel were recorded across groundwater within all strata between 9.4µg/l and 38µg/l, with the highest concentration recorded in Tidal Flat Deposits at E-BH14A(38µg/l). Three DWS exceedances of nickel were recorded for the East Site-Hydrogen Production Area in groundwater within Made Ground, Tidal Flat Deposits and the Flamborough Chalk Formation. Most exceedances were recorded within the East Site (Ammonia Storage and Hydrogen Production Areas), although one exceedance was recorded in the West Site for W-BH26 (19µg/l). No exceedances of nickel were recorded within soil leachate samples or surface water samples. As the nickel exceedances are within the same order of magnitude as the DWS (20µg/l) and one order of magnitude above the EQS (8.6µg/l), this is considered marginal and therefore does not pose a significant risk to controlled waters.

7.1.7.7 Lead

Four marginal exceedances of lead were recorded in soil leachate samples, with the maximum recorded concentration (5.8µg/l) recorded within the same order of magnitude as the EQS (1.3µg/l). Marginal exceedances of lead were recorded in surface water samples from both monitoring rounds at SW2 (Habrough Marsh Drain) and SW3 (North Beck Drain). However, the exceedances of lead (1.61µg/l to 3.15µg/l) were recorded within the same order of magnitude as the EQS Coastal criteria (1.3µg/l). Surface water samples SW2 and SW3 recorded a marginal exceedance of lead (1.61µg/l and 1.63µg/l) within the same order of magnitude as the EQS Coastal criteria (1.3µg/l) during the first surface water monitoring round.

Phosphorus

Marginal exceedances of phosphorus were recorded in surface water samples from (SW3) the North Beck Drain during both monitoring rounds and from the Habrough Marsh Drain (SW2) during the second monitpring round. Due to the industrial nature of the surrounding area, this is considered to be related to an off-site source. However, it should be noted that the metal suite for leachate and groundwater did not include phosphorus.

7.1.7.8 Selenium

An isolated DWS exceedance of selenium in groundwater was recorded at E-BH15 (East Site-Hydrogen Production Area) within Made Ground (52µg/l). However, this is considered a marginal exceedance as it is the same order of magnitude as the DWS (10µg/l). Exploratory hole E-BH06B was the only location to record a DWS exceedance for soil leachate at 14µg/l. No exceedances of selenium were recorded in surface water samples.

7.1.7.9 Zinc

Nine EQS exceedances were recorded for zinc, in groundwater mostly within the East Site (Ammonia Storage and Hydrogen Production Areas) although two exceedances were recorded in the West Site. The exceedances were

recorded at concentrations of between 7.6µg/l and 41µg/l in groundwater. Exceedances were also recorded in groundwater within Tidal Flat Deposits, Glacial Till Deposits and the Flamborough Chalk Formation. The highest concentration was recorded in E-BH14A at 41µg/l within the Tidal Flat Deposits. Three soil leachate samples also recorded exceedances of zinc between 8.9µg/l and 24µg/l within the East Site (Ammonia Storage and Hydrogen Production Areas) and West Site. Both surface water monitoring locations recorded an exceedance of zinc. The EQS exceedances of zinc are within the same order of magnitude, or one order of magnitude above the EQS criteria (6.8µg/l).

During the second surface water monitoring round, exceedances of zinc were recorded at SW1 (8.05µg/l), SW2 (22.3µg/l) and SW3 (33.3µg/l) up to one order of magnitude above the EQS (6.8µg/l). Two exceedances were also recorded for zinc (filtered) at SW2 and SW3 (16.7µg/l and 10.7µg/l respectively) at one order of magnitude above the EQS (6.8µg/l) during the second surface water monitoring round.

7.1.8 Inorganics

7.1.8.1 Ammonium

Thirteen EQS exceedances of ammonium were recorded in groundwater across all strata within the East Site (Ammonia Storage and Hydrogen Production Areas) and the West Site. Sixteen groundwater samples were tested for ammonium. Overall, 81.3% of the detects were recorded above the EQS criteria. The highest concentration was recorded within Made Ground in E-BH15 (1,100mg/l) at five orders of magnitude above the EQS criteria (0.021mg/l). This may represent a localised source of ammonia within Made Ground. The concentration of ammonium within E-BH14A in Tidal Flat Deposits was recorded at 12mg/l. Locations E-BH15 and E-BH14A are located adjacent to each other and also recorded an ammonia odour within Made Ground during the investigation. Therefore, there is likely a localised source of ammonia within Made Ground in the East Site-Hydrogen Production. The elevated concentrations at other exploratory holes ranged between 0.025mg/l and 2.8mg/l. Therefore, most exceedances are between the same order of magnitude and two orders of magnitude above the EQS criteria (0.021mg/l).

It is noted that the EQS is for unionised ammonia and hence a direct comparison of this criteria to the reported ammonia concentrations is inherently conservative as only a proportion of the ammonia will be in the unionised form. However, increasing alkalinity favours the unionised form and hence, at the elevated pH detected in groundwater at a number of locations, the unionised form may comprise a significant proportion of the total ammonia concentration.

Five DWS exceedances of ammonium were recorded in groundwater within Made Ground, Tidal Flat Deposits and the Flamborough Chalk Formation within the East Site-Ammonia Storage East Site-Hydrogen Production. The highest concentration was recorded within Made Ground in E-BH15 (1,100mg/l) at four orders of magnitude above the DWS criteria (0.5mg/l). E-BH14A also recorded a concentration of 12mg/l. The elevated concentrations at the other exploratory hole locations ranged between 1mg/l and 2.8mg/l. Therefore, most exceedances are between one and two orders of magnitude above the DWS criteria.

No exceedances were recorded within soil leachate and surface water samples.

7.1.8.2 Ammoniacal Nitrogen

Nineteen EQS exceedances of ammoniacal nitrogen were recorded in twenty-three samples of groundwater across all strata within the East Site-Ammonia Storage , East Site-Hydrogen Production and the West Site. Overall, 82.6% of the detects were recorded above the EQS criteria. The highest concentration was recorded within Made Ground in E-BH15 at 870mg/l at four orders of magnitude above the EQS criteria (0.021mg/l). The second highest concentration was recorded in E-BH14A, adjacent to E-BH15, within Tidal Flat Deposits at 9.4mg/l. The elevated concentrations within other exploratory holes ranged between 0.028mg/l and 2.2mg/l. Therefore, most exceedances are between the same order of magnitude and two orders of magnitude above the EQS criteria. It is also noted that the maximum concentration decreased with depth across the strata. Therefore, there could be a localised source of ammoniacal nitrogen within Made Ground in the East Site-Hydrogen Production.

Exceedances of ammoniacal nitrogen were recorded at all three surface water sampling locations during the second round of monitoring. The highest concentration was recorded at SW2 (1.3mg/l) at two orders of magnitude above the EQS (0.021mg/l). The concentration at SW1 and SW3 were recorded as 0.314mg/l and 0.202mg/l respectively. Ammoniacal nitrogen exceedances were not identified in surface water samples from the first monitoring round.

It is noted that the EQS is for unionised ammonia and hence a direct comparison of this criteria to the reported ammonia concentrations is inherently conservative as only a proportion of the ammonia will be in the unionised

form. However, increasing alkalinity favours the unionised form and hence, at the elevated pH detected in groundwater at a number of locations, the unionised form may comprise a significant proportion of the total ammonia concentration.

No exceedances were recorded within soil leachate and surface water samples.

7.1.8.3 Inorganic nitrogen

Surface water samples from SW2 and SW3 recorded exceedances of inorganic nitrogen at concentrations of 8.62mg/l and 12.2mg/l during the first surface water monitoring round. The concentrations are within the same order of magnitude and one order of magnitude above the EQS criteria (3.78mg/l). An exceedance of inorganic nitrogen within the same order of magnitude as the EQS was only recorded at SW3 (4.83mg/l) during the second monitoring round.

7.1.8.4 Nitrate

Two DWS exceedances were recorded for nitrate in groundwater at E-BH10 (within the Flamborough Chalk Formation) and E-BH15 (within Made Ground) in the East Site-Ammonia Storage and East Site-Hydrogen Production respectively. The highest concentration was recorded in E-BH15 at 1,660mg/l which is two orders of magnitude above the DWS (50mg/l). The exceedance within the Flamborough Chalk Formation is considered marginal as it is the same as the DWS.

No exceedances were recorded within soil leachate and surface water samples.

7.1.8.5 Sodium

Nine DWS exceedances of sodium were recorded across the East Site-Ammonia Storage and East Site-Hydrogen Production in groundwater across all strata. Overall, 39% of the detected results recorded sodium concentrations above the DWS (200mg/l). The highest concentration was recorded within Tidal Flat Deposits at E-BH14A (16,000mg/l). The exceedance at E-BH14A is two orders of magnitude above the DWS. All other exceedances were recorded within the same order of magnitude as the DWS. No exceedances were recorded within soil leachate and surface water samples.

7.1.8.6 Chloride

Nine DWS exceedances of chloride were recorded across the East Site (Ammonia Storage Tank and Hydrogen Production Areas) in groundwater across all strata. The exceedances of chloride are recorded at the same locations as the exceedances of sodium, with 32% of detects above the DWS (250mg/l). The highest concentration was recorded within Tidal Flat Deposits at E-BH14A (3,700mg/l). The exceedance at E-BH14A is one order of magnitude above the DWS. Most exceedances were recorded within the same order of magnitude as the DWS, apart from E-BH20 which also recorded an exceedance one order of magnitude above the DWS at 1,500mg/l. A marginal exceedance of chloride was recorded within soil leachate in E-BH15 within Tidal Flat Deposits with a recorded concentration of 270mg/l. No exceedances were recorded within surface water samples.

7.1.8.7 Fluoride

An isolated exceedance of fluoride was recorded within soil leachate in E-BH25 (2.1mg/l). However, as the exceedance is within the same order of magnitude as the DWS (1.5mg/l), it is considered marginal.

7.1.8.8 Cyanide (Total)

An isolated EQS and DWS exceedance of cyanide was recorded in groundwater within Made Ground at E-BH15 (0.13mg/l). No further exceedances were recorded within groundwater, surface water and soil leachate samples. The concentration of cyanide is two orders of magnitude above the EQS (0.001mg/l) and one order of magnitude above the DWS (0.05mg/l).

7.2 Summary of risk to human health

Based on the results of the soil screening assessment of the AECOM 2023 chemical data no contaminants exceeded the Generic Assessment Criteria (GAC)) designed to be protective of human health for the proposed commercial/industrial end use, nor GAC for acute risks to construction workers. However, high pH was recorded within two samples from E-BH04 and E-CPT06 within Made Ground in the East Site-Hydrogen Production. Asbestos was detected in two samples of Made Ground at ground level in the form of chrysotile at E-BH10 and E-BH25 in the East Site-Ammonia Storage and East Site-Hydrogen Production respectively. Quantification testing was undertaken on the sample from E-BH10, which recorded <0.001 mass %. The presence of asbestos may pose a risk to construction workers and potential end-users within the East Site (Hydrogen Production and Ammonia Storage Areas) if mitigation measures are not implemented to reduce the risk of exposure. Therefore, other than

potential risks from asbestos and pH, the risk to future users from the contaminants in the soil is deemed acceptable. However, it should be noted that the pipeline area has not yet been investigated.

Summary of risk to surface waterRegarding the potential risk to surface water, exceedances of the Environmental Quality Standards (EQS) were identified in the groundwater samples for chloroform, PAHs, metals and inorganics. The three exceedances of chloroform are considered to be isolated as they were recorded across a range of natural strata and were only recorded up to one order of magnitude above the EQS in the East Site (Hydrogen Production and Ammonia Storage Areas). The exceedances of PAHs and cyanide in groundwater within Made Ground are considered to be isolated localised occurrences within E-BH15 in the East Site-Hydrogen Production. Furthermore, the PAH exceedances are recorded at the same order of magnitude as the EQS, and therefore are considered to be marginal exceedances. Multiple exceedances were recorded for metals determinands. Elevated copper, lead, nickel and zinc were recorded in the East Site-Hydrogen Production and elevated nickel and zinc were recorded in the East Site-Ammonia Storage and the West Site. However, the exceedances were either the same order of magnitude or one order of magnitude above the EQS in groundwater, surface water and soil leachate. As the exceedances were marginal and recorded across the Made Ground and natural strata, it is considered to represent natural background conditions and pose a negligible risk to surface waters.

Exceedances of PAHs were recorded within surface water samples from Habrough Marsh Drain and the North Beck Drain. However, it is considered that these exceedances are indicative of off-site sources associated with the prevalent historical and current industrial land use within the wider area. Samples from Habrough Marsh Drain were collected upstream of the West Site and approximately 40m west from the East Site-Hydrogen Production, and samples from the North Beck Drain were collected approximately 450m east from the East Site. Industrial land use immediately adjacent to Habrough Marsh Drain comprises pipelines, railway sidings and industrial properties. Similarly, industrial land use immediately adjacent to the North Beck Drain comprises industrial properties and a chemical works. Elevated concentrations of ammoniacal nitrogen and ammonium were recorded within groundwater across all strata within the West Site and East Site (Hydrogen Production and Ammonia Storage Areas), with the highest concentration recorded in Made Ground within the East Site-Hydrogen Production. The highest concentrations of ammoniacal nitrogen and ammonium were recorded within groundwater in Made Ground at E-BH15 at 870mg/l and 1,100mg/l respectively. The second highest concentrations were recorded in E-BH14A within Tidal Flat Deposits (9.4mg/l of ammoniacal nitrogen and 12mg/l of ammonium) adjacent to E-BH15. An ammonia odour was recorded in both exploratory holes within Made Ground during the ground investigation. Therefore, there is a likely a source of elevated ammonium and ammoniacal nitrogen within Made Ground in the south-east corner of the East Site. As elevated ammoniacal nitrogen and ammonium were recorded in Tidal Flat Deposits (albeit at a much lower concentration than in the Made Ground), this may suggest a potential vertical migration pathway from Made Ground to natural strata. Therefore, there is a potential risk to surface water associated with these determinands in groundwater. Therefore, it is recommended that further groundwater monitoring is undertaken. Depending on the results of the further groundwater monitoring, additional risk assessments may be required such as the Remedial Targets Methodology assessment. It should also be noted that the pipeline area has not yet been investigated.

7.3 Summary of risk to groundwater quality

7.3.1.1 East Site-Hydrogen Production

With regards to a potential risk to groundwater, exceedances of the Drinking Water Standard (DWS) were identified in the groundwater for hydrocarbons, PAHs, metals and inorganics in the East Site-Hydrogen Production.

The exceedances of C12-C16 aromatics and naphthalene are considered to be isolated occurrences and are within the same order of magnitude as the DWS. The majority of DWS exceedances are associated with metals and inorganic determinands.

Exceedances of the DWS were recorded for arsenic, boron, nickel and selenium in groundwater within Made Ground, Tidal Flat Deposits and the Flamborough Chalk Formation, mostly within the East Site-Hydrogen Production. All of the exceedances were recorded within the same order of magnitude as the DWS. Localised exceedances of arsenic were recorded within Made Ground (17.3µg/l in E-BH20 and 21.8µg/l in E-BH15) which may indicate a potential source of elevated metals in the south-east corner of the East Site – Hydrogen Production Area , where elevated ammoniacal nitrogen and ammonium has also been recorded in groundwater. Elevated metals were also recorded within the Flamborough Chalk Formation in the East Site-Hydrogen Production. The Flamborough Chalk Formation is designated as a Principal Aquifer. An SPZ 1, 2 and 3 are also located within the wider site, which is likely associated with a potable water abstraction within the Flamborough Chalk Formation. Therefore, there is a potential risk to the Principal Aquifer associated with elevated concentrations of metals.

Although exceedances of nickel, sodium, chloride, ammonium and TPH C12-C16 were recorded within the Tidal Flat Deposits groundwater, this is not considered to present a risk to groundwater quality as the Tidal Flat Deposits are an Unproductive Aquifer.

There may be a potential risk to groundwater in the East Site Hydrogen Production Areas associated with inorganics within groundwater. Concentrations of ammonium in E-BH15 (1,100mg/l) are four orders of magnitude above the DWS (0.5mg/l) within Made Ground at E-BH15 and the concentration of nitrate in E-BH15 (1,660mg/l) is two orders of magnitude above the DWS (50mg/l). Elevated concentrations were also recorded in E-BH14A adjacent to E-BH15 within the Tidal Flat Deposits groundwater, which may suggest a potential vertical migration pathway from Made Ground to natural strata and a localised source of ammonium and nitrate within Made Ground. Therefore, there is a potential risk to groundwater associated with ammonium and nitrate. Due to the sensitivity of the Principal Aquifer and the presence of an SPZ1, it is recommended that further groundwater monitoring rounds are undertaken to characterise the inorganic concentrations in groundwater. Further risk assessment may be required depending on the results of the groundwater monitoring.Elevated concentrations of sodium and chloride were recorded across all strata, with the highest concentrations recorded within Tidal Flat Deposits in E-BH14A (16,000mg/l of sodium and 3,700mg/l of chloride).. This may be associated with saltwater intrusion from the Humber Estuary, particularly for groundwater within Made Ground and Tidal Flat Deposits. It is recommended that further groundwater monitoring is undertaken to determine the trend of the concentrations over time.

7.3.1.2 East Site-Ammonia Storage

Exceedances of boron and inorganics were recorded in the East Site-Ammonia Storage. The recorded concentration of boron within the Flamborough Chalk Formation at the same concentration as the DWS (1000µg/l). Therefore, this is considered a marginal exceedance.

Elevated concentrations of sodium and chloride were recorded within Glacial Till Deposits (210mg/l and 250mg/l respectively in E-BH07) and the Flamborough Chalk Formation (400mg/l and 590mg/l respectively in E-BH04). should also be noted that an exceedance of ammonium and nitrate was recorded in E-BH10 (1.2mg/l and 50mg/l respectively) within the Flamborough Chalk Formation. Although the concentrations of inorganics are lower compaed to the East Site-Hydrogen Production, inorganics may pose a risk to groundwater quality, particularly as the Flamborough Chalk Formation is a Principal Aquifer. Therefore, it is recommended that further groundwater monitoring is undertaken to characterise the inorganic concentrations in groundwater.

7.3.1.3 West Site

No exceedances of the DWS were recorded within the West Site. Therefore, it is considered that there is not a risk to groundwater quality within the West Site.

8 Ground Gas

Gas monitoring was undertaken as outlined in Section 3. The results of this monitoring and the gas assessment undertaken are presented in the Ground Gas Risk Assessment in Appendix H.

Weekly ground gas monitoring was undertaken on completed borehole installations during the GI between 13th January and 27th February. Six rounds of post-GI ground gas monitoring have been undertaken between 27th February and 9th May 2023. , the ground gas assessment is based on the results of all rounds of monitoring during the GI and post GI between 13th January and 9th May 2023.

The gas monitoring results indicate that the maximum CH_4 and CO_2 concentrations recorded during the monitoring were 93.9% v/v and 5.9% v/v respectively int E-BH18 which was screened within the Flamborough Chalk Formation. . The maximum flow rate recorded in E-BH04 (screened within the Flamborough Chalk Formation) during the monitoring was 120l/hr. Elevated methane concentrations were also recorded in E-BH04 (up to 83.3% v/v) screened in the Flamborough Chalk, E-BH22 (up to 61.1% v/v) screened in the Made Ground and E-BH25 (up to 83.6%v/v) screened in the Glacial Till.

Groundwater levels were recorded above the response zone in the following monitoring wells: E-BH02, E-BH04, E-BH07, E-BH11, E-BH14A, E-BH15, E-BH18, E-BH20, E-BH25 and W-BH31. Therefore, it is considered that the wells are flooded which may have caused compression of gases within the standpipe and hence affect the concentrations of gases recorded during the monitoring rounds. Artesian conditions were encountered in the following exploratory hole locations: W-BH09, W-BH10A, W-BH14, W-BH17, W-BH18, W-BH20, W-BH21, W-BH22, W-BH24, W-BH30, W-BH34 and W-BH35. .

Based on the results, the site is classified as a Characteristic Situation (CS)5. Therefore, this provisionally indicates that gas protection measures are required to be incorporated into the building design with regards to ground gas.

The Characteristic Situation (CS)5 was derived using guidance for Construction Industry Research and Information Association (CIRIA) C665 Assessing risk posed by hazardous ground gases to buildings. This assessment takes a holistic approach to characterising the site and uses a rational method for classifying gassing sites in terms of the risks posed by the presence of gas. It assumes worst case ground gas conditions in the assessment of potential risks, i.e. maximum gas concentrations and maximum flow rates recorded. However, based on the results of the ground investigation and an understanding of the site geology, it is not clear as to the sources of high methane concentrations which are driving the assessment of risk. In addition, the methane concentrations appear to be quite variable, for example, location E-BH04 exhibited concentrations between <0.1% v/v to 5.4%v/v during the GI and in the first 3 monitoring rounds, then recorded concentrations of between 62.5% v/v to 83.3% v/v for the final 3 rounds. Location E-BH18 recorded an opposite trend where concentrations of between 26.45% v/v to 93.9% v/v were recorded during GI and first monitoring round and were <0.1%v/v thereafter. Therefore, the CS5 classification may overestimate the actual ground gas risk at the site.

Furthermore, high recorded flow rates may have been driven by water level changes in the aquifers and so may over estimate the actual flow rates. During the monitoring, locations screened in chalk were flooded which have potentially given rise to high flow rates which increase the CS value to CS5.

Given the uncertainty over the source of the elevated gas concentrations and potential overestimatation of the flow rates in monitoring wells that have occurred on a seemingly low risk site an alternative approach to gas risk assessment has been undertaken, using guidance from Wilson and Card, A Pragmatic Approach to Ground Gas Risk Assessment for the 21st Century.

Low risk sites are defined as those where the conceptual model has not identified any significant sources of ground gas including:

1. Natural soils with a high carbonate content, such as Chalk, some Glacial Tills, etc
2. Natural soils that are known to contain methane, such as Alluvium, Peat, etc
3. Made Ground with a low organic content (i.e. predominantly soil, ash or clinker with occasional pieces of wood, etc) It should be noted that the maximum depth for applying this approach is 5m within made ground as there is a greater risk of unidentified degradable material with deeper deposits and the soil atmosphere is more likely to be predominantly anaerobic below this depth.

Using this alternative approach, Total Organic Carbon (TOC) recorded across the site, in Made Ground averaged 1.25%, with the highest concentration being within E-BH04 at 1.6% and the lowest recorded concentration of 0.9% within E-BH06A, E-BH20, and E-BH24. The average 1.25% TOC gives a characteristic situation of CS2.

It is recommended that further monitoring is undertaken to confirm the gas and flow rate regime across the site and undertake gas sampling and laboratory analysis to identify the potential source of the gas and validate the results of the monitoring.

9 Geotechnical Risk Register

A Geotechnical Risk Register has been compiled to show the degree of risk attached to various ground related aspects of the proposed scheme. The purpose of the register is to produce an assessment of the risk to the project posed by site specific ground related problems and identify suitable mitigation measures to control the risk to an acceptable level for the IGET project. The risk register should be developed and refined as the geotechnical design and assessment progresses such that the register will allow management of the geotechnical risks.

The degree of risk (R) is determined by combining an assessment of the likelihood (L) of the hazard with an assessment of the severity (S) of the hazard. The scale against which the likelihood and severity are measured, and the resulting degree of risk determined is presented below. Table 9-4 presents the risk register for the proposed scheme.

Table 9-1. Scoring rationale describing likelihood and severity

Likelihood			Severity		
1	Extremely unlikely	The event is not expected to occur, unless under exceptionally adverse circumstances.	1	Insignificant	Unnoticeable damage or loss to an asset or resource, no human injury..
2	Unlikely	The event is only expected to occur under rare or adverse circumstances.	2	Minor	Minimal first aid incident or intervention requiring routine maintenance/repair
3	Likely	The event is expected to occur under slightly adverse circumstances.	3	Moderate	Temporary, or lost-time injury or illness, or damage to property, infrastructure or the environmental requiring non-routine maintenance or repair.
4	Highly likely	The event is expected to occur under normal or average circumstances.	4	Major	Permanent injury, loss or damage to property, infrastructure, or the environment, resulting in loss of function or performance
5	Almost certain	The event is expected to occur within a short period under normal or average circumstances	5	Catastrophic	Fatality, loss or damage to property, infrastructure, or the environment, resulting in permanent loss of function or performance

Table 9-2. Risk matrix (risk = likelihood x severity)

Likelihood	Severity				
	Insignificant	Minor	Moderate	Major	Catastrophic
Extremely unlikely	1	2	3	4	5
Unlikely	2	4	6	8	10
Likely	3	6	9	12	15
Highly likely	4	8	12	16	20
Almost certain	5	10	15	20	25

Table 9-3. Risk categorisation

Likelihood x Severity)	Risk	
1 to 5	Low	A generally acceptable level of risk, provided that all reasonably practicable control measures are in place.
6 to 8	Medium	A tolerable level of risk if further mitigation is not reasonably practicable. Associated activities may proceed with the identified controls.
9 to 15	High	Generally, an unacceptable level of risk and further mitigation measures are encouraged. If risk cannot be reduced, acceptance of risk and approval is required from all stakeholders.
16 to 25	Very high	An unacceptable level of risk, which is to be avoided or reduced significantly.

Table 9-4. Geotechnical Risk Register

Risk No	Hazard	Source	Consequence	Risk before Mitigation			Possible Mitigation Measures	Risk after Mitigation		
				L	S	R		L	S	R
GEO 001	Presence of Made Ground	Investigations have confirmed variable Made Ground up to 4m thick at the East and West Sites.	Excessive differential and or total settlement. Increased cost and delay if Made Ground is required to be removed from Site	3	4	12	Resistance from Made Ground to be discounted during pile design. Excavate and replace made ground with engineered fill.	2	4	8
GEO 002	Presence of soft and compressible strata	Investigations and testing have confirmed that Tidal Flat Deposits comprise soft to very soft clay with lenses and pockets of peat.	Long-term, large magnitude consolidation settlement in response to raising of site elevations or construction of shallow foundations.	3	4	12	For structures to be founded on the Tidal Flat Deposits, settlement assessment to be undertaken to assess total and differential movements. Should movements be too high for the structure performance, consideration to be given to ground improvement options or adoption of deep foundations.	1	4	4
GEO 003	Lateral changes in ground conditions	The GI has indicated there to be lateral changes within the geology.	Variable soil response under the loading of proposed development, potentially leading to differential settlement.	4	3	12	Foundation design shall allow for laterally variable ground conditions.	2	3	6
GEO 004	Obstructions due to the presence of boulders and coarse flint within the Glacial Till and the underlying Chalk Formation.	Boulders and coarser material was recorded during the recent GI within the Glacial Till and Flamborough Chalk Formation.	Installation of piled foundations could be impeded due to the presence of coarse material within the Glacial Till and the Chalk. Increased cost and delay associated with hard digging and pile installation.	3	3	9	An allowance for hard digging within cost and project programme. Appropriate piling technique to be adopted.	1	3	3
GEO 005	Weathered bedrock	Borehole records indicate the uppermost section of the Chalk bedrock to be structureless with decreased strength parameters. This weathered bedrock zone may be unsuitable as a founding stratum for heavily loaded piles.	End bearing of piles terminating in weathered chalk may be relatively low.	4	3	12	Foundation design accounting for weathered bedrock.	4	1	4
GEO 006	Aggressive ground and groundwater conditions for buried concrete and steel	Elevated concentrations of sulphate and alkaline pH in soil. Ground Investigation has indicated soils to be aggressive to buried concrete with BRE SD1 ACEC Classification ranging between DS1 AC-1 and DS-5 AC-5.	Early deterioration of buried concrete and steel structures.	4	3	12	Adopt appropriate concrete class for buried concrete. Adopt appropriate corrosion measures for buried steel structures such as cathodic protection.	3	3	9

Risk No	Hazard	Source	Consequence	Risk before Mitigation			Possible Mitigation Measures	Risk after Mitigation		
				L	S	R		L	S	R
GEO 007	High groundwater table	Investigations indicate a shallow groundwater table across all three site, up to 1m bgl.	Flooding of excavations. Buoyant uplift of structures below groundwater table.	3	2	6	Provision of groundwater control in temporary works design. Conservative approach to be taken at design stage in selecting groundwater level. Buoyant uplift design checks to be undertaken for structures below groundwater table. Additional groundwater monitoring before and during construction.	1	2	2
GEO008	Artesian Groundwater	Groundwater monitoring indicates the presence of artesian groundwater conditions in Chalk and potentially the permeable layers of the Glacial Till particularly in the West Site	Groundwater under artesian pressure expected to be encountered during construction of piled foundations. Basal instability of open pile shafts. Potential for uplift on the underside of deep excavations	3	2	6	Provision of groundwater control in temporary works design. Conservative approach to be taken at design stage in selecting groundwater level to ensure artesian conditions are considered accordingly. Additional groundwater monitoring before and during construction.	2	2	4
GEO 009	Existing Underground and Overhead Services at proposed site of works	Existing known or unknown services that could impact site construction works, site clearance and Sste set-up (compound, haul roads etc.)	Increased cost and delay to divert or lower services; H&S impact during any excavations during construction; Scheme design alterations to avoid overhead/underground services.	4	4	16	Obtain up to date service plans and records; Design proposed scheme to minimise impact on existing services. PAS type B to D surveys to be undertaken prior to commencement of any works.	2	4	8

Appendix A Factual Report

Appendix B Groundwater Figures

Figure B1. Site plan showing the locations of the boreholes and piezometers in the Western section of the Site

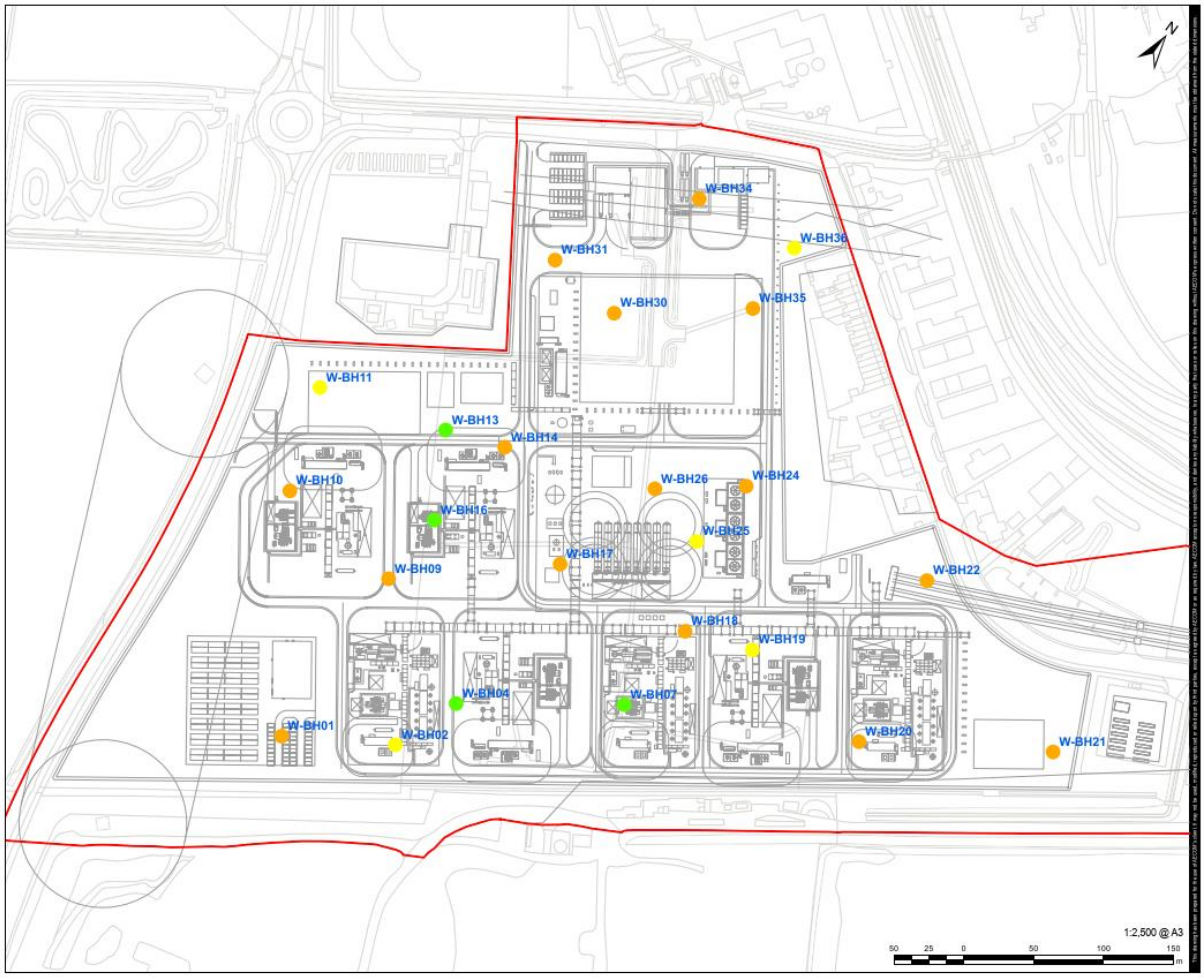


Figure B2. Site plan showing the locations of the boreholes and piezometers in the Eastern section of the Site

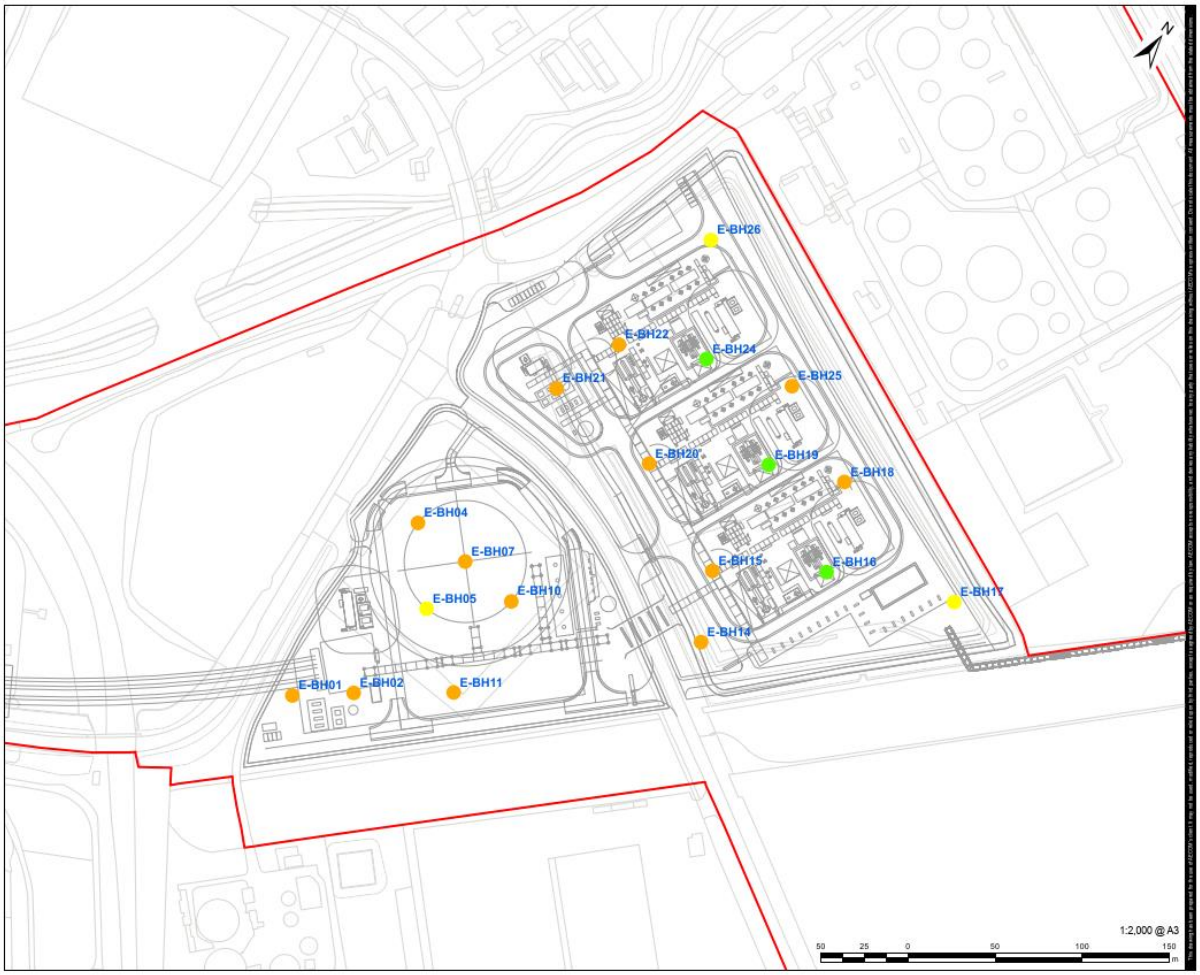


Figure B3 Tidal data from the Immingham Tidal Monitoring Station for the period January 2023 – February 2023

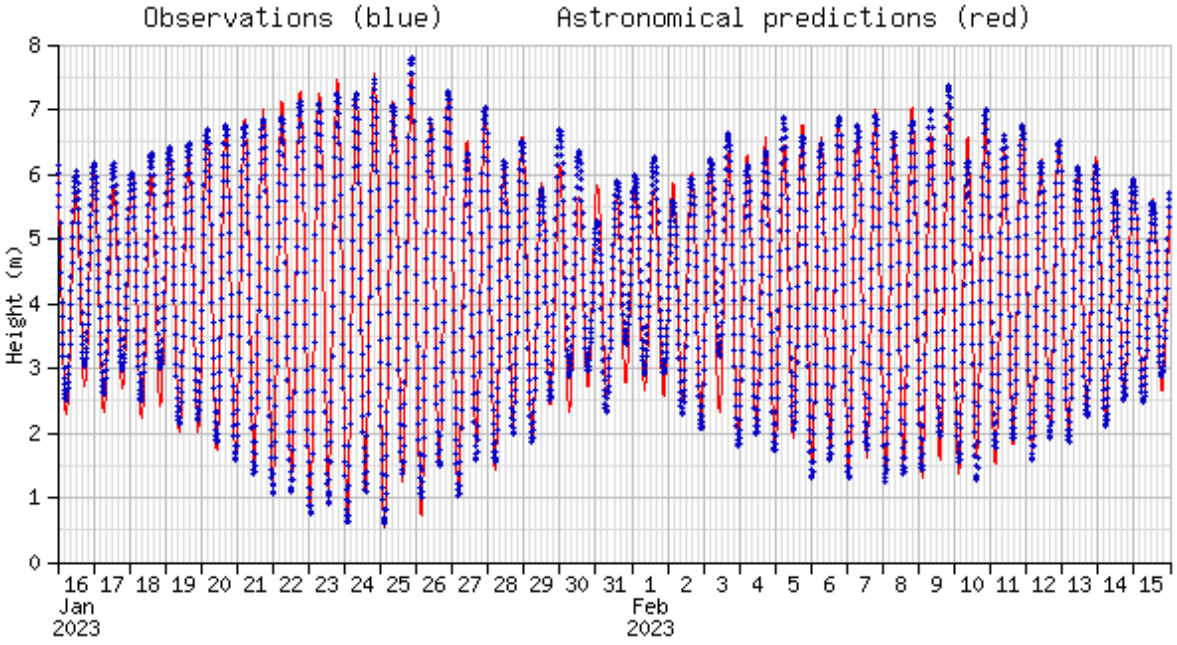
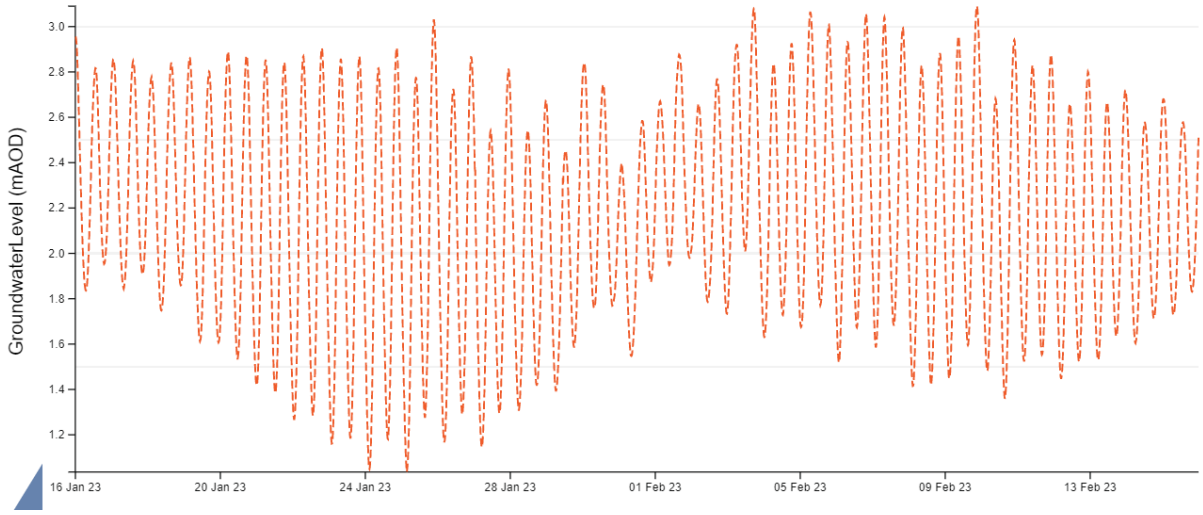


Figure B4 Monitored Groundwater Levels for the borehole (5_106) monitored by the Environment Agency for the period January 2023 – February 2023



Revision: 1 Drawn: EB Checked: DF Approved: HH Date: 2023-06-07

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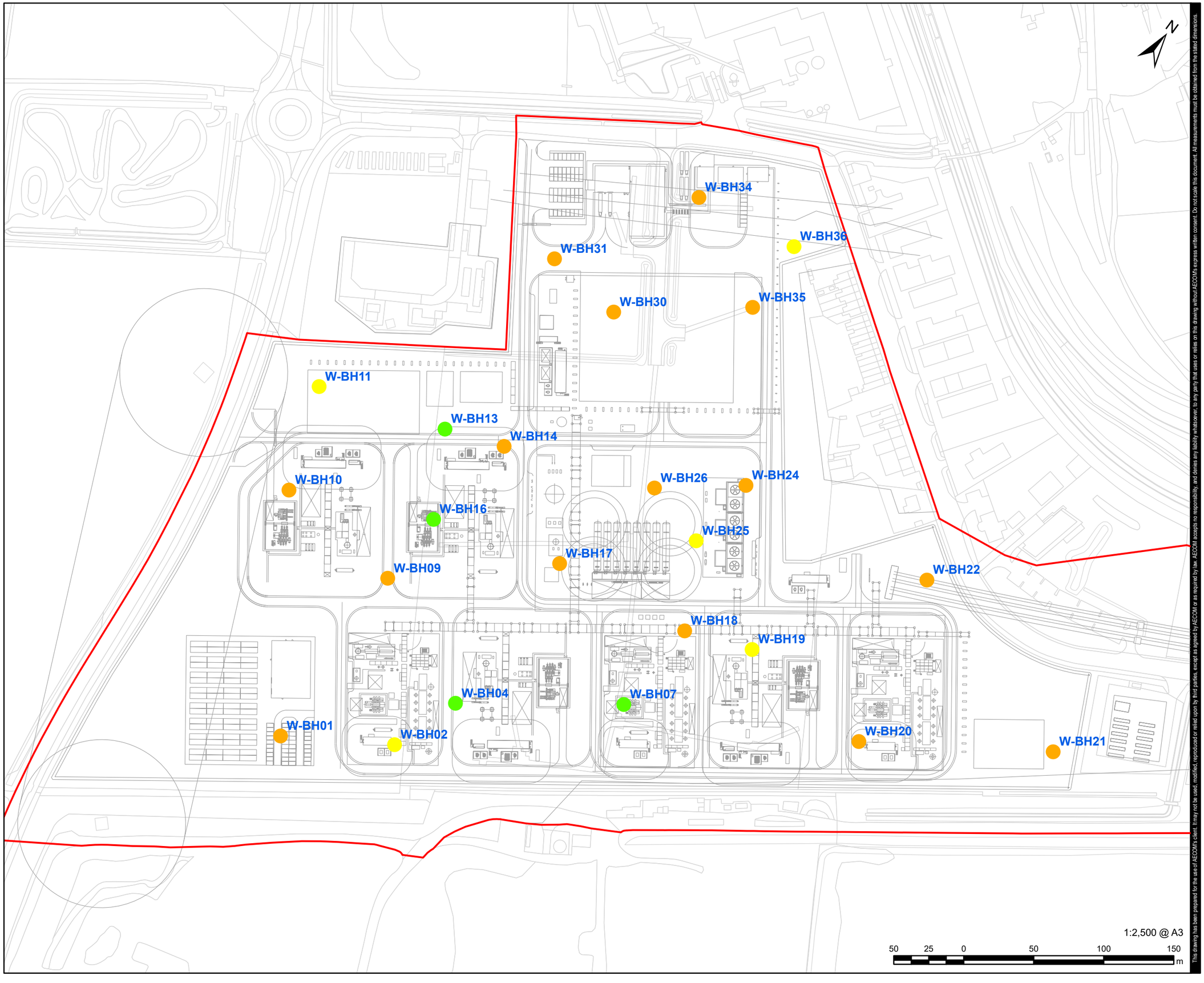

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PROJECT

Immingham Green Energy Terminal

CLIENT

Associated British Ports

CONSULTANT

AECOM Limited
5th Floor
2 City Walk
Leeds, LS11 9AR
www.aecom.com

LEGEND

- Site Boundary
- Vibrating Wire Piezometer
- Standpipe Installation
- Down-Hole Seismic Test

NOTES

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ISSUE PURPOSE

FOR INFORMATION

PROJECT NUMBER

60673509

DEVELOPMENT CONSENT ORDER NO

TR30008

FIGURE TITLE

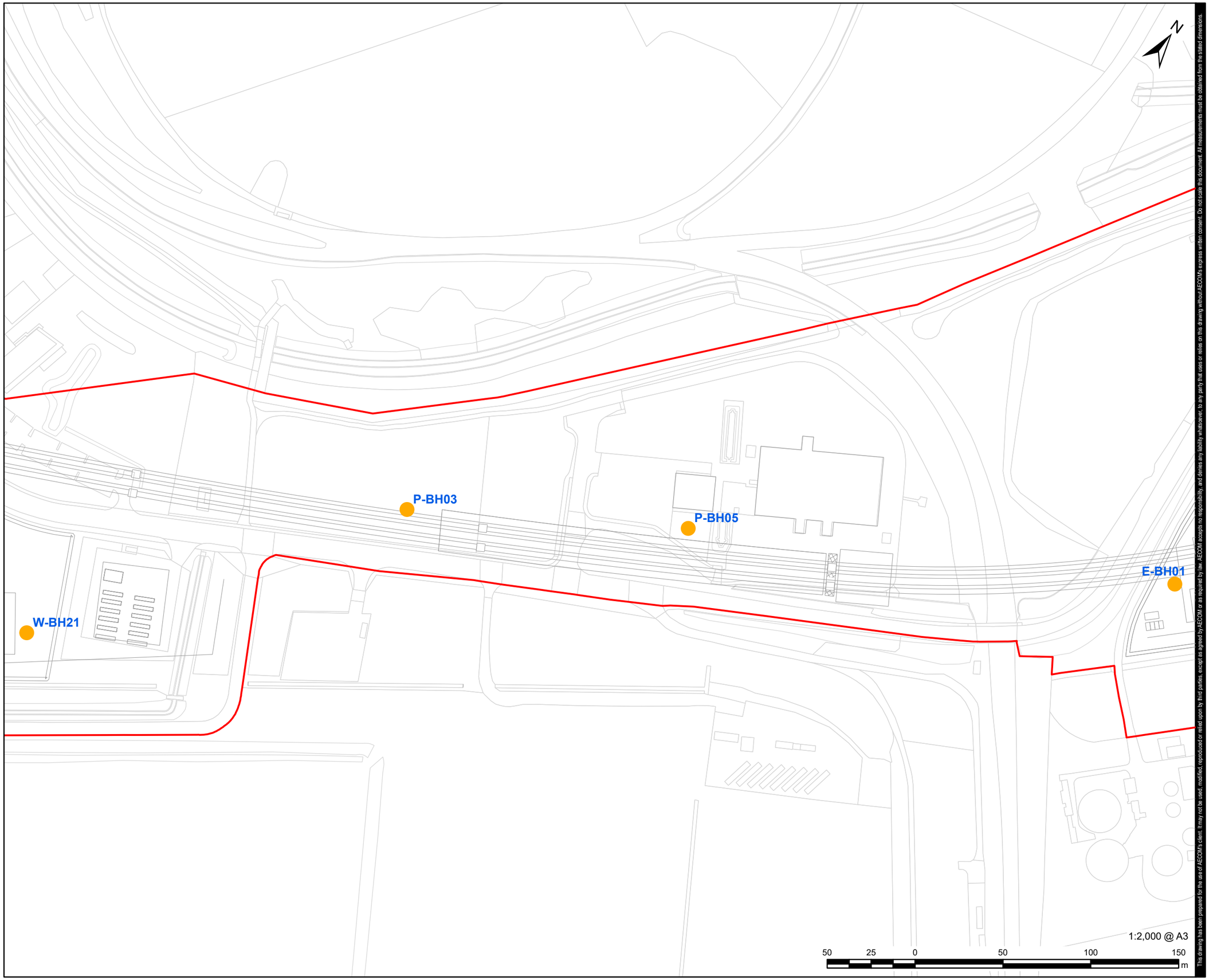
Proposed Instruments Location Plan

FIGURE NUMBER

Figure 1b (Page 1 of 4)

Revision: 1 Drawn: EB Checked: DF Approved: HH Date: 2023-06-07

Filename: \\na.aecomnet.com\lfs\EMEA\Manchester-UKMCR5\Legacy\UKMCR1FP002-V1\IE\Proposal\35121\Immingham GET GIS\02_Maps\Preliminary_Drawings\IGET_Prelim_07_Ground_Investigation_Boreholes.aprx



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LEGEND

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ISSUE PURPOSE

FOR INFORMATION

PROJECT NUMBER

60673509

DEVELOPMENT CONSENT ORDER NO

TR30008

FIGURE TITLE

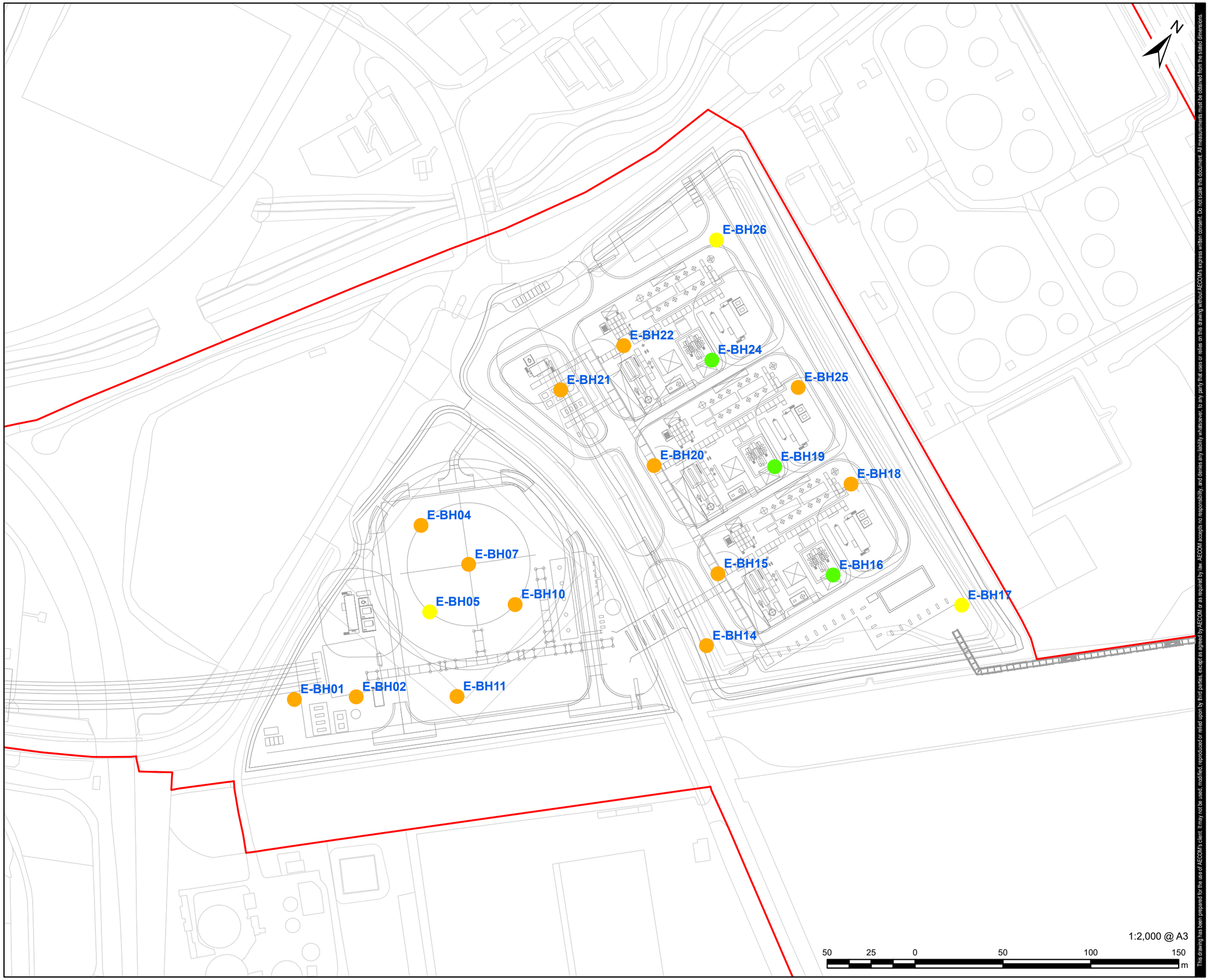
Proposed Instruments Location Plan

FIGURE NUMBER

Figure 1b (Page 2 of 4)

Revision: 1 Drawn: EB Checked: DF Approved: HH Date: 2023-06-07

Filename: \\na.aecomnet.com\lfs\EMEA\Manchester-UKMCR5\Legacy\UKMCR1FP002-V1\EIProposal\3512\Immingham GET GIS\02_Maps\Preliminary_Drawings\IGET_Prelim_07_Ground_Investigation_Boreholes.aprx



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LEGEND

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- Down-Hole Seismic Test

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ISSUE PURPOSE

FOR INFORMATION

PROJECT NUMBER

60673509

DEVELOPMENT CONSENT ORDER NO

TR30008

FIGURE TITLE

Proposed Instruments Location Plan

FIGURE NUMBER

Figure 1b (Page 3 of 4)

Revision: 1 Drawn: EB Checked: DF Approved: HH Date: 2023-06-07

Filename: \\na.aecomnet.com\fs\EMEA\Manchester-UKMCR5\Legacy\UKMCR1FP002-V1\EIProposal\35121Immingham GET GIS\02_Maps\Preliminary_Drawings\IGET_Prelim_07_Ground_Investigation_Boreholes.aprx

E-BH26
E-BH24
E-BH25
E-BH20
E-BH19
E-BH18
E-BH15
E-BH16
E-BH17
E-BH14
P-BH07

1:2,000 @ A3

50 25 0 50 100 150 m

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LEGEND

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ISSUE PURPOSE

FOR INFORMATION

PROJECT NUMBER

60673509

DEVELOPMENT CONSENT ORDER NO

TR30008

FIGURE TITLE

Proposed Instruments Location Plan

FIGURE NUMBER

Figure 1b (Page 4 of 4)

Appendix C Geological Cross-Sections

Revision: 1 Drawn: EB Checked: DF Approved: NF Date: 2023-06-06

Filename: \\na.aecomnet.com\ifs\EMEA\Manchester-UKMCR5\Legacy\UKMCR1FP002-V1\E\Proposal\3512\Immingham GET GIS\02_Maps\60687114_Immingham_NH3\Cross Sections\60687114_ACM_DR_RSGE_001_0_West_Cross_Section_1_20230606_EB.aprx

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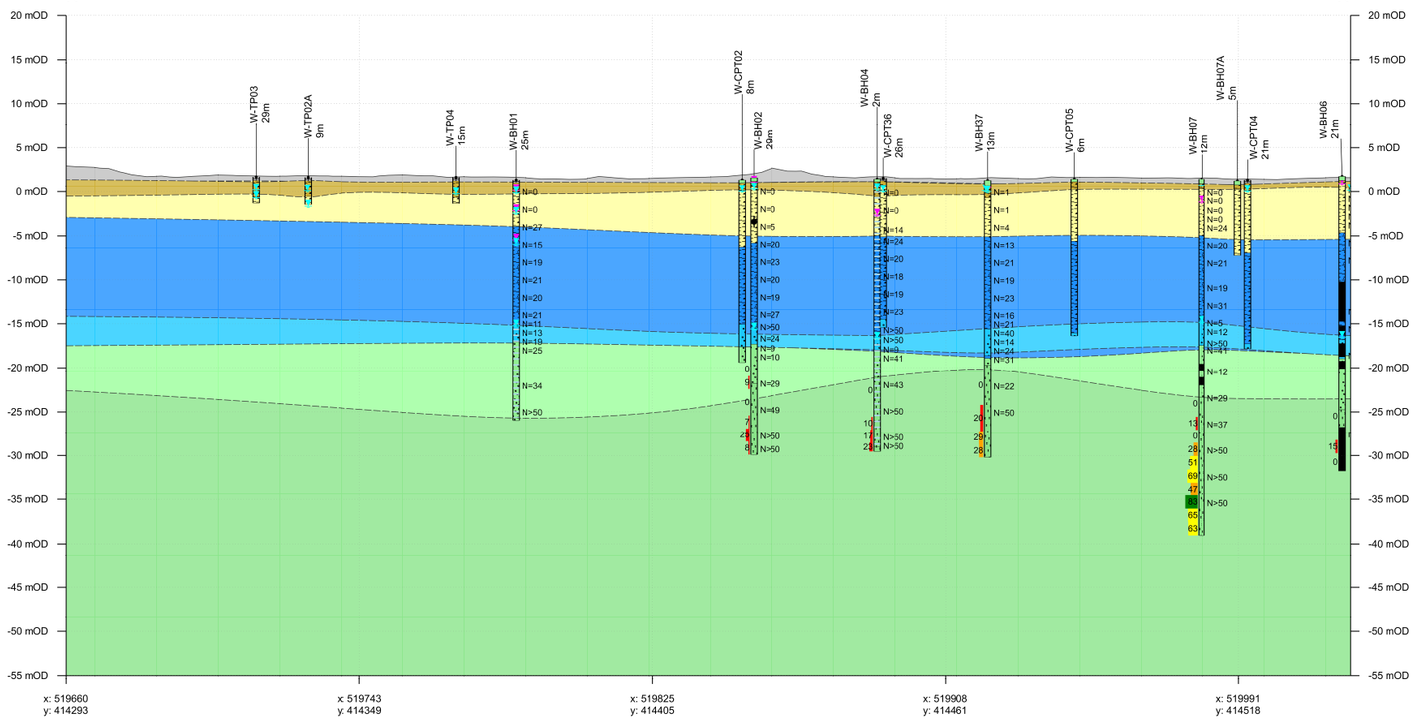


Legend

Ground Model Geology
- Made Ground
- Firm Tidal Flat Deposits
- Tidal Flat Deposits
- Glacial Till Deposits
- Granular Glacial Till Deposits
- Weathered Flamborough Chalk Formation
- Flamborough Chalk Formation

Hole Geology Code
MG, GTD, FCF, TFD2, GGTD, NR, TFD, WFCF

GeologyCode2
TS

Rock Quality Designation (%)
Value and bar on LHS of hole stick:
≤ 25, ≤ 90, ≤ 50, > 90, ≤ 75

Standpipe Response Zone
SP

Groundwater Strike
Strike_Level

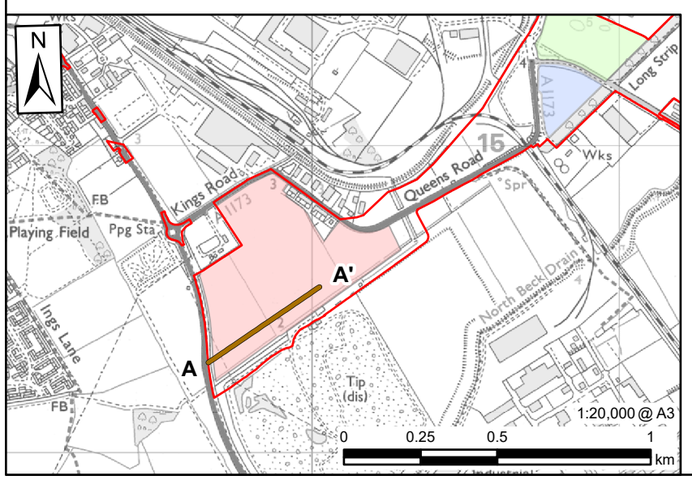
Groundwater Strike Monitored
Strike_Rise_Level_20 mins

Vibrating Wire Piezometers
Monitoring_Instrument_Level_Piezometers

Note - Hole Geology Code / Strata Names:
MG - Made Ground
TFD2 - Firm Tidal Flat Deposits
TFD - Tidal Flat Deposits
GTD - Glacial Till Deposits
GGTD - Granular Glacial Till Deposits
WFCF - Weathered Flamborough Chalk Formation
FCF - Flamborough Chalk Formation
NR - No Recovery

Standard Penetration Test Results
Value on RHS of hole stick:
N=[SPT N Value]
N>50 - Refusal

Scale: 1:2000
Vertical exaggeration: 3x
0m 100m



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LEGEND
- Site Boundary
- Cross Section Line
- East Site – Ammonia Storage
- East Site – Hydrogen Production
- West Site

NOTES

1. DO NOT SCALE FROM THIS DRAWING.

2. THIS FIGURE SHOULD BE READ IN CONJUNCTION WITH THE FOLLOWING GEOTECHNICAL REPORT: AECOM(2023). GROUND INVESTIGATION REPORT FOR IMMINGHAM GREEN ENERGY TERMINAL. PROJECT NUMBER 60687114

3. ALL DIMENSIONS IN METRES (M) AND ALL ELEVATIONS/LEVELS IN METRES RELATIVE TO ORDNANCE DATUM (MOD) UNLESS NOTED OTHERWISE.

4. GROUND SURFACE SHOWN BASED ON LIDAR SURVEY UNDERTAKEN BY GEOTERRA LTD ON 14 AND 15 SEPTEMBER 2022.

5. THE GROUND INVESTIGATION (GI) DATA IS DISPLAYED FROM THE 2022/2023 GROUND INVESTIGATION CARRIED OUT AT THE IMMINGHAM GREEN ENERGY TERMINAL SITE. AP AMMONIA IMPORT TERMINAL. GROUND INVESTIGATION FACTUAL REPORT. PROJECT NUMBER. 60687114, MAY 2023.

6. GEOLOGICAL BOUNDARIES INTERPRETED BASED ON FIELD DATA FROM THE 2022/2023 GI AT IMMINGHAM AND AN INTERPRETATIVE 3D MODEL. GEOLOGICAL BOUNDARIES SHOULD BE CONSIDERED AS AN INDICATIVE DISTRIBUTION BETWEEN EXPLORATORY HOLES ONLY. ACTUAL GROUND CONDITIONS AWAY FROM EXPLORATORY HOLES MAY VARY FROM THAT SHOWN.

7. GROUNDWATER STRIKES ARE SHOWN FOR THE LEVEL ENCOUNTERED ON SITE DURING GROUND INVESTIGATION DRILLING AND THE GROUNDWATER STRIKE LEVEL RECORDED AFTER 20 MINUTES STANDING TIME; THE GROUND INVESTIGATION FROM WHICH STRIKES ARE SHOWN OCCURED BETWEEN NOVEMBER 2022 AND APRIL 2023. ACTUAL GROUNDWATER LEVELS ON SITE MAY VARY, BOTH SPATIALLY AND SEASONALLY, FROM THOSE SHOWN.

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ISSUE PURPOSE

DRAFT

PROJECT NUMBER

60687114

FIGURE TITLE

Geological Cross Section
West Cross Section 1

FIGURE NUMBER

60687114_ACM_DR_RSGE_001_0

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Revision: 1 Drawn: EB Checked: DF Approved: NF Date: 2023-06-06

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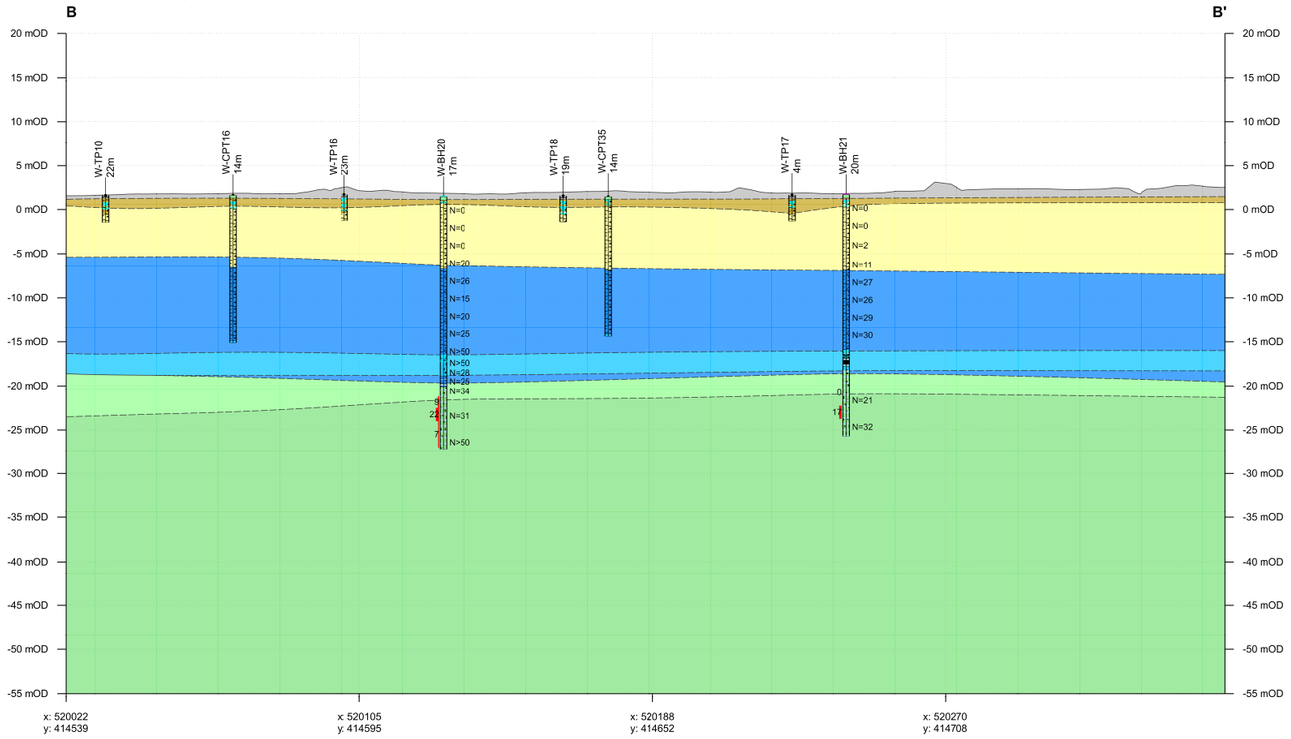


Legend

Ground Model Geology
- Made Ground
- Firm Tidal Flat Deposits
- Tidal Flat Deposits
- Glacial Till Deposits
- Granular Glacial Till Deposits
- Weathered Flamborough Chalk Formation
- Flamborough Chalk Formation

Hole Geology Code
- MG
- TFD2
- TFD
- GTD
- GGTD
- WFCF
- FCF
- NR

GeologyCode2
- TS

Rock Quality Designation (%)
Value and bar on LHS of hole stick:
- ≤ 25
- ≤ 50
- ≤ 75
- ≤ 90
- > 90

Standpipe Response Zone
- SP

Groundwater Strike
- Strike_Level

Groundwater Strike Monitored
- Strike_Rise_Level_20 mins

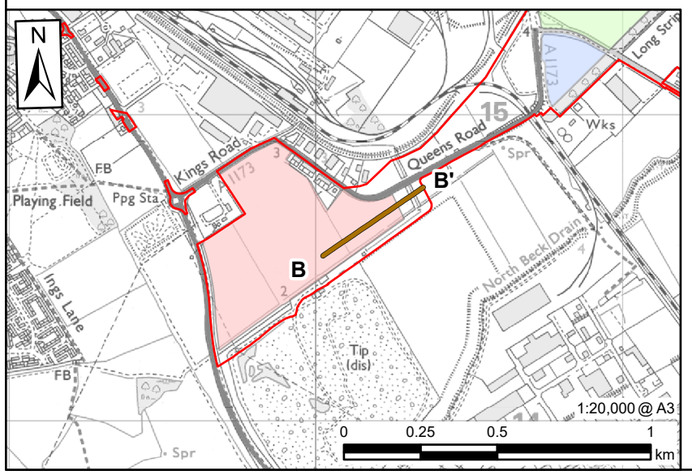
Vibrating Wire Piezometers
- Monitoring_Instrument_Level_Piezometers

Note - Hole Geology Code / Strata Names:
MG - Made Ground
TFD2 - Firm Tidal Flat Deposits
TFD - Tidal Flat Deposits
GTD - Glacial Till Deposits
GGTD - Granular Glacial Till Deposits
WFCF - Weathered Flamborough Chalk Formation
FCF - Flamborough Chalk Formation
NR - No Recovery

Standard Penetration Test Results

Value on RHS of hole stick:
N=[SPT N Value]
N>50 - Refusal

Scale: 1:2000
Vertical exaggeration: 3x
0m 100m



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PROJECT

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CLIENT

Air Products PLC

CONSULTANT

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5th Floor
2 City Walk
Leeds, LS11 9AR
www.aecom.com

LEGEND
- Site Boundary
- Cross Section Line
- East Site – Ammonia Storage
- East Site – Hydrogen Production
- West Site

NOTES

1. DO NOT SCALE FROM THIS DRAWING.

2. THIS FIGURE SHOULD BE READ IN CONJUNCTION WITH THE FOLLOWING GEOTECHNICAL REPORT: AECOM(2023). GROUND INVESTIGATION REPORT FOR IMMINGHAM GREEN ENERGY TERMINAL. PROJECT NUMBER 60687114

3. ALL DIMENSIONS IN METRES (M) AND ALL ELEVATIONS/LEVELS IN METRES RELATIVE TO ORDNANCE DATUM (MOD) UNLESS NOTED OTHERWISE.

4. GROUND SURFACE SHOWN BASED ON LIDAR SURVEY UNDERTAKEN BY GEOTERRA LTD ON 14 AND 15 SEPTEMBER 2022.

5. THE GROUND INVESTIGATION (GI) DATA IS DISPLAYED FROM THE 2022/2023 GROUND INVESTIGATION CARRIED OUT AT THE IMMINGHAM GREEN ENERGY TERMINAL SITE. AP AMMONIA IMPORT TERMINAL. GROUND INVESTIGATION FACTUAL REPORT. PROJECT NUMBER. 60687114, MAY 2023.

6. GEOLOGICAL BOUNDARIES INTERPRETED BASED ON FIELD DATA FROM THE 2022/2023 GI AT IMMINGHAM AND AN INTERPRETATIVE 3D MODEL. GEOLOGICAL BOUNDARIES SHOULD BE CONSIDERED AS AN INDICATIVE DISTRIBUTION BETWEEN EXPLORATORY HOLES ONLY. ACTUAL GROUND CONDITIONS AWAY FROM EXPLORATORY HOLES MAY VARY FROM THAT SHOWN.

7. GROUNDWATER STRIKES ARE SHOWN FOR THE LEVEL ENCOUNTERED ON SITE DURING GROUND INVESTIGATION DRILLING AND THE GROUNDWATER STRIKE LEVEL RECORDED AFTER 20 MINUTES STANDING TIME; THE GROUND INVESTIGATION FROM WHICH STRIKES ARE SHOWN OCCURED BETWEEN NOVEMBER 2022 AND APRIL 2023. ACTUAL GROUNDWATER LEVELS ON SITE MAY VARY, BOTH SPATIALLY AND SEASONALLY, FROM THOSE SHOWN.

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ISSUE PURPOSE

DRAFT

PROJECT NUMBER

60687114

FIGURE TITLE

Geological Cross Section
West Cross Section 2

FIGURE NUMBER

60687114_ACM_DR_RSGE_002_0

Revision: 1 Drawn: EB Checked: DF Approved: NF Date: 2023-06-06

Filename: \\na.aecomnet.com\lfs\EMEA\Manchester-UKMCR5\Legacy\UKMCR1FP002-V1\E\Proposal\3512\Immingham GET GIS\02_Maps\60687114_Immingham_NH3\Cross Sections\60687114_ACM_DR_RSGE_003_0_West_Cross_Section_3_20230606_EB.aprx

Location

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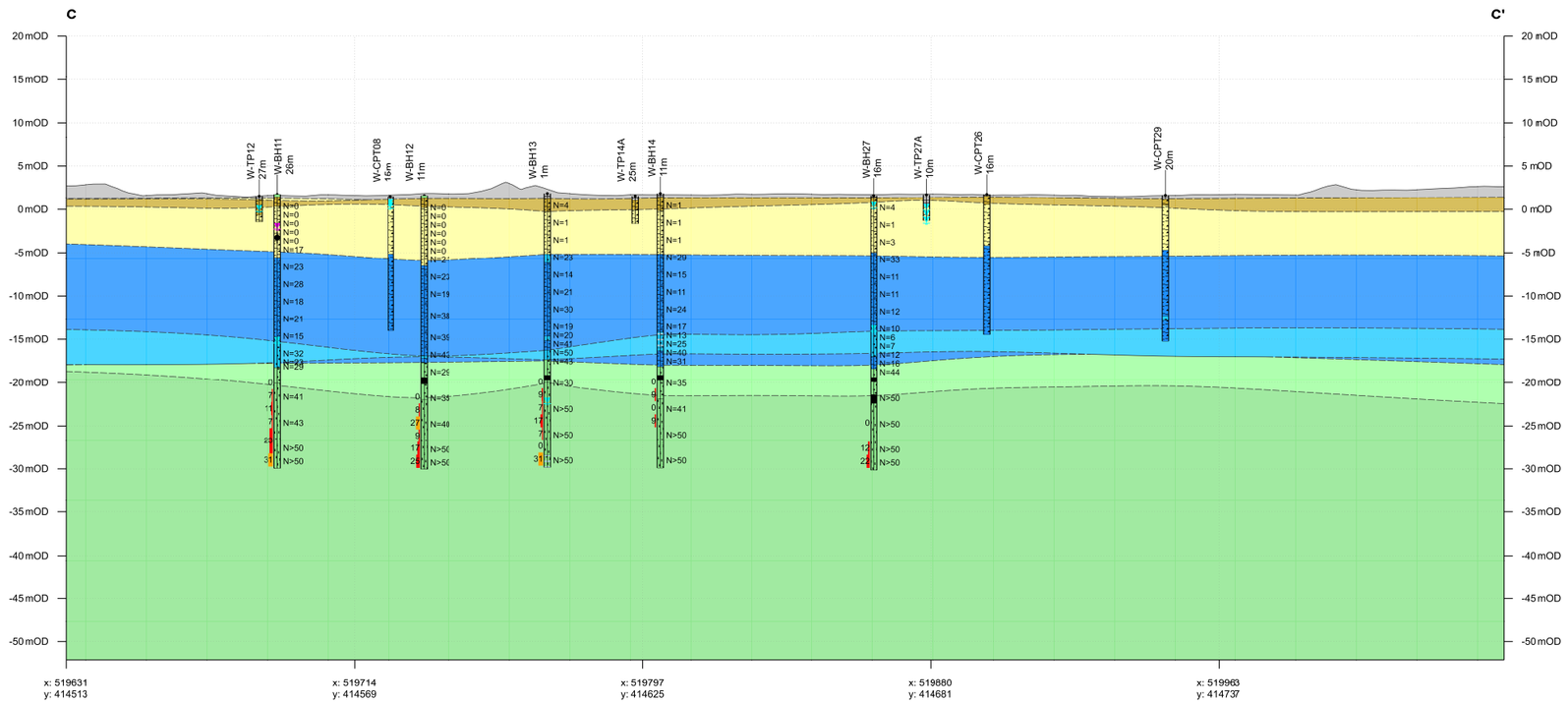
C': 520045, 414792



Legend

Ground Model Geology
- Made Ground
- Firm Tidal Flat Deposits
- Tidal Flat Deposits
- Glacial Till Deposits
- Granular Glacial Till Deposits
- Weathered Flamborough Chalk Formation
- Flamborough Chalk Formation

Hole Geology Code
MG, GTD, FCF, TFD2, GGTD, NR, TFD, WFCF

GeologyCode2
TS

Rock Quality Designation (%)
Value and bar on LHS of hole stick:
≤ 25, ≤ 90, ≤ 50, > 90, ≤ 75

Standpipe Response Zone
SP

Groundwater Strike
Strike_Level

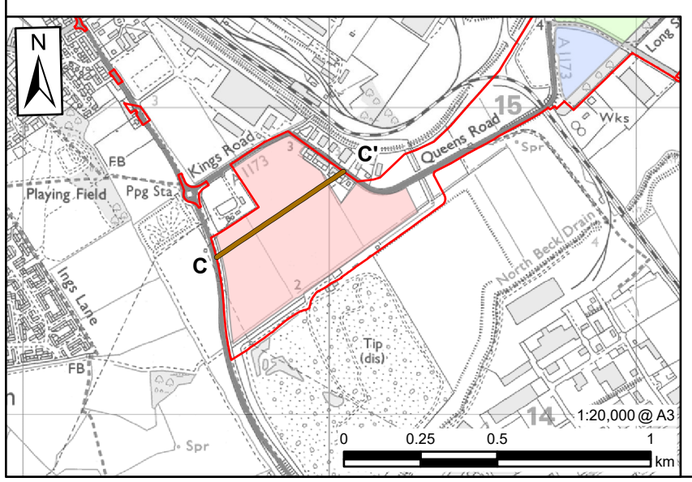
Groundwater Strike Monitored
Strike_Rise_Level_20 mins

Vibrating Wire Piezometers
Monitoring_Instrument_Level_Piezometers

Note - Hole Geology Code / Strata Names:
MG - Made Ground
TFD2 - Firm Tidal Flat Deposits
TFD - Tidal Flat Deposits
GTD - Glacial Till Deposits
GGTD - Granular Glacial Till Deposits
WFCF - Weathered Flamborough Chalk Formation
FCF - Flamborough Chalk Formation
NR - No Recovery

Standard Penetration Test Results
Value on RHS of hole stick:
N=[SPT N Value]
N>50 - Refusal

Scale: 1:2000
Vertical exaggeration: 3x
0m 100m



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CONSULTANT

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LEGEND
- Site Boundary
- Cross Section Line
- East Site – Ammonia Storage
- East Site – Hydrogen Production
- West Site

NOTES

1. DO NOT SCALE FROM THIS DRAWING.

2. THIS FIGURE SHOULD BE READ IN CONJUNCTION WITH THE FOLLOWING GEOTECHNICAL REPORT: AECOM(2023). GROUND INVESTIGATION REPORT FOR IMMINGHAM GREEN ENERGY TERMINAL. PROJECT NUMBER 60687114

3. ALL DIMENSIONS IN METRES (M) AND ALL ELEVATIONS/LEVELS IN METRES RELATIVE TO ORDNANCE DATUM (MOD) UNLESS NOTED OTHERWISE.

4. GROUND SURFACE SHOWN BASED ON LIDAR SURVEY UNDERTAKEN BY GEOTERRA LTD ON 14 AND 15 SEPTEMBER 2022.

5. THE GROUND INVESTIGATION (GI) DATA IS DISPLAYED FROM THE 2022/2023 GROUND INVESTIGATION CARRIED OUT AT THE IMMINGHAM GREEN ENERGY TERMINAL SITE. AP AMMONIA IMPORT TERMINAL. GROUND INVESTIGATION FACTUAL REPORT. PROJECT NUMBER. 60687114, MAY 2023.

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ISSUE PURPOSE

DRAFT

PROJECT NUMBER

60687114

FIGURE TITLE

Geological Cross Section
West Cross Section 3

FIGURE NUMBER

60687114_ACM_DR_RSGE_003_0

Revision: 1 Drawn: EB Checked: DF Approved: NF Date: 2023-06-06

Filename: \\na.aecomnet.com\fs\EMEA\Manchester-UKMCR5\Legacy\UKMCR1FP002-V1\E\Proposal\l3512\Immingham GET GIS\02_Maps\60687114_Immingham_NH3\Cross Sections\60687114_ACM_DR_RSGE_004_0_West_Cross_Section_4_20230606_EB.aprx

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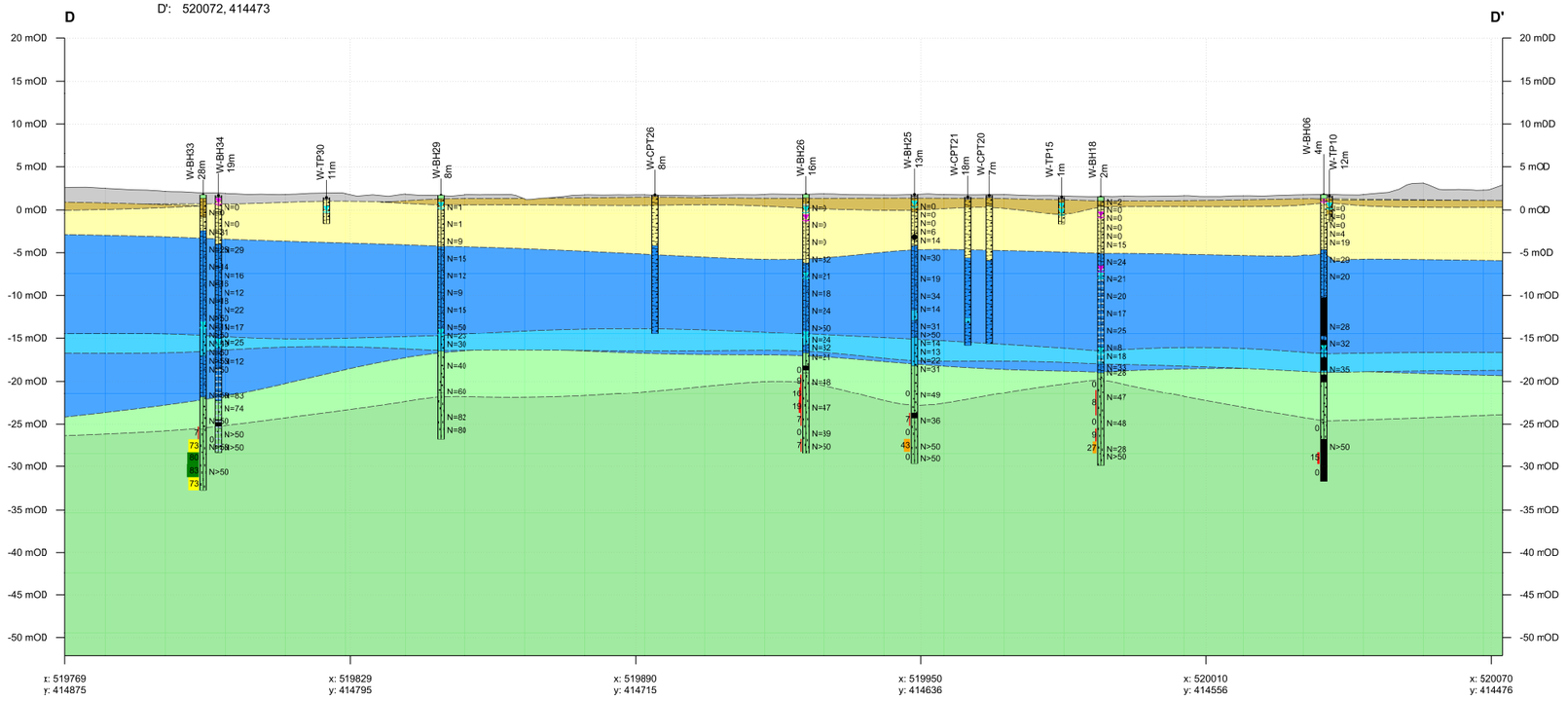

Legend

Ground Model Geology
- Made Ground
- Firm Tidal Flat Deposits
- Tidal Flat Deposits
- Glacial Till Deposits
- Granular Glacial Till Deposits
- Weathered Flamborough Chalk Formation
- Flamborough Chalk Formation

Hole Geology Code
MG, GTD, FCF, TFD2, GGTD, NR, TFD, WFCF

GeologyCode2
TS

Rock Quality Designation (%)
Value and bar on LHS of hole stick:
≤ 25, ≤ 90, ≤ 50, > 90, ≤ 75

Standpipe Response Zone
SP

Groundwater Strike
Strike_Level

Groundwater Strike Monitored
Strike_Rise_Level_20 mins

Vibrating Wire Piezometers
Monitoring_Instrument_Level_Piezometers

Note - Hole Geology Code / Strata Names:
MG - Made Ground
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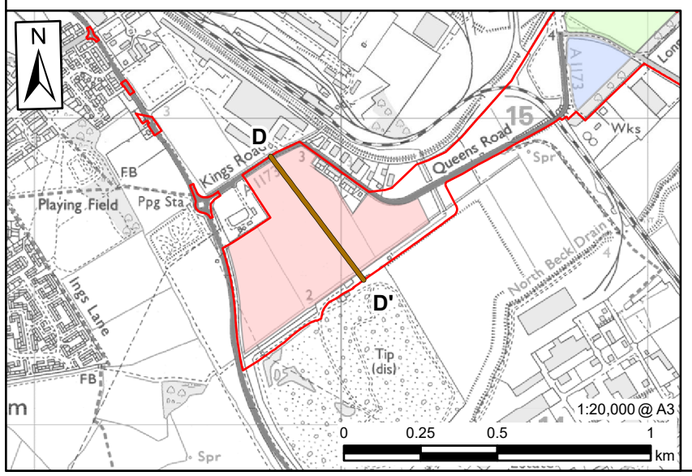
TFD - Tidal Flat Deposits
GTD - Glacial Till Deposits
GGTD - Granular Glacial Till Deposits
WFCF - Weathered Flamborough Chalk Formation
FCF - Flamborough Chalk Formation
NR - No Recovery

Standard Penetration Test Results
Value on RHS of hole stick:
N=[SPT N Value]
N>50 - Refusal

Scale: 1:2000
Vertical exaggeration: 3x
0m 100m



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PROJECT
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LEGEND
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- East Site – Hydrogen Production
- West Site

NOTES

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3. ALL DIMENSIONS IN METRES (M) AND ALL ELEVATIONS/LEVELS IN METRES RELATIVE TO ORDNANCE DATUM (MOD) UNLESS NOTED OTHERWISE.

4. GROUND SURFACE SHOWN BASED ON LIDAR SURVEY UNDERTAKEN BY GEOTERRA LTD ON 14 AND 15 SEPTEMBER 2022.

5. THE GROUND INVESTIGATION (GI) DATA IS DISPLAYED FROM THE 2022/2023 GROUND INVESTIGATION CARRIED OUT AT THE IMMINGHAM GREEN ENERGY TERMINAL SITE. AP AMMONIA IMPORT TERMINAL. GROUND INVESTIGATION FACTUAL REPORT. PROJECT NUMBER. 60687114, MAY 2023.

6. GEOLOGICAL BOUNDARIES INTERPRETED BASED ON FIELD DATA FROM THE 2022/2023 GI AT IMMINGHAM AND AN INTERPRETATIVE 3D MODEL. GEOLOGICAL BOUNDARIES SHOULD BE CONSIDERED AS AN INDICATIVE DISTRIBUTION BETWEEN EXPLORATORY HOLES ONLY. ACTUAL GROUND CONDITIONS AWAY FROM EXPLORATORY HOLES MAY VARY FROM THAT SHOWN.

7. GROUNDWATER STRIKES ARE SHOWN FOR THE LEVEL ENCOUNTERED ON SITE DURING GROUND INVESTIGATION DRILLING AND THE GROUNDWATER STRIKE LEVEL RECORDED AFTER 20 MINUTES STANDING TIME; THE GROUND INVESTIGATION FROM WHICH STRIKES ARE SHOWN OCCURED BETWEEN NOVEMBER 2022 AND APRIL 2023. ACTUAL GROUNDWATER LEVELS ON SITE MAY VARY, BOTH SPATIALLY AND SEASONALLY, FROM THOSE SHOWN.

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ISSUE PURPOSE
DRAFT

PROJECT NUMBER
60687114

FIGURE TITLE
Geological Cross Section
West Cross Section 4

FIGURE NUMBER
60687114_ACM_DR_RSGE_004_0

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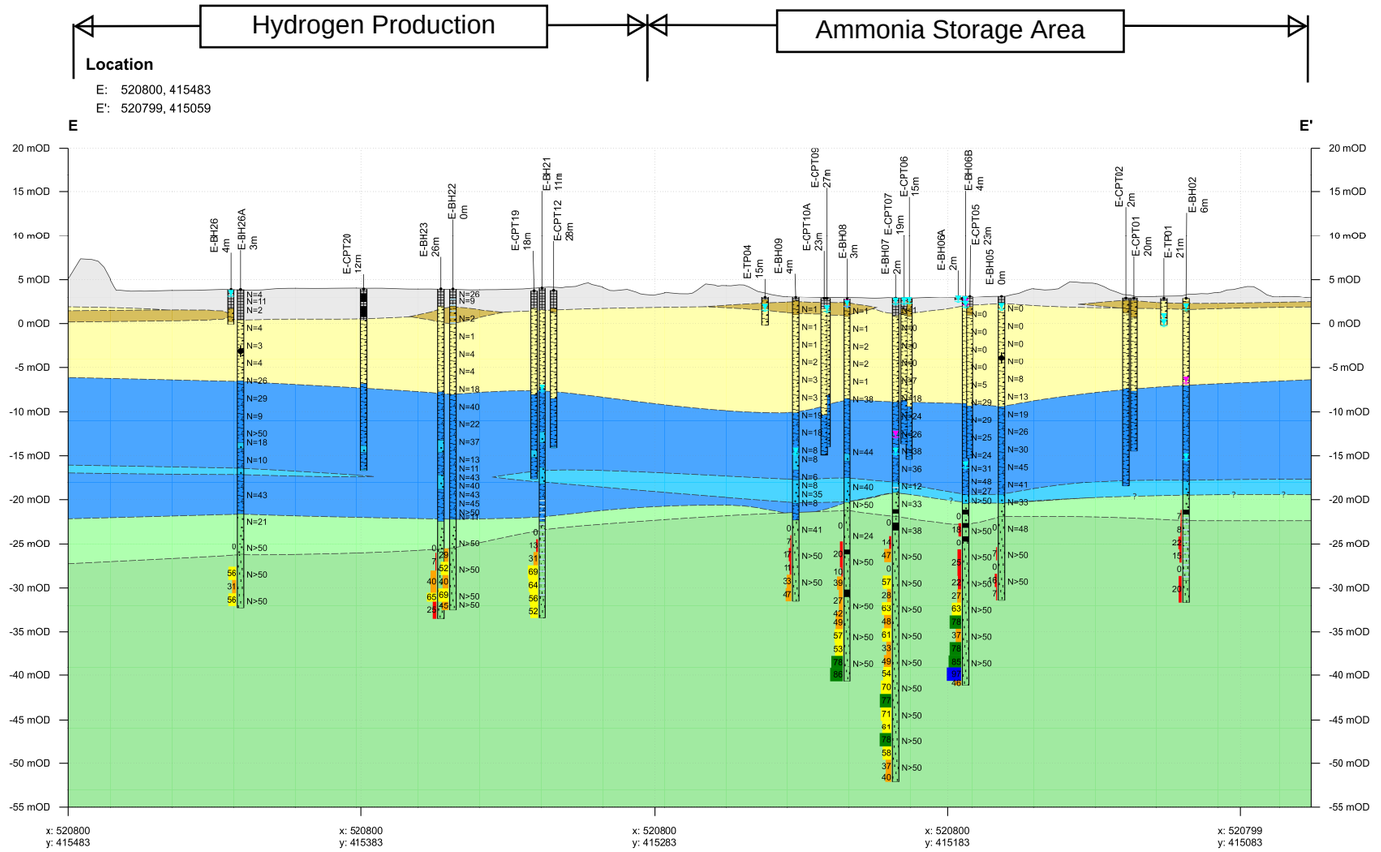


Legend

Ground Model Geology
- Made Ground
- Firm Tidal Flat Deposits
- Tidal Flat Deposits
- Glacial Till Deposits
- Granular Glacial Till Deposits
- Weathered Flamborough Chalk Formation
- Flamborough Chalk Formation

Hole Geology Code
MG, GTD, FCF, TFD2, GGTD, NR, TFD, WFCF

Rock Quality Designation (%)
Value and bar on LHS of hole stick:
≤ 25, ≤ 90, ≤ 50, > 90, ≤ 75

Standpipe Response Zone
SP

Groundwater Strike
Strike_Level

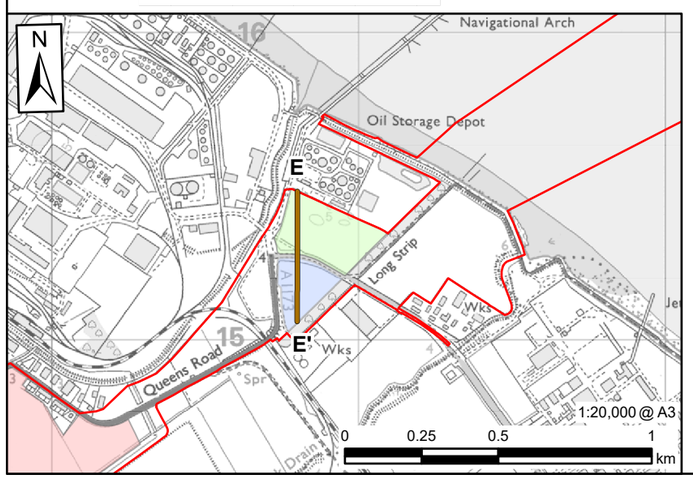
Groundwater Strike Monitored
Strike_Rise_Level_20 mins

Vibrating Wire Piezometers
Monitoring_Instrument_Level_Piezometers

Scale: 1:2000
Vertical exaggeration: 3x
0m 100m

Note - Hole Geology Code / Strata Names:
MG - Made Ground, TFD2 - Firm Tidal Flat Deposits
TFD - Tidal Flat Deposits
GTD - Glacial Till Deposits
GGTD - Granular Glacial Till Deposits
WFCF - Weathered Flamborough Chalk Formation
FCF - Flamborough Chalk Formation
NR - No Recovery

Standard Penetration Test Results
Value on RHS of hole stick:
N=[SPT N Value]
N>50 - Refusal



AECOM

PROJECT
Immingham Green Energy Terminal Ground Investigation

CLIENT
Air Products PLC

CONSULTANT
AECOM Limited
5th Floor
2 City Walk
Leeds, LS11 9AR
www.aecom.com

LEGEND
- Site Boundary
- Cross Section Line
- East Site – Ammonia Storage
- East Site – Hydrogen Production
- West Site

NOTES
1. DO NOT SCALE FROM THIS DRAWING.

2. THIS FIGURE SHOULD BE READ IN CONJUNCTION WITH THE FOLLOWING GEOTECHNICAL REPORT: AECOM(2023). GROUND INVESTIGATION REPORT FOR IMMINGHAM GREEN ENERGY TERMINAL. PROJECT NUMBER 60687114

3. ALL DIMENSIONS IN METRES (M) AND ALL ELEVATIONS/LEVELS IN METRES RELATIVE TO ORDNANCE DATUM (MOD) UNLESS NOTED OTHERWISE.

4. GROUND SURFACE SHOWN BASED ON LIDAR SURVEY UNDERTAKEN BY GEOTERRA LTD ON 14 AND 15 SEPTEMBER 2022.

5. THE GROUND INVESTIGATION (GI) DATA IS DISPLAYED FROM THE 2022/2023 GROUND INVESTIGATION CARRIED OUT AT THE IMMINGHAM GREEN ENERGY TERMINAL SITE. AP AMMONIA IMPORT TERMINAL. GROUND INVESTIGATION FACTUAL REPORT. PROJECT NUMBER. 60687114, MAY 2023.

6. GEOLOGICAL BOUNDARIES INTERPRETED BASED ON FIELD DATA FROM THE 2022/2023 GI AT IMMINGHAM AND AN INTERPRETATIVE 3D MODEL. GEOLOGICAL BOUNDARIES SHOULD BE CONSIDERED AS AN INDICATIVE DISTRIBUTION BETWEEN EXPLORATORY HOLES ONLY. ACTUAL GROUND CONDITIONS AWAY FROM EXPLORATORY HOLES MAY VARY FROM THAT SHOWN.

7. GROUNDWATER STRIKES ARE SHOWN FOR THE LEVEL ENCOUNTERED ON SITE DURING GROUND INVESTIGATION DRILLING AND THE GROUNDWATER STRIKE LEVEL RECORDED AFTER 20 MINUTES STANDING TIME; THE GROUND INVESTIGATION FROM WHICH STRIKES ARE SHOWN OCCURED BETWEEN NOVEMBER 2022 AND APRIL 2023. ACTUAL GROUNDWATER LEVELS ON SITE MAY VARY, BOTH SPATIALLY AND SEASONALLY, FROM THOSE SHOWN.

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ISSUE PURPOSE
DRAFT

PROJECT NUMBER
60687114

FIGURE TITLE
Geological Cross Section
East Cross Section 1

FIGURE NUMBER
60687114_ACM_DR_RSGE_005_0

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Revision: 1 Drawn: EB Checked: DF Approved: NF Date: 2023-06-06

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Revision: 1 Drawn: EB Checked: DF Approved: NF Date: 2023-06-06

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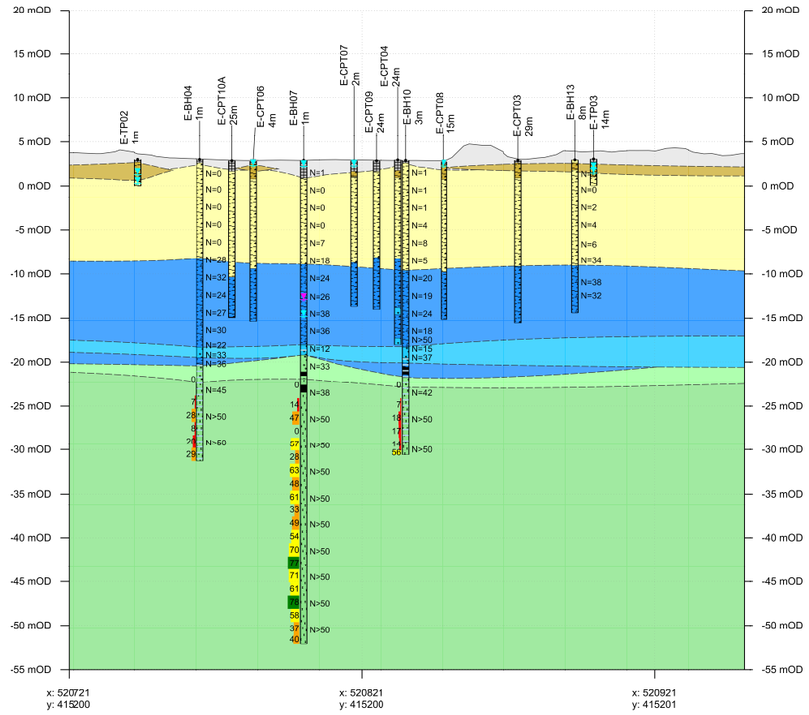


Legend

Ground Model Geology
- Made Ground
- Firm Tidal Flat Deposits
- Tidal Flat Deposits
- Glacial Till Deposits
- Granular Glacial Till Deposits
- Weathered Flamborough Chalk Formation
- Flamborough Chalk Formation

Hole Geology Code
MG, GTD, FCF, TFD2, GGTD, NR, TFD, WFCF

Rock Quality Designation (%)
Value and bar on LHS of hole stick:
≤ 25, ≤ 90, ≤ 50, > 90, ≤ 75

Standpipe Response Zone
SP

Groundwater Strike
Strike_Level

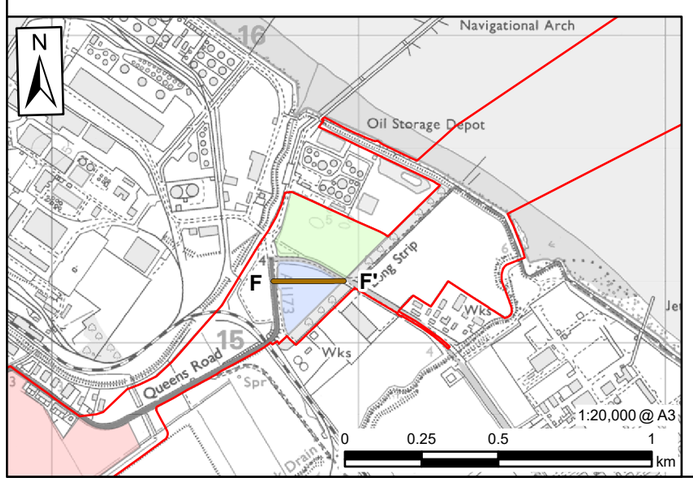
Groundwater Strike Monitored
Strike_Rise_Level_20 mins

Vibrating Wire Piezometers
Monitoring_Instrument_Level_Piezometers

Note - Hole Geology Code / Strata Names:
MG - Made Ground
TFD2 - Firm Tidal Flat Deposits
TFD - Tidal Flat Deposits
GTD - Glacial Till Deposits
GGTD - Granular Glacial Till Deposits
WFCF - Weathered Flamborough Chalk Formation
FCF - Flamborough Chalk Formation
NR - No Recovery

Standard Penetration Test Results
Value on RHS of hole stick:
N=[SPT N Value]
N>50 - Refusal

Scale: 1:2000
Vertical exaggeration: 3x
0m 100m



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PROJECT

Immingham Green Energy Terminal Ground Investigation

CLIENT

Air Products PLC

CONSULTANT

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5th Floor
2 City Walk
Leeds, LS11 9AR
www.aecom.com

LEGEND
- Site Boundary
- Cross Section Line
- East Site – Ammonia Storage
- East Site – Hydrogen Production
- West Site

NOTES

1. DO NOT SCALE FROM THIS DRAWING.

2. THIS FIGURE SHOULD BE READ IN CONJUNCTION WITH THE FOLLOWING GEOTECHNICAL REPORT: AECOM(2023). GROUND INVESTIGATION REPORT FOR IMMINGHAM GREEN ENERGY TERMINAL. PROJECT NUMBER 60687114

3. ALL DIMENSIONS IN METRES (M) AND ALL ELEVATIONS/LEVELS IN METRES RELATIVE TO ORDNANCE DATUM (MOD) UNLESS NOTED OTHERWISE.

4. GROUND SURFACE SHOWN BASED ON LIDAR SURVEY UNDERTAKEN BY GEOTERRA LTD ON 14 AND 15 SEPTEMBER 2022.

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7. GROUNDWATER STRIKES ARE SHOWN FOR THE LEVEL ENCOUNTERED ON SITE DURING GROUND INVESTIGATION DRILLING AND THE GROUNDWATER STRIKE LEVEL RECORDED AFTER 20 MINUTES STANDING TIME; THE GROUND INVESTIGATION FROM WHICH STRIKES ARE SHOWN OCCURED BETWEEN NOVEMBER 2022 AND APRIL 2023. ACTUAL GROUNDWATER LEVELS ON SITE MAY VARY, BOTH SPATIALLY AND SEASONALLY, FROM THOSE SHOWN.

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ISSUE PURPOSE

DRAFT

PROJECT NUMBER

60687114

FIGURE TITLE

Geological Cross Section
East Cross Section 2

FIGURE NUMBER

60687114_ACM_DR_RSGE_006_0

Revision: 1 Drawn: EB Checked: DF Approved: NF Date: 2023-06-06

Filename: \\na.aecomnet.com\fs\EMEA\Manchester-UKMCR5\Legacy\UKMCR1FP002-V1\EIProposal\13512\Immingham GET GIS\02_Maps\60687114_Immingham_NH3\Cross Sections\60687114_ACM_DR_RSGE_007_0_East_Cross_Section_3_20230606_EB.aprx

Location

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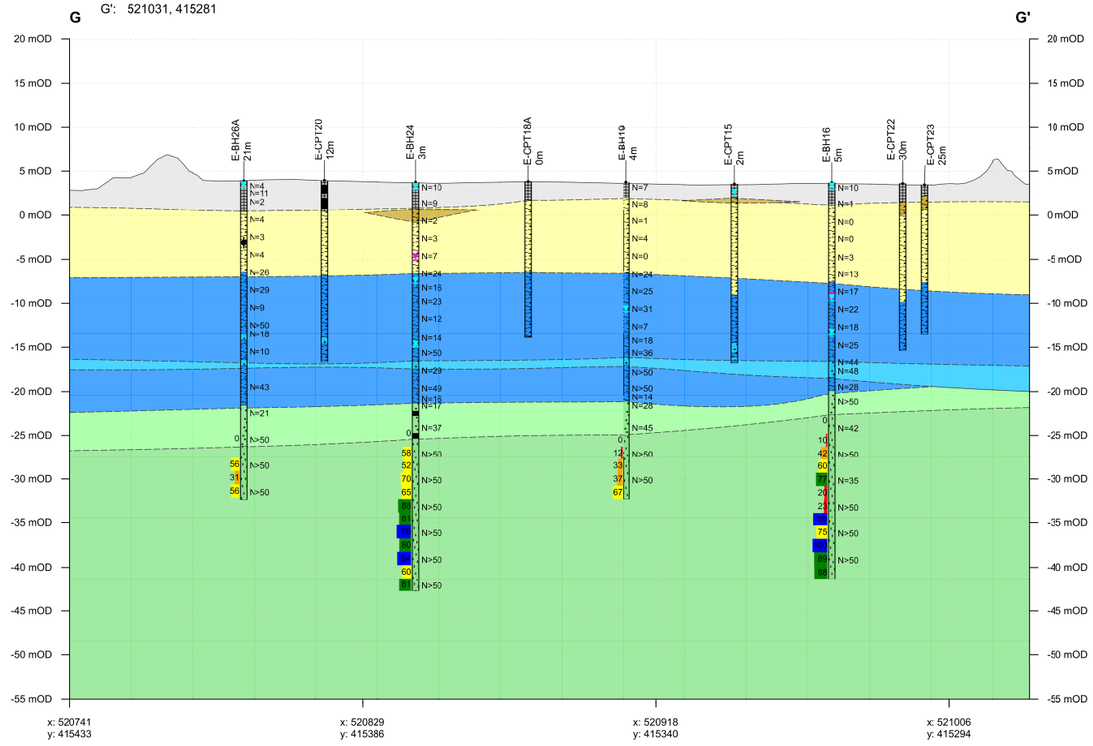
G': 521031, 415281



Legend

Ground Model Geology
- Made Ground
- Firm Tidal Flat Deposits
- Tidal Flat Deposits
- Glacial Till Deposits
- Granular Glacial Till Deposits
- Weathered Flamborough Chalk Formation
- Flamborough Chalk Formation

Hole Geology Code
MG, GTD, FCF, TFD2, GGTD, NR, TFD, WFCF

Rock Quality Designation (%)
Value and bar on LHS of hole stick:
≤ 25, ≤ 90, ≤ 50, > 90, ≤ 75

Standpipe Response Zone
- SP

Groundwater Strike
- Strike_Level

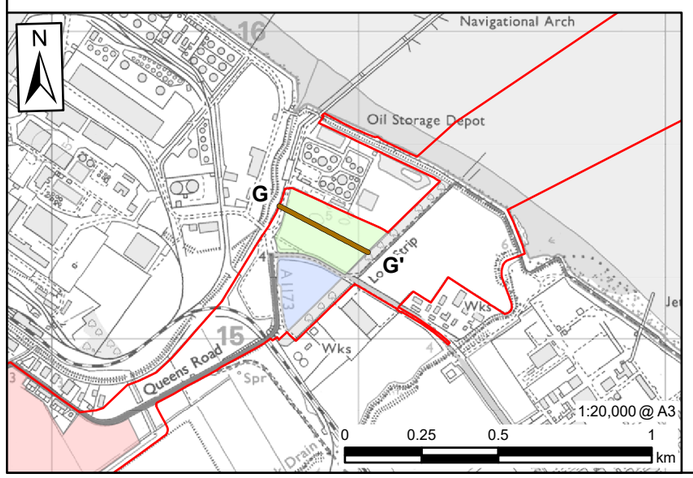
Groundwater Strike Monitored
- Strike_Rise_Level_20 mins

Vibrating Wire Piezometers
- Monitoring_Instrument_Level_Piezometers

Note - Hole Geology Code / Strata Names:
MG - Made Ground
TFD2 - Firm Tidal Flat Deposits
TFD - Tidal Flat Deposits
GTD - Glacial Till Deposits
GGTD - Granular Glacial Till Deposits
WFCF - Weathered Flamborough Chalk Formation
FCF - Flamborough Chalk Formation
NR - No Recovery

Standard Penetration Test Results
Value on RHS of hole stick:
N=[SPT N Value]
N>50 - Refusal

Scale: 1:2000
Vertical exaggeration: 3x
0m 100m



AECOM

PROJECT
Immingham Green Energy Terminal Ground Investigation

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LEGEND
- Site Boundary
- Cross Section Line
- East Site – Ammonia Storage
- East Site – Hydrogen Production
- West Site

NOTES
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2. THIS FIGURE SHOULD BE READ IN CONJUNCTION WITH THE FOLLOWING GEOTECHNICAL REPORT: AECOM(2023). GROUND INVESTIGATION REPORT FOR IMMINGHAM GREEN ENERGY TERMINAL. PROJECT NUMBER 60687114

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ISSUE PURPOSE
DRAFT

PROJECT NUMBER
60687114

FIGURE TITLE
Geological Cross Section
East Cross Section 3

FIGURE NUMBER
60687114_ACM_DR_RSGE_007_0

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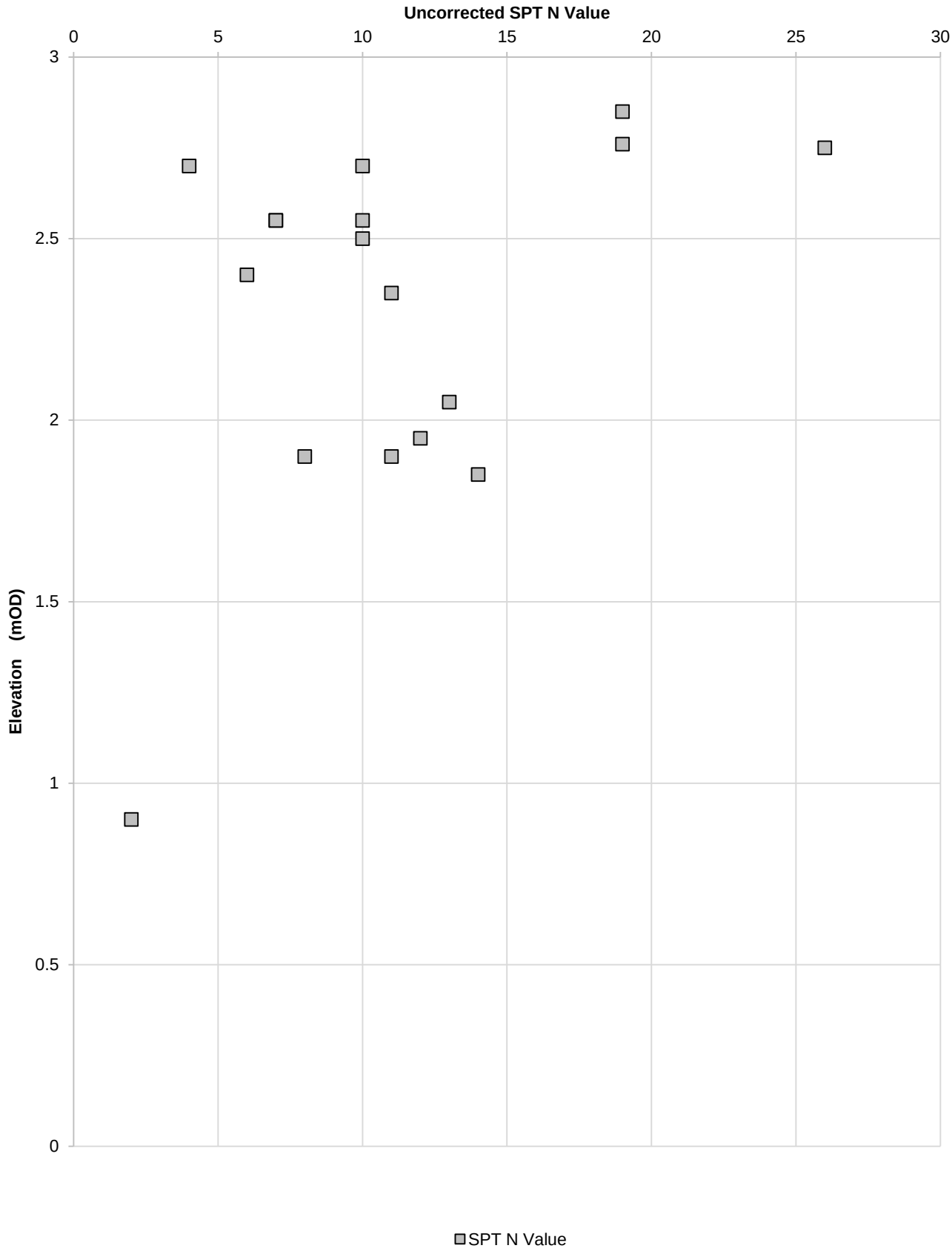
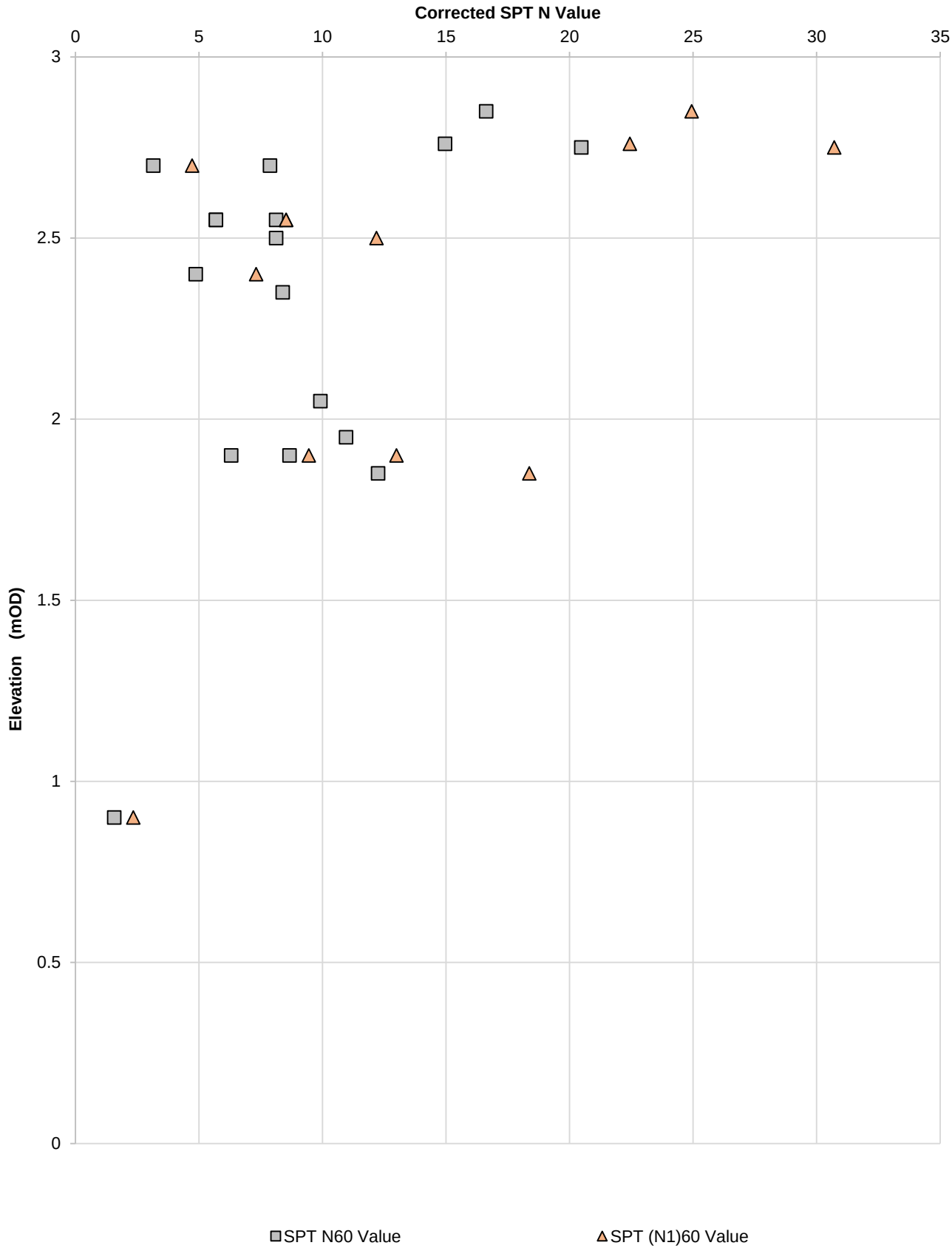
Appendix D Geotechnical Properties Figures



Title:	East Site Hydrogen Production: Uncorrected SPT N Value by Elevation for Made Ground	**Figure No.:**	D.1
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

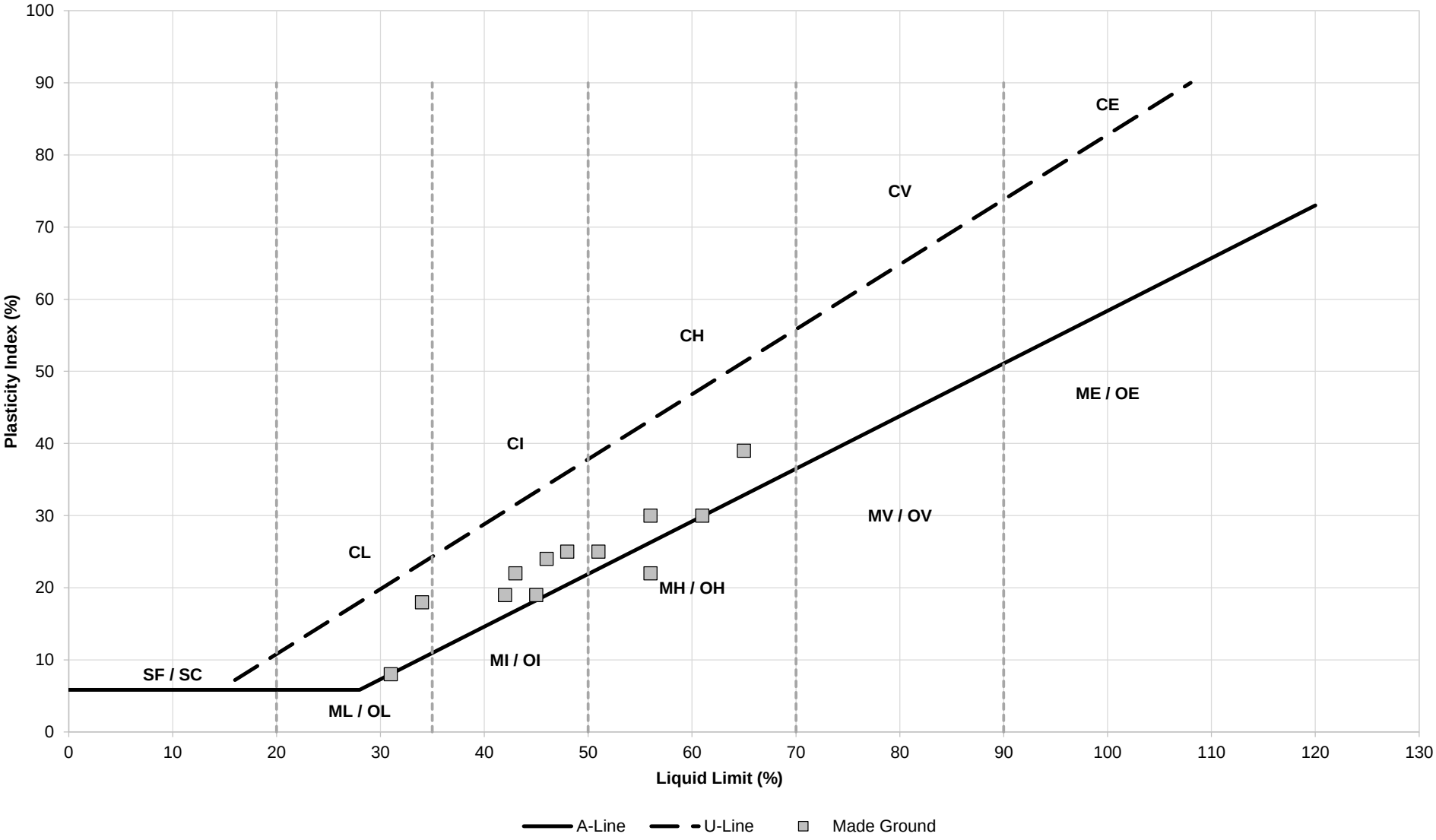
AECOM



Title:	East Site Hydrogen Production: Corrected SPT N Value by Elevation for Made Ground	**Figure No.:**	D.2
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

AECOM

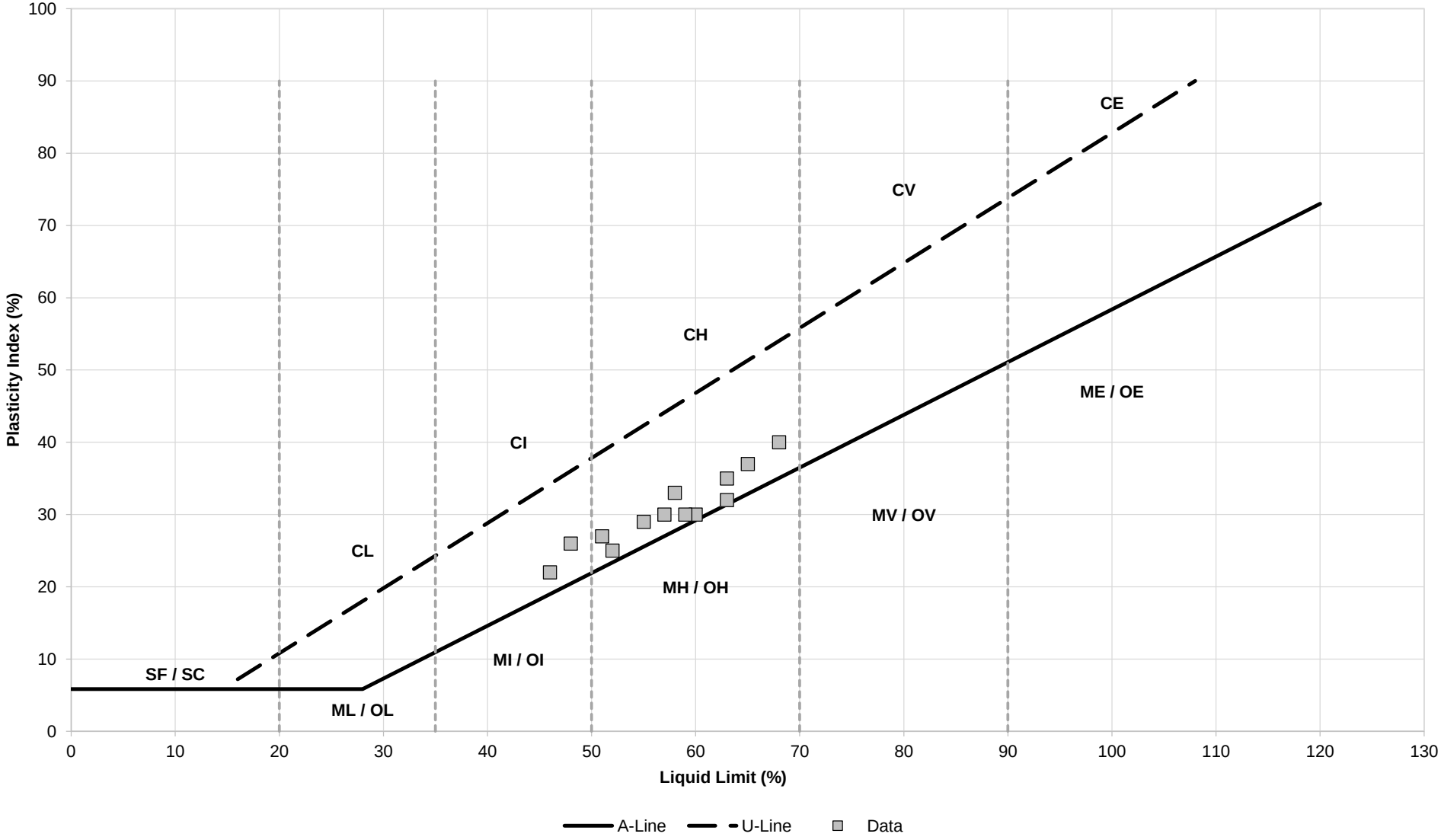
Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



Title:	East Site - Hydrogen Production - Plasticity chart - Made Ground					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.3	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	P01	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

AECOM

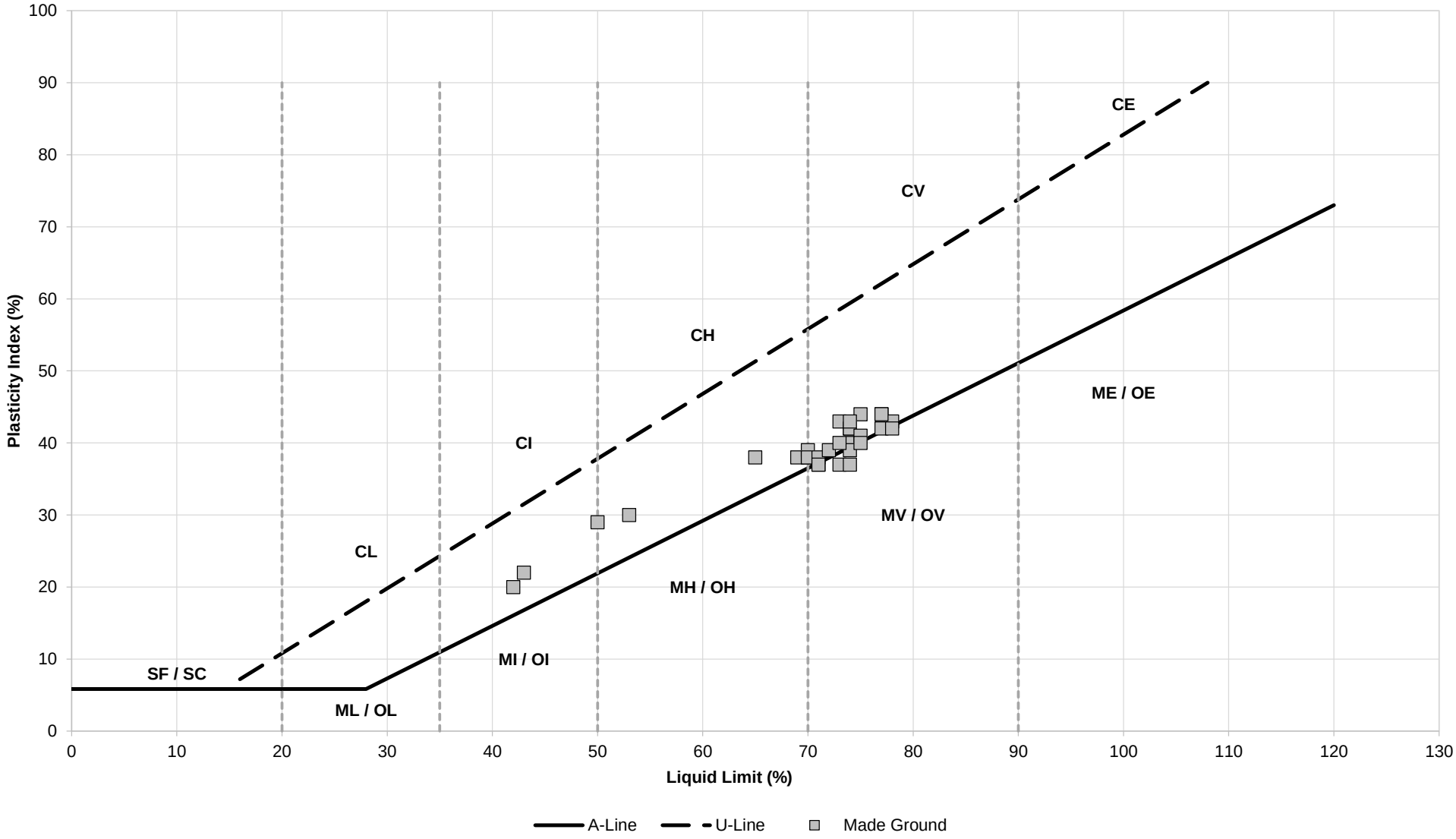
Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



Title:	East Site - Ammonia Storage - Plasticity chart - Made Ground					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.4	**Author:**	CC	**Date:**	June-23	**Location:**	Immingham
Revision:	P01	**Checker:**	DW	**Date:**	June-23	**Client:**	Air Products

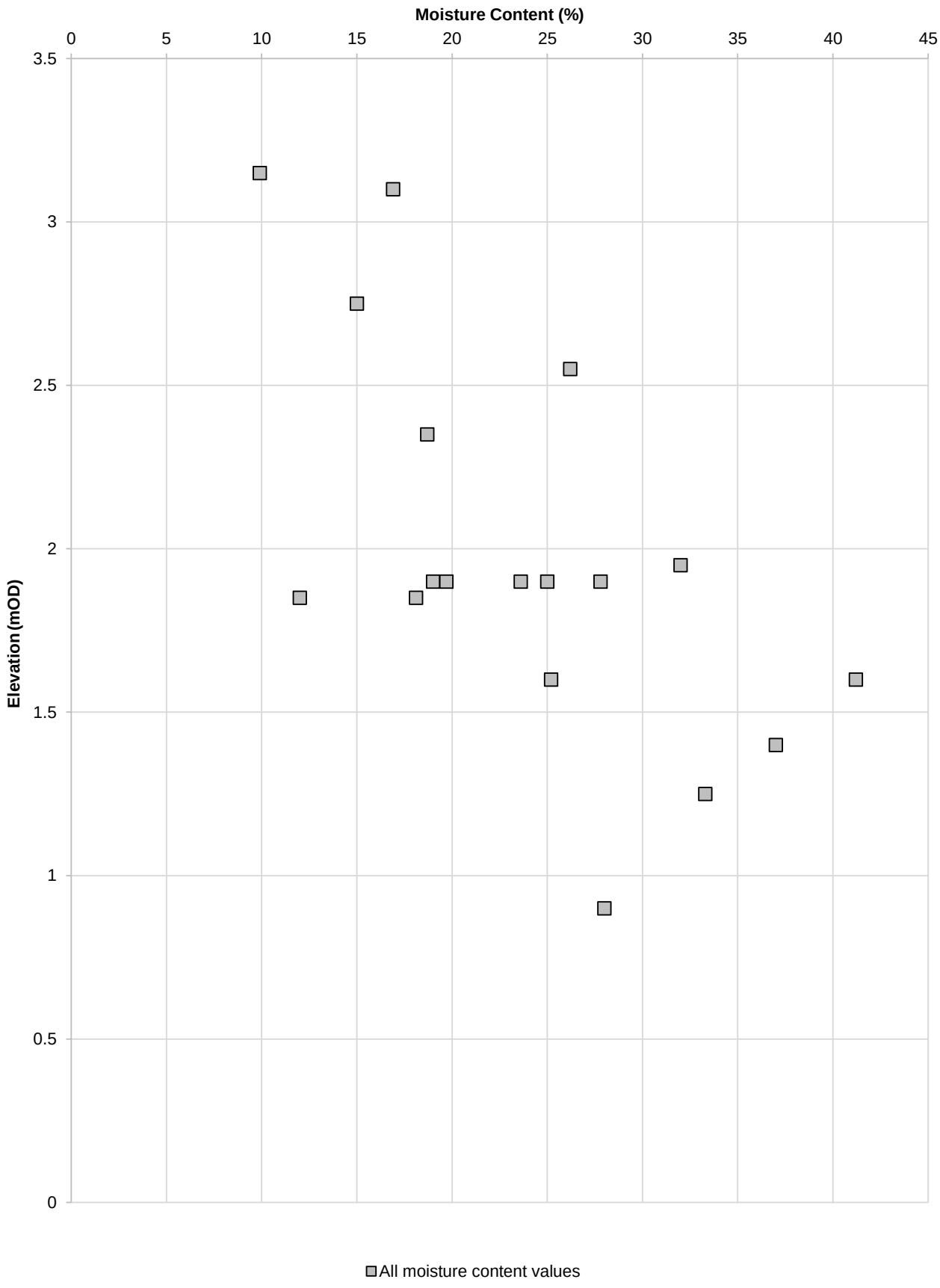
AECOM

Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



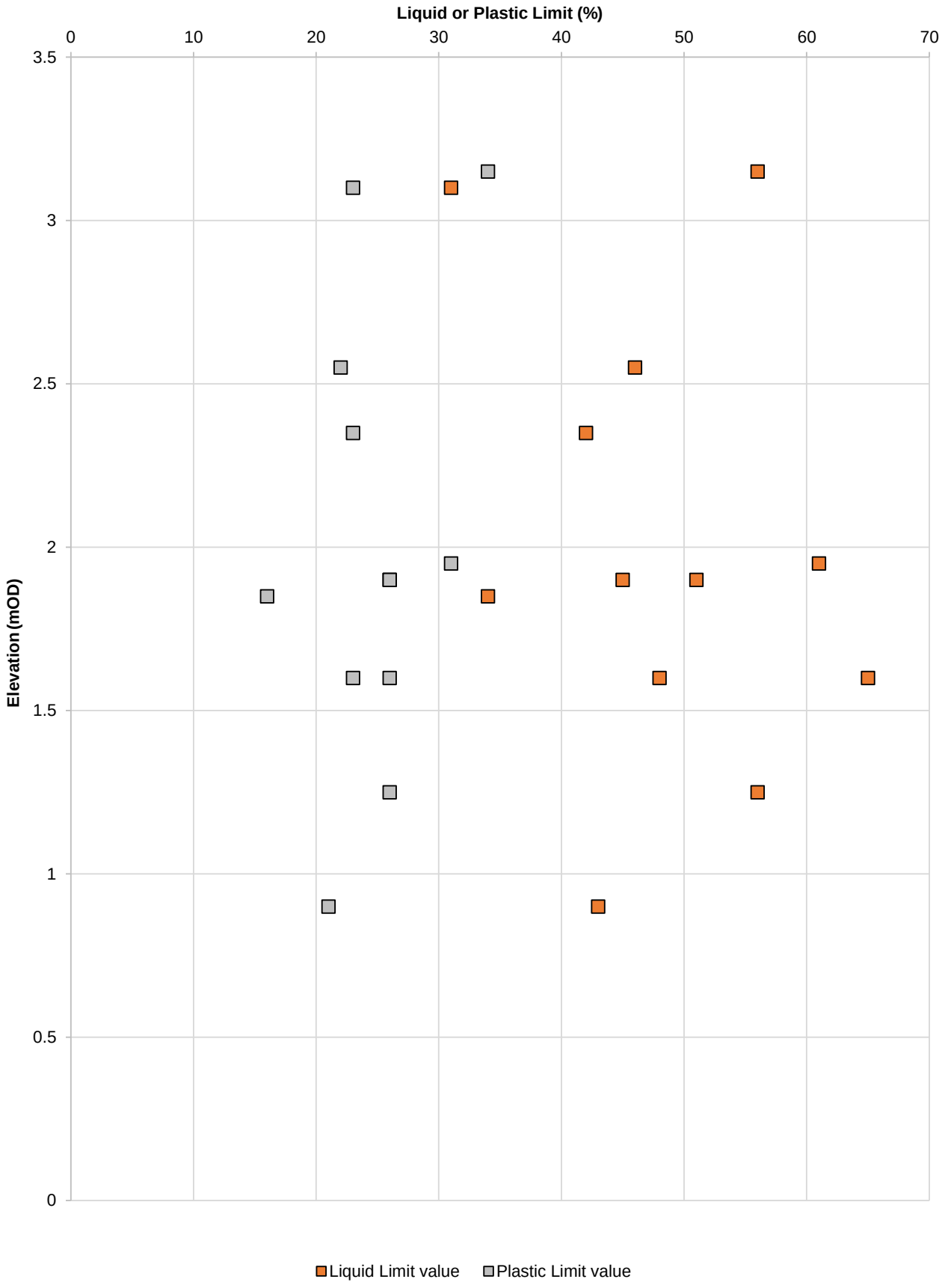
Title:	West Site - Plasticity chart - Made Ground					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.5	**Author:**	CC	**Date:**	June-23	**Location:**	Immingham
Revision:	P01	**Checker:**	DW	**Date:**	June-23	**Client:**	Air Products

AECOM



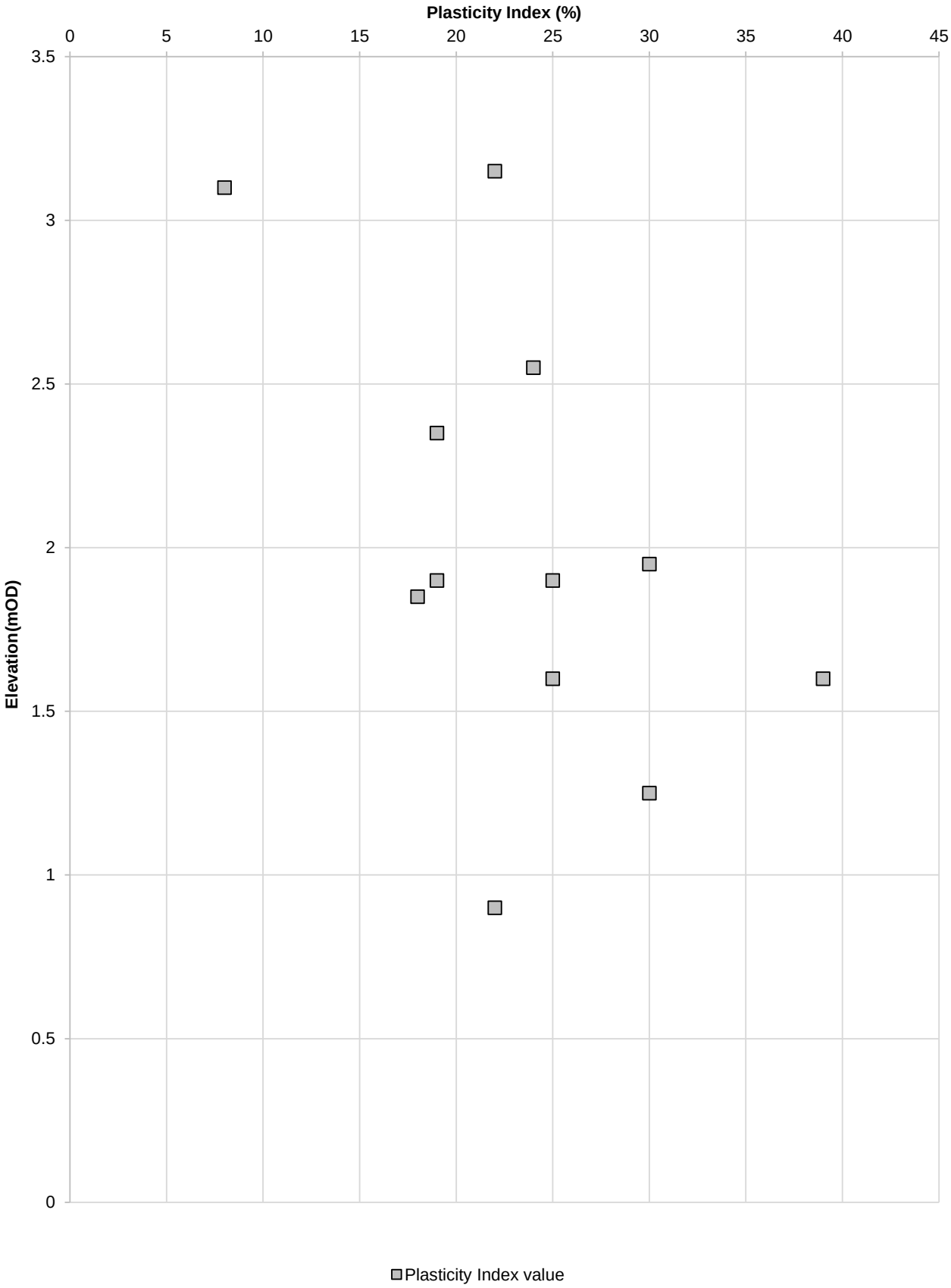
Title:	East Site - Hydrogen Production: Moisture content by Elevation for Made Ground	**Fig No.:**	D.6
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



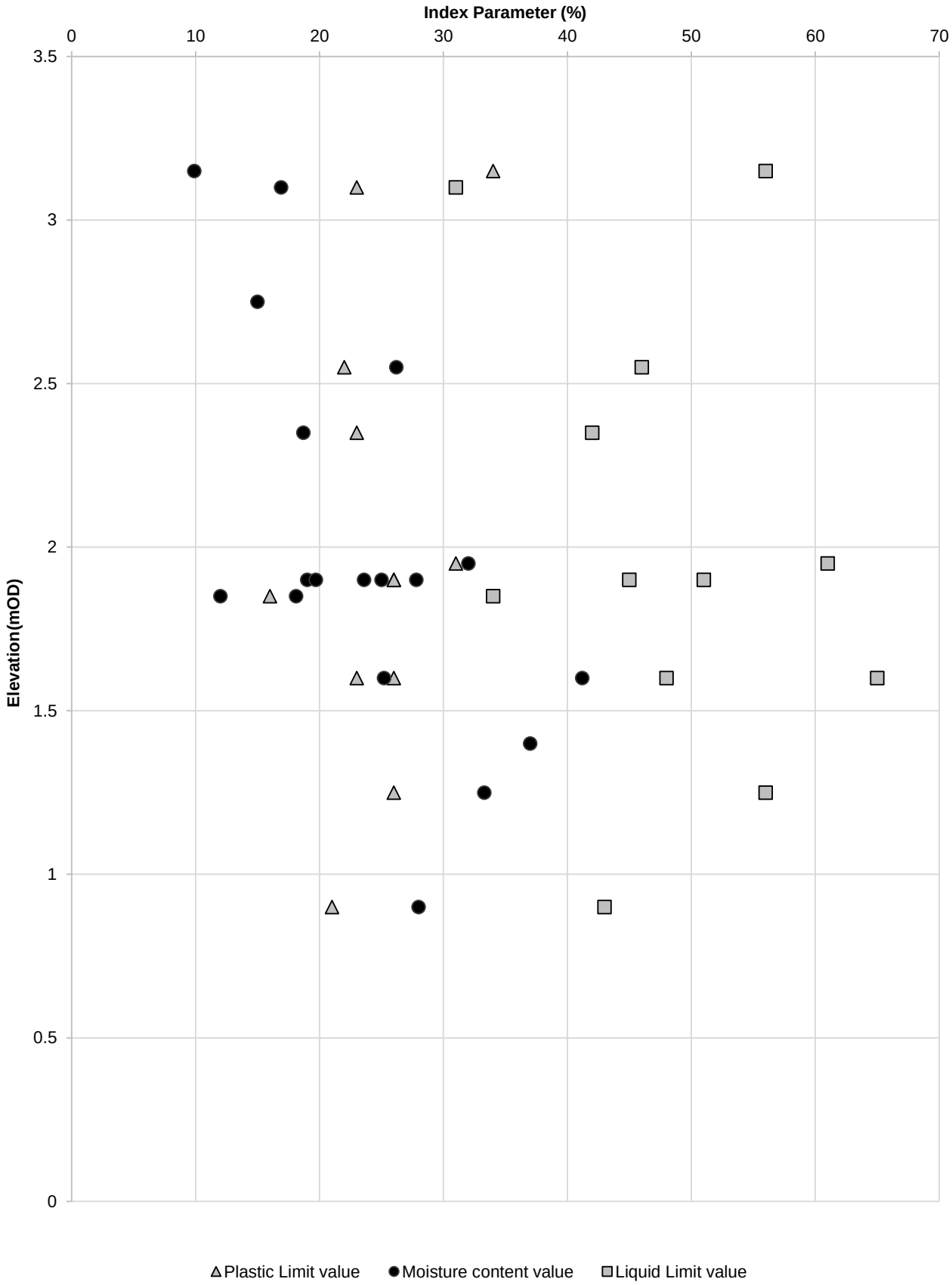
Title:	East Site - Hydrogen Production: Liquid Limit and Plastic Limit by Elevation for Made Ground	**Fig No.:**	D.7
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



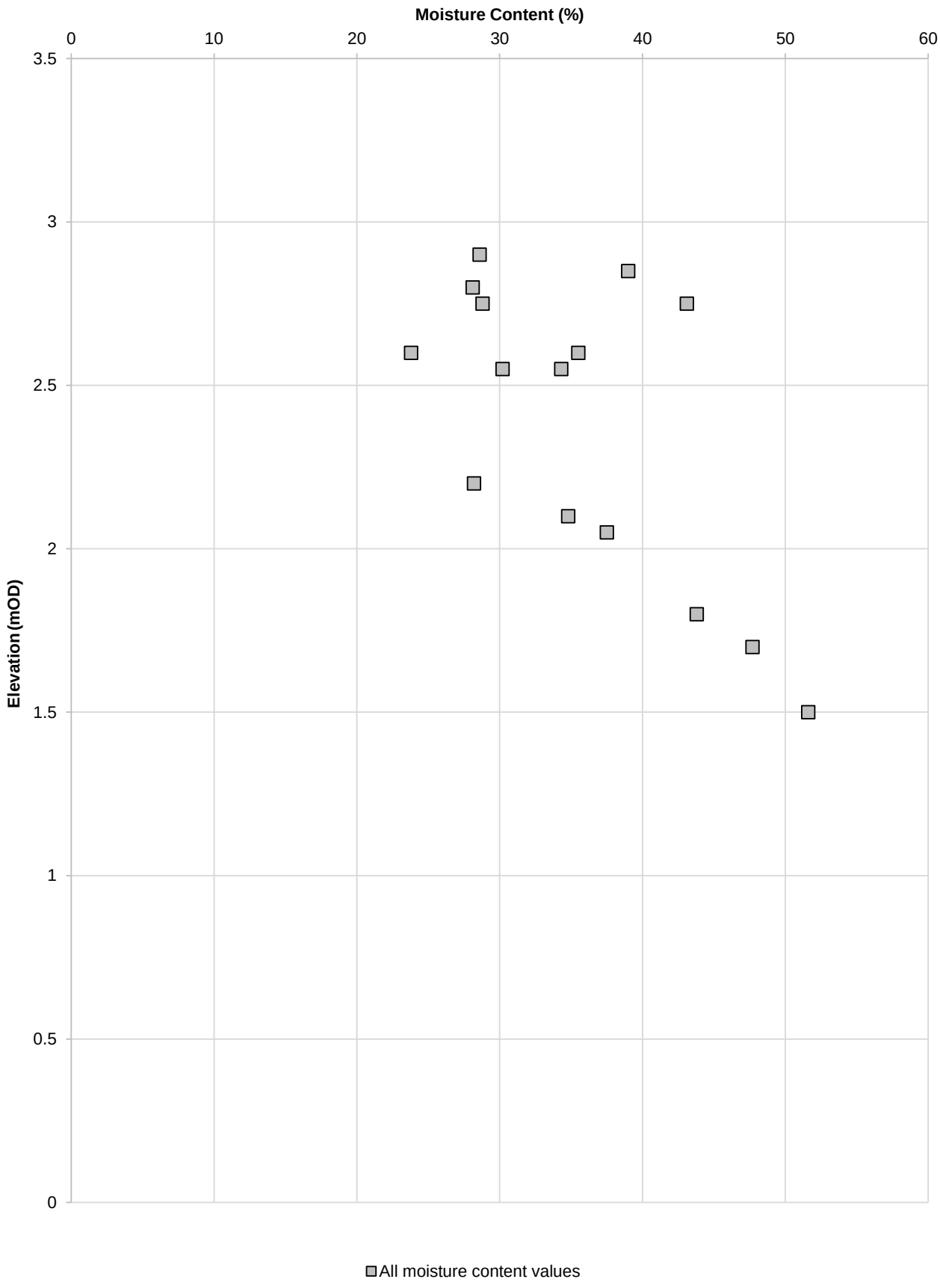
Title:	East Site - Hydrogen Production: Plasticity Index by Elevation for Made Ground	**Fig No.:**	D.8
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



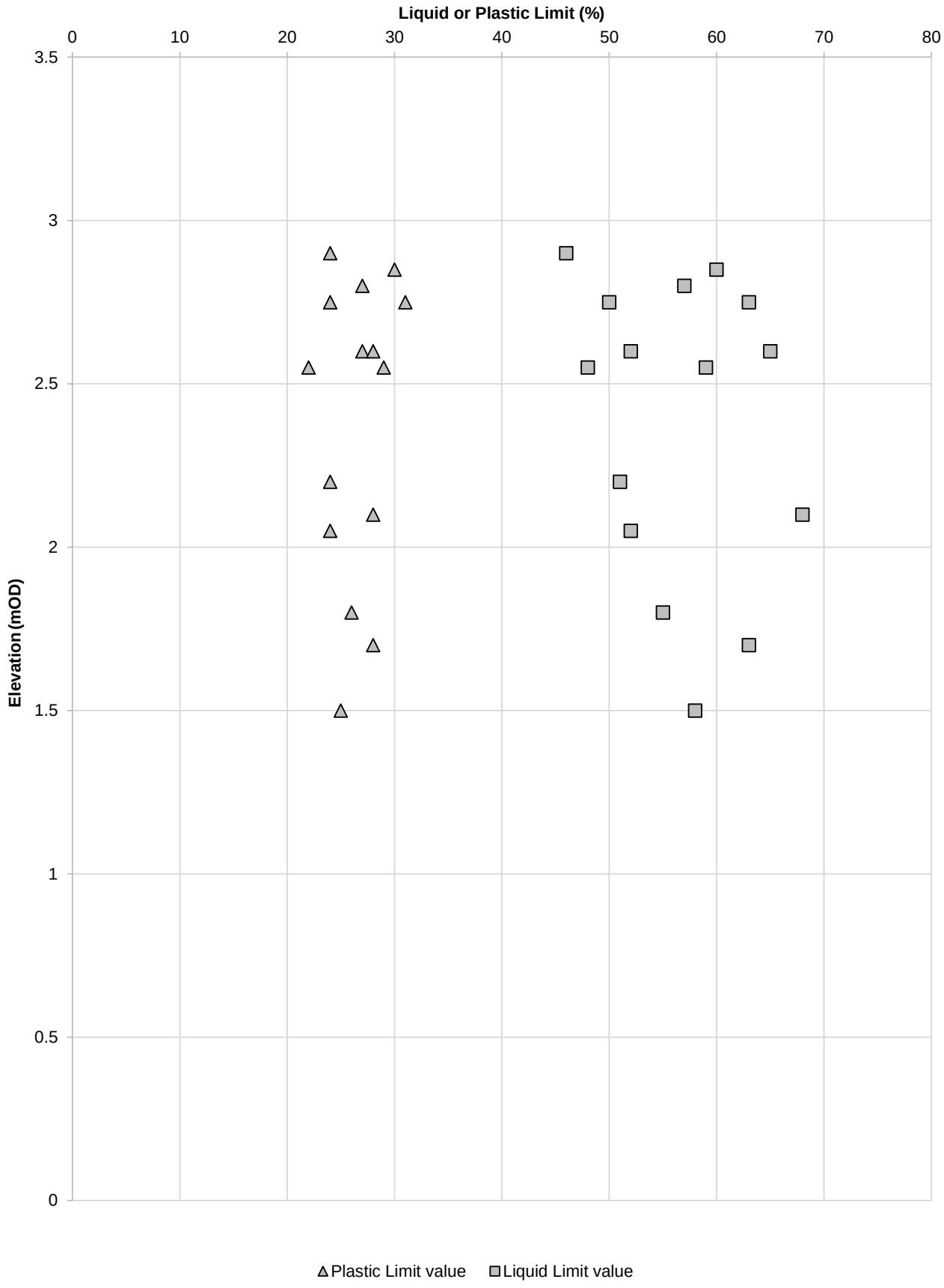
Title:	East Site - Hydrogen Production: Moisture content & Atterberg Limits by Elevation - Made Ground	**Fig No.:**	D.9
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



Title:	East Site Ammonia Storage - Moisture content by Elevation for Made Ground	**Figure No.:**	D.10
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



Title:	East Site Ammonia Storage - Liquid Limit and Plastic Limit by Elevation for Made Ground	**Figure No.:**	D.11
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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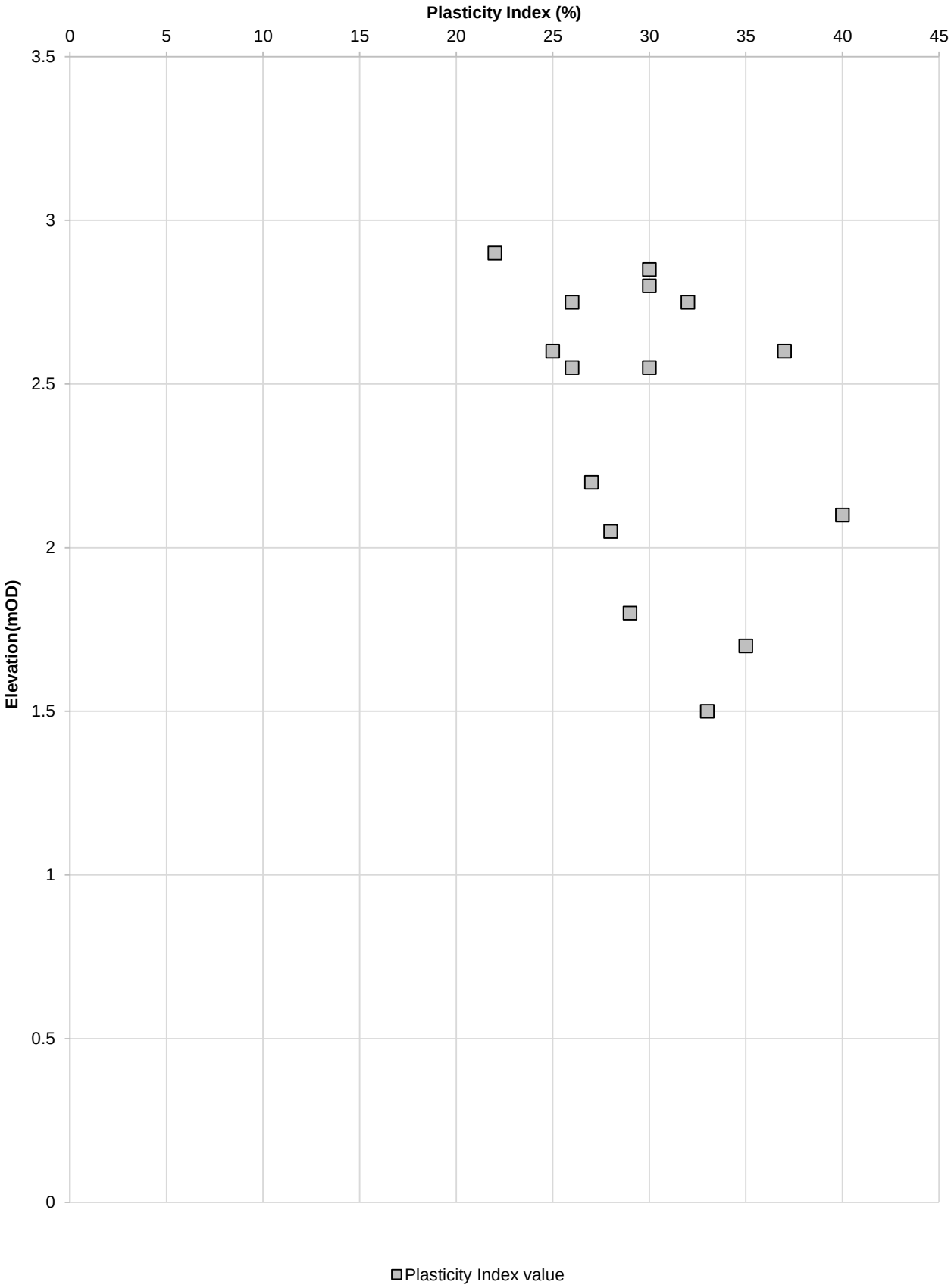

Title:	East Site Ammonia Storage - Plasticity Index by Elevation for Made Ground	**Figure No.:**	D.12
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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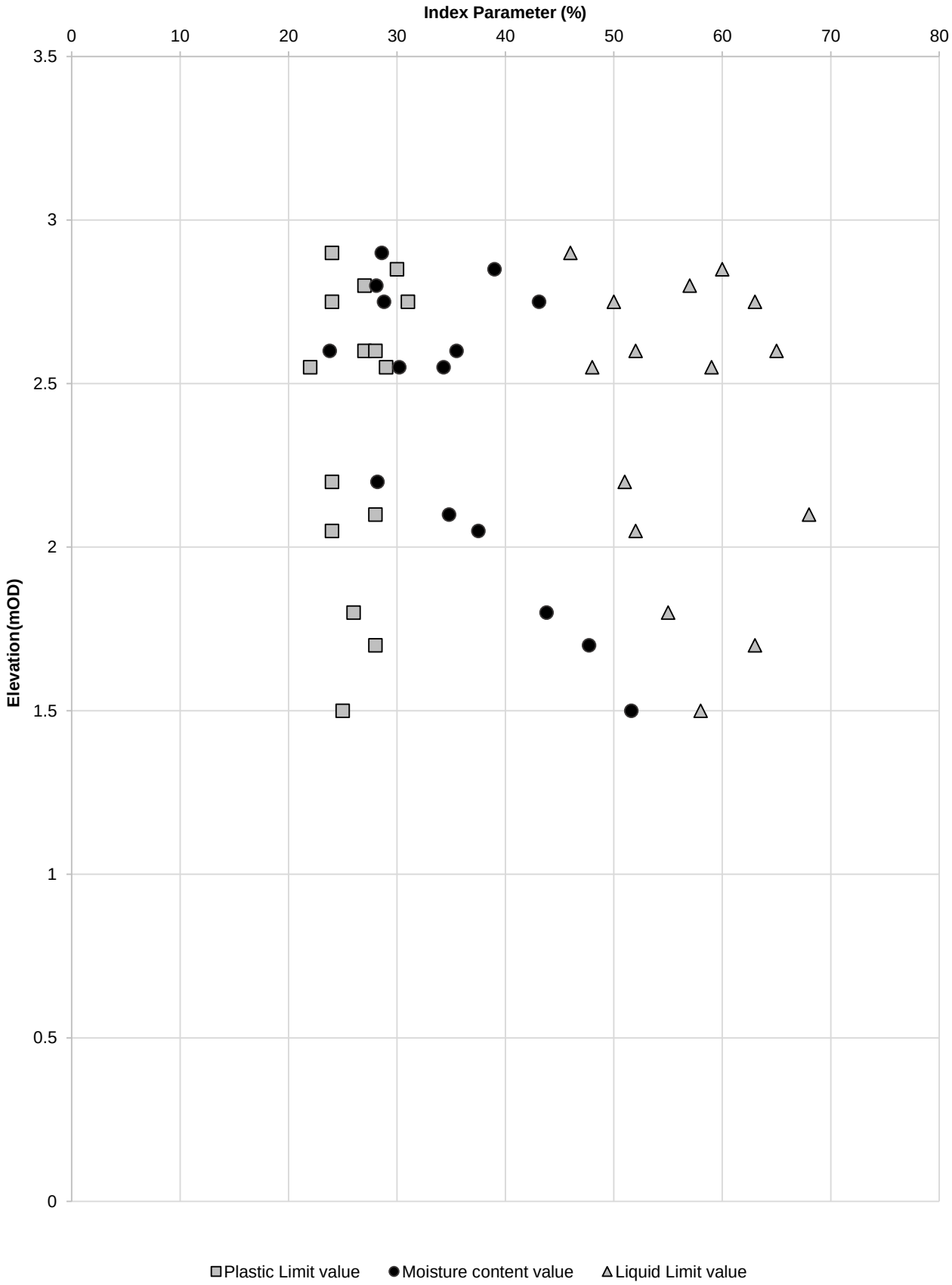

Title:	East Site Ammonia Storage - Moisture content & Atterberg Limits by Elevation - Made Ground	**Figure No.:**	D.13
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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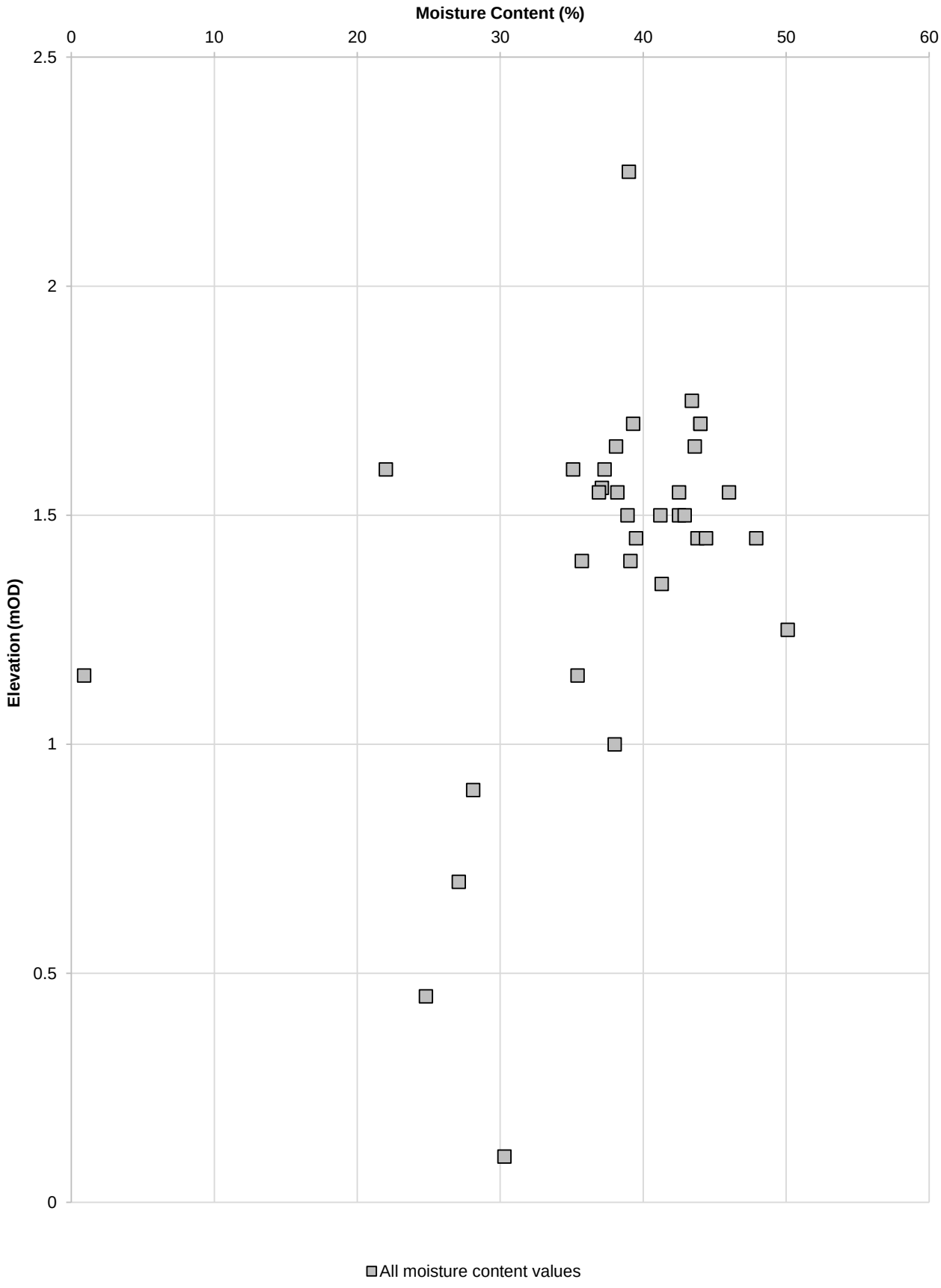

Title:	West Site - Moisture content by Elevation for Made Ground	**Fig No.:**	D.14
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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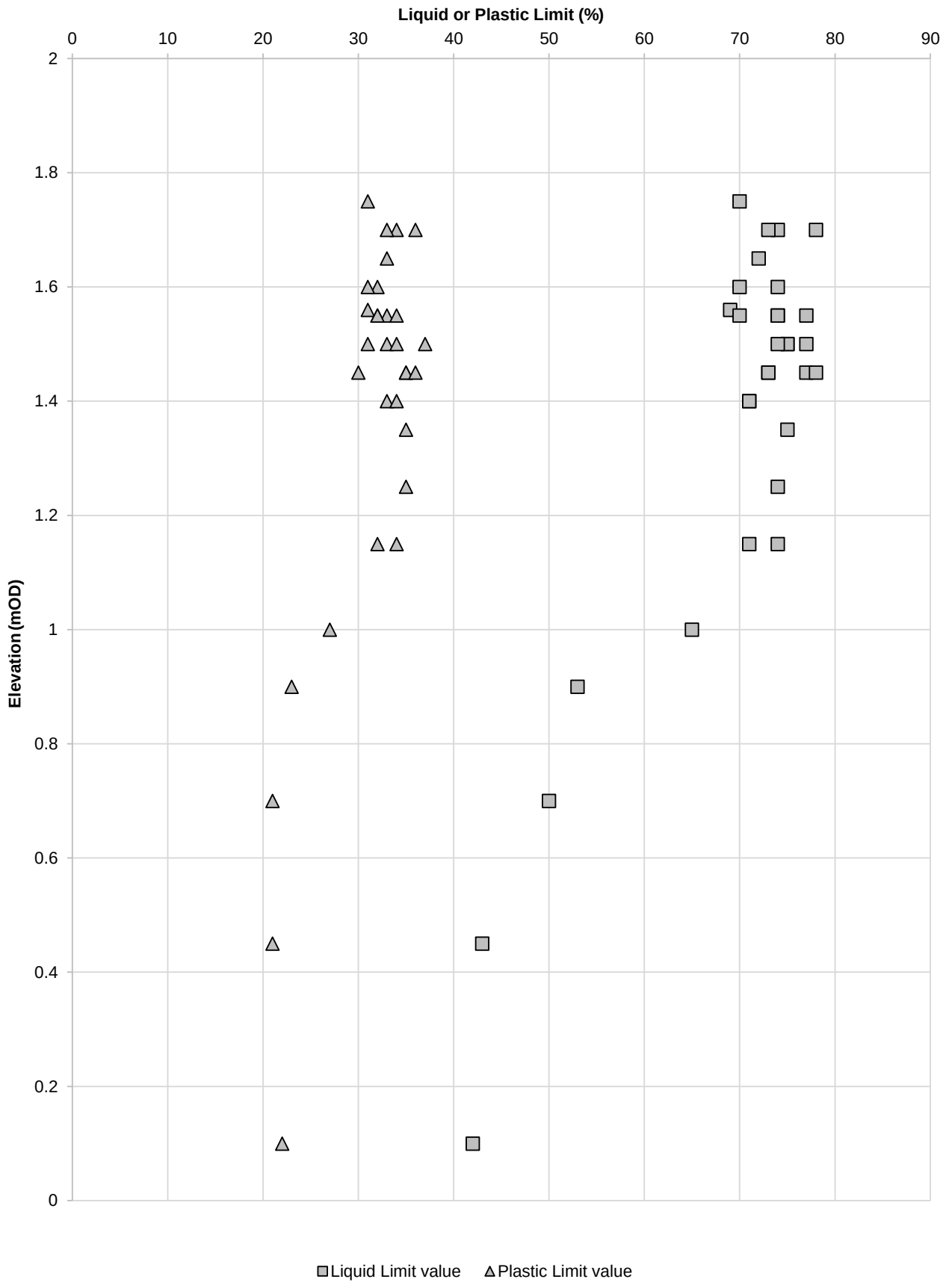

Title:	West Site - Liquid Limit and Plastic Limit by Elevation for Made Ground	**Fig No.:**	D.15
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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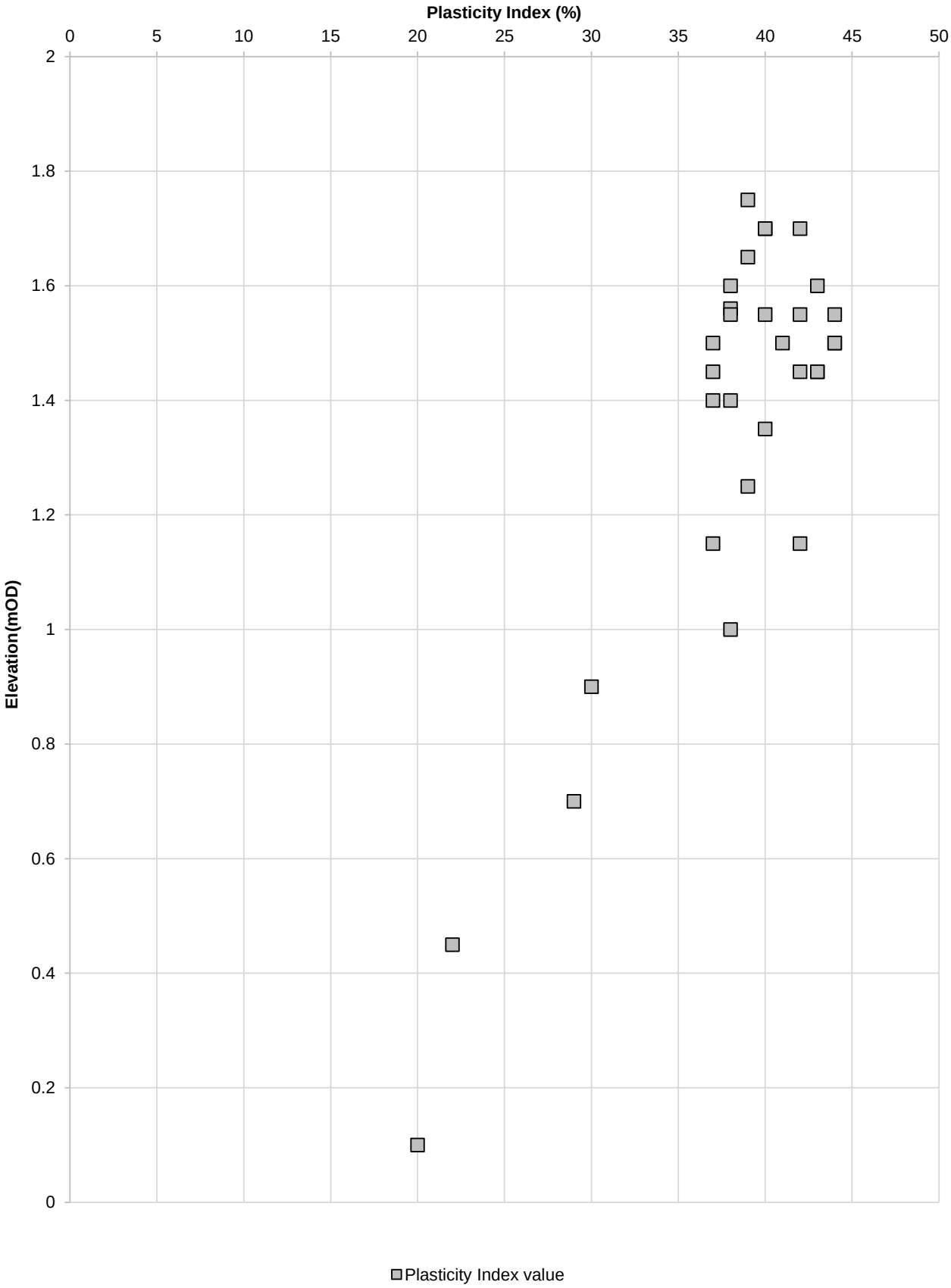

Title:	West Site - Plasticity Index by Elevation for Made Ground	**Fig No.:**	D.16
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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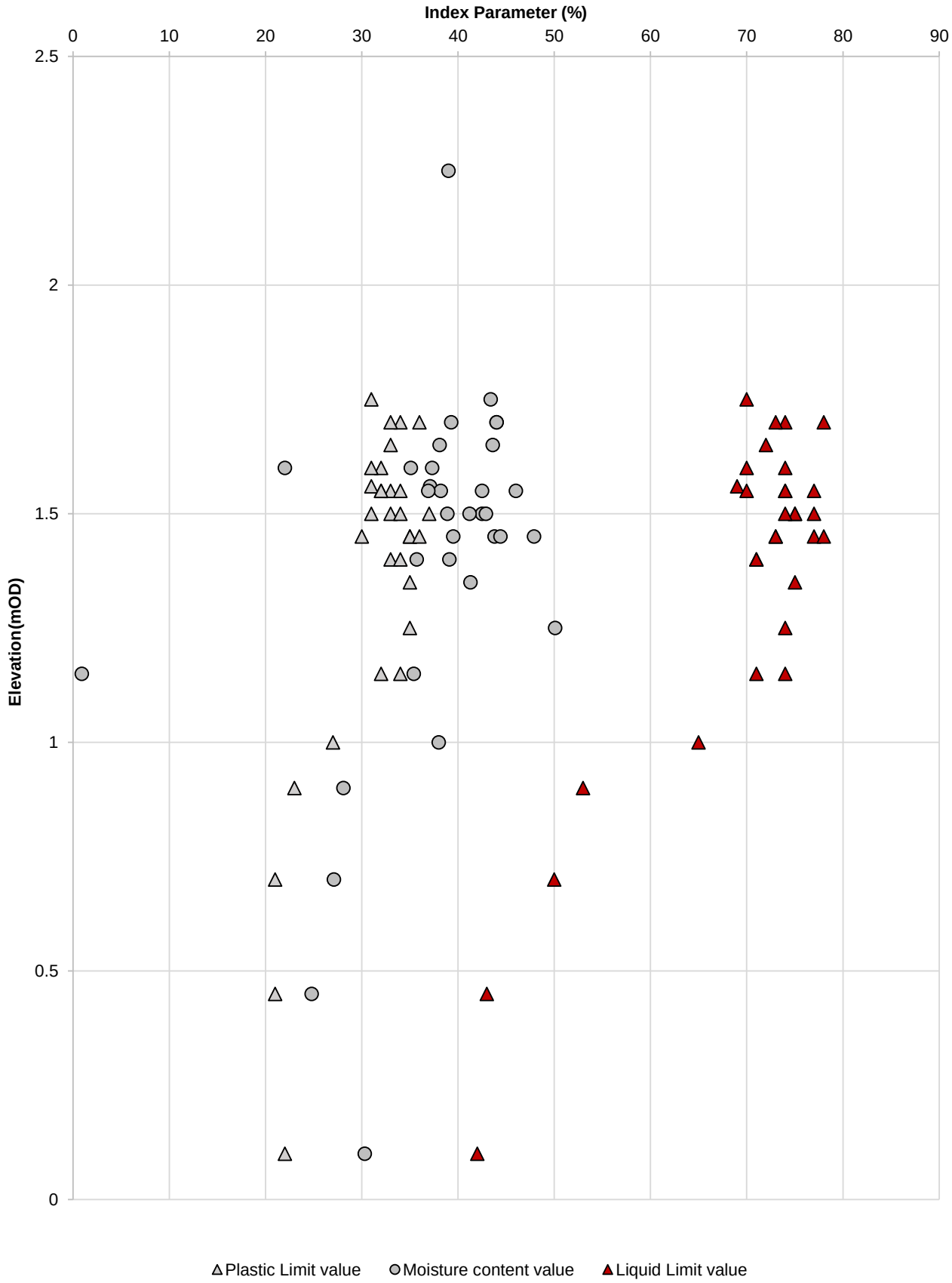

Title:	West Site - Moisture content & Atterberg Limits by Elevation - Made Ground	**Fig No.:**	D.17
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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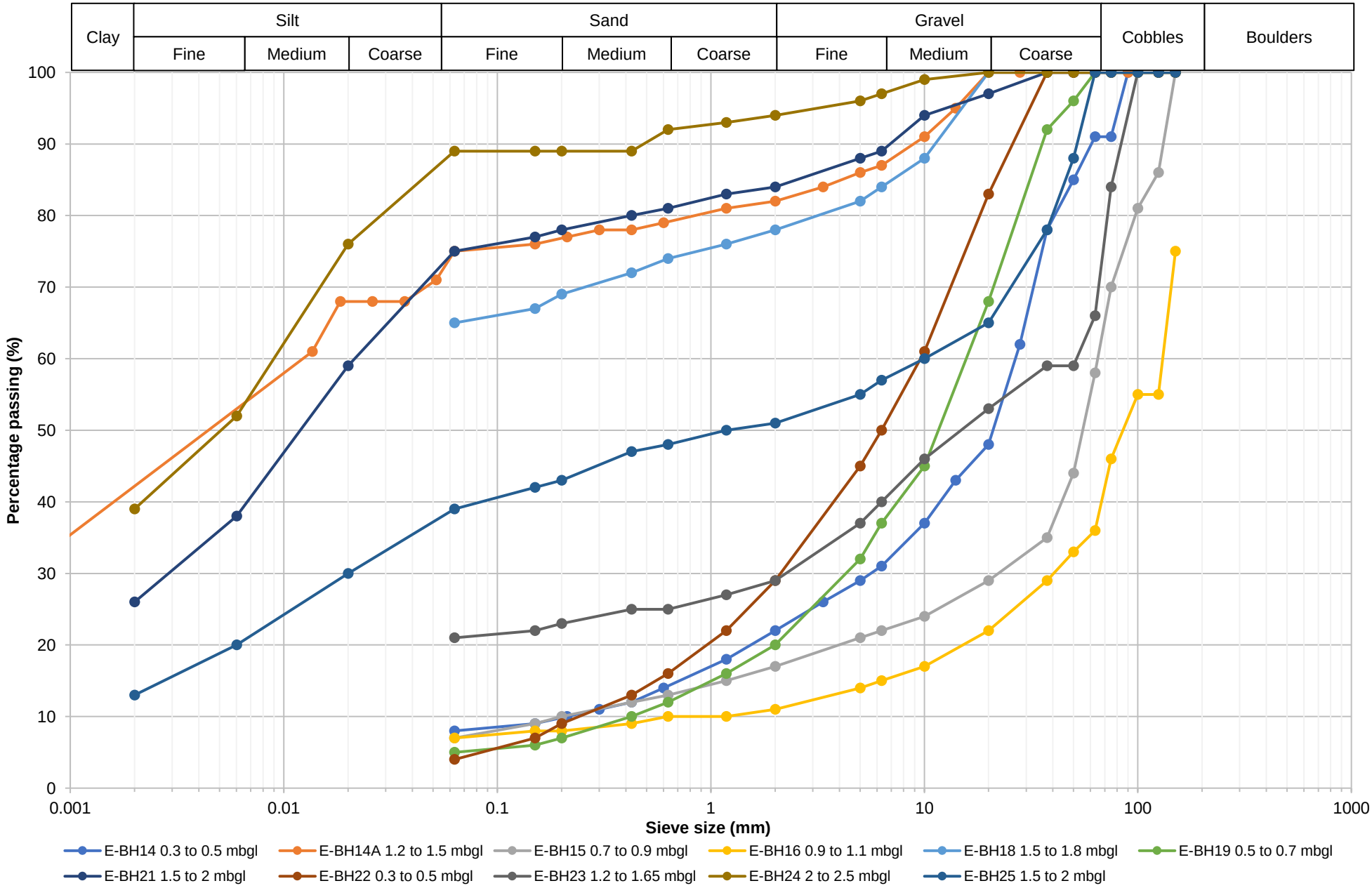

Title:	East Site Hydrogen Production: Plot of Particle size distribution (PSD) by Sample for MG2					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.18	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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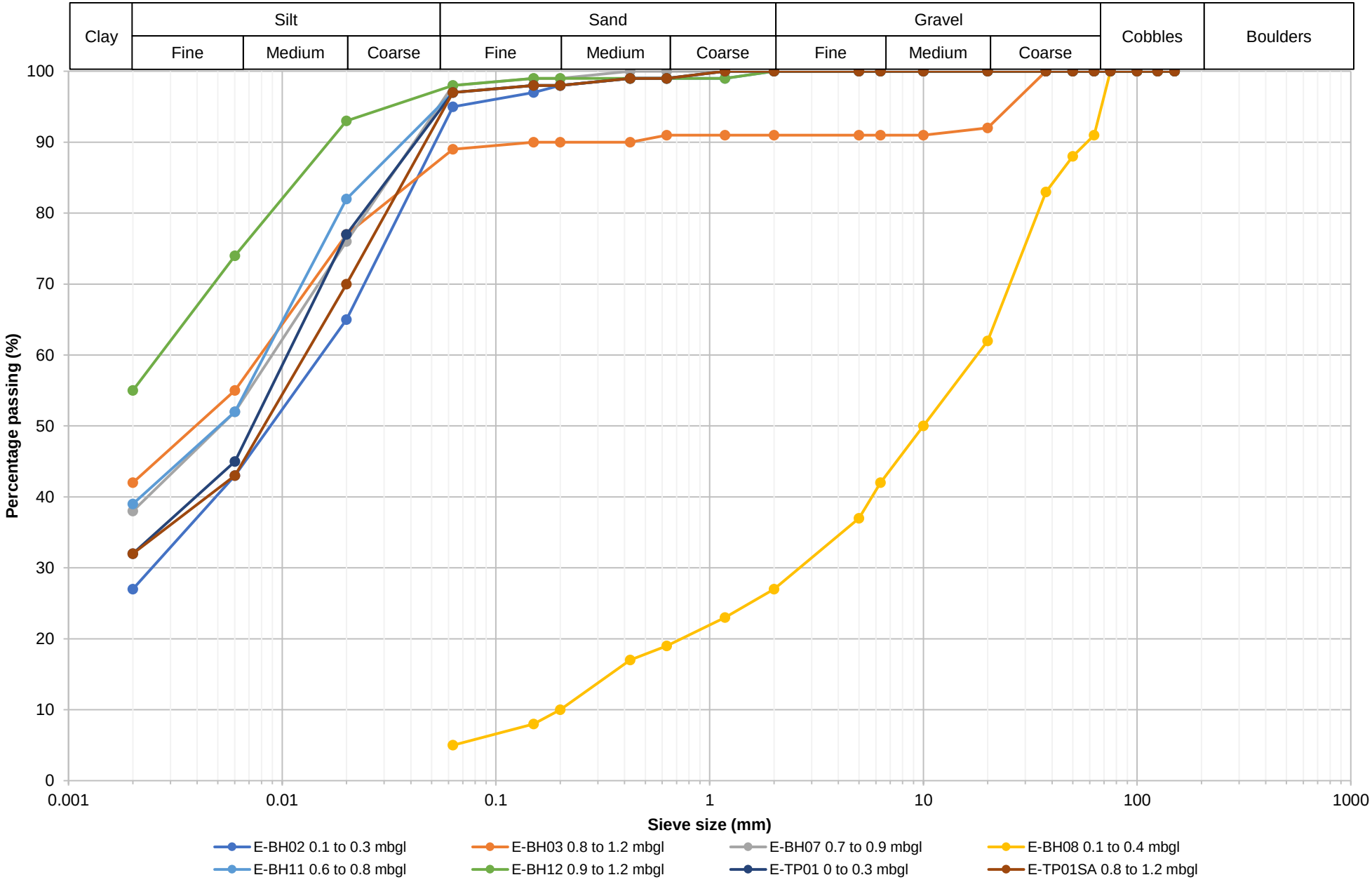

Title:	East Site Ammonia Storage: Plot of Particle size distribution (PSD) by Sample for Made Ground					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.19	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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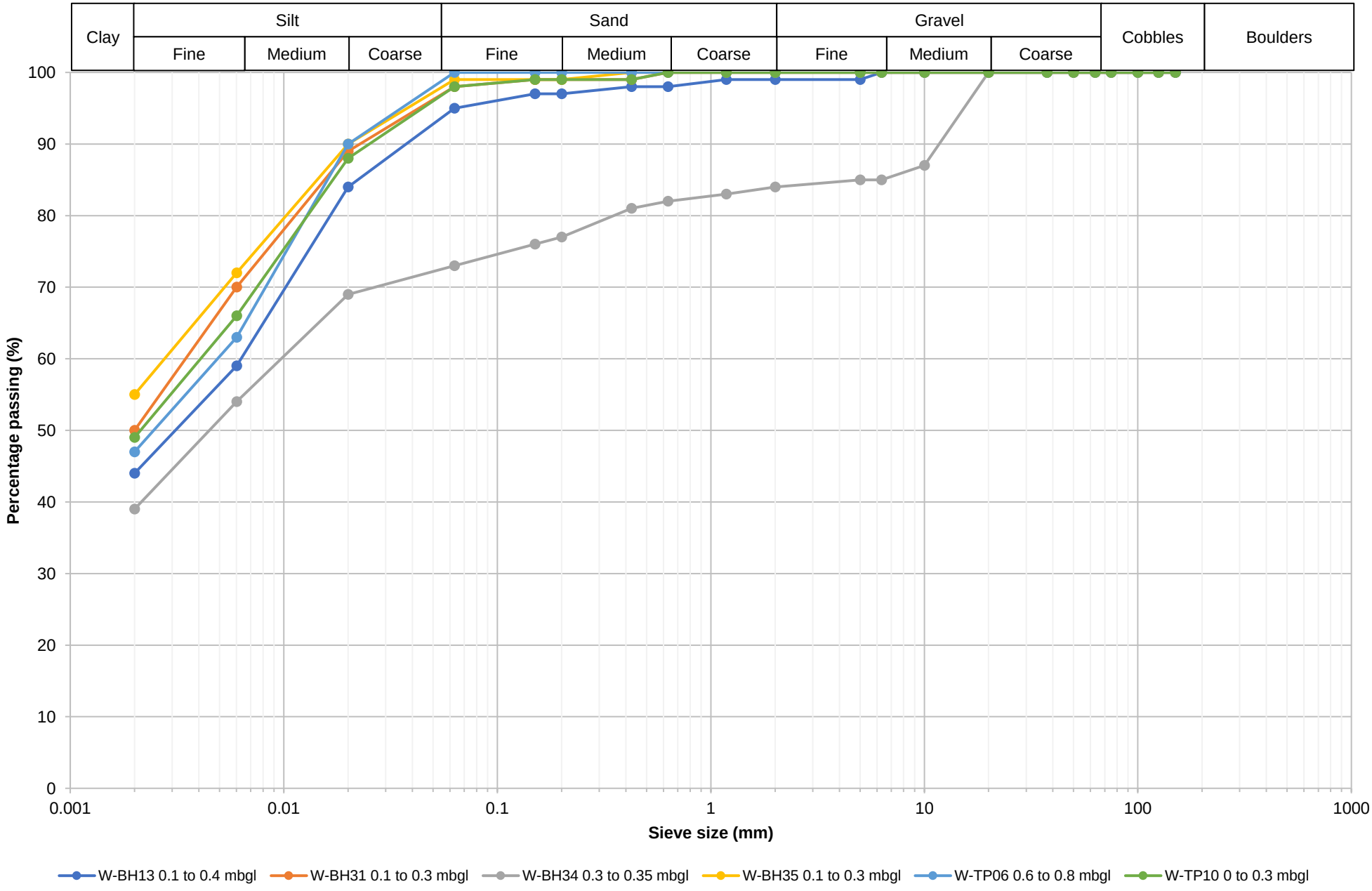

Title:	West Site: Plot of Particle size distribution (PSD) by Sample for Made Ground					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.20	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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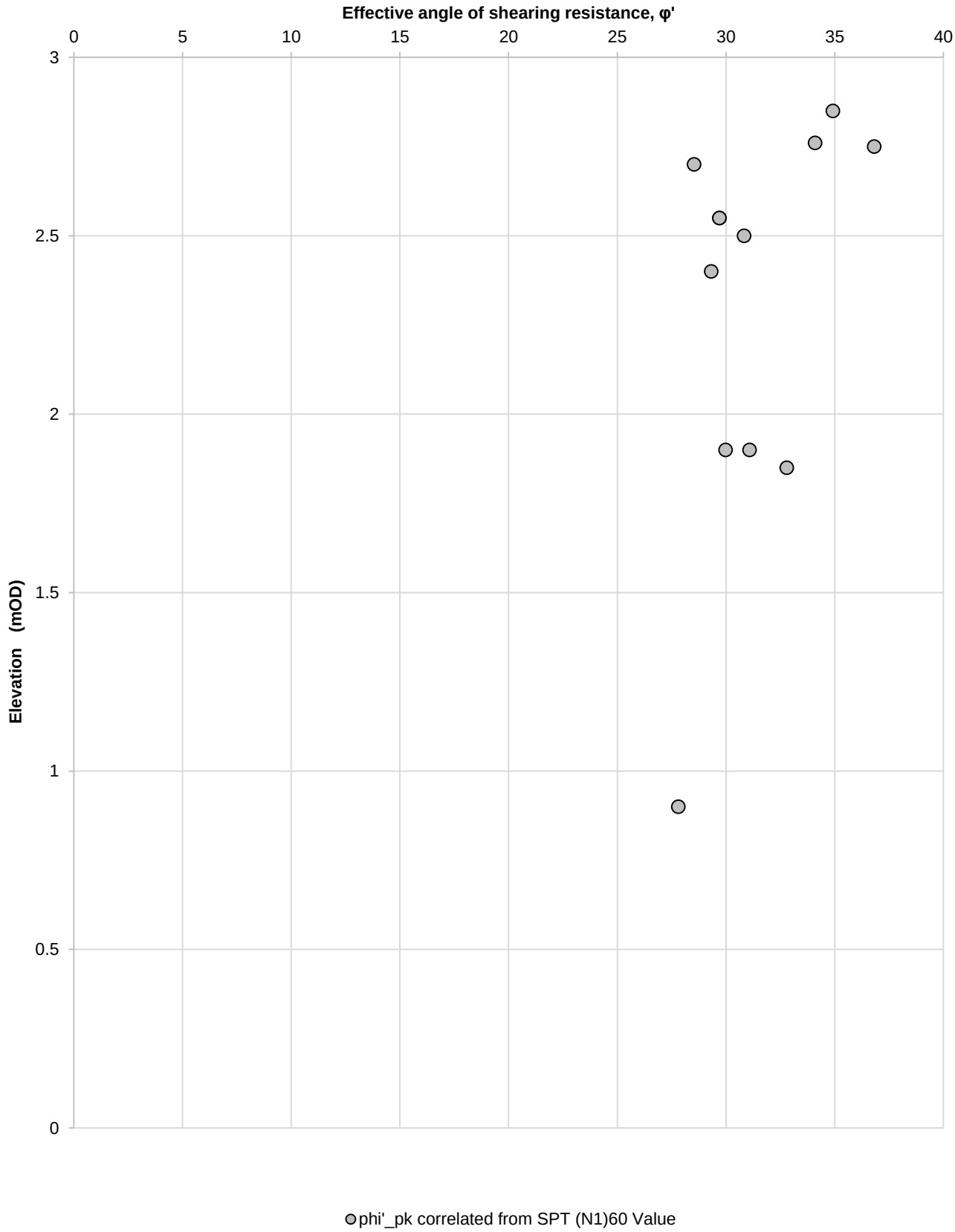

Title:	East Site Hydrogen Production: Effective Angle of Shearing Resistance by Elevation for Made Ground	**Figure No.:**	D.21
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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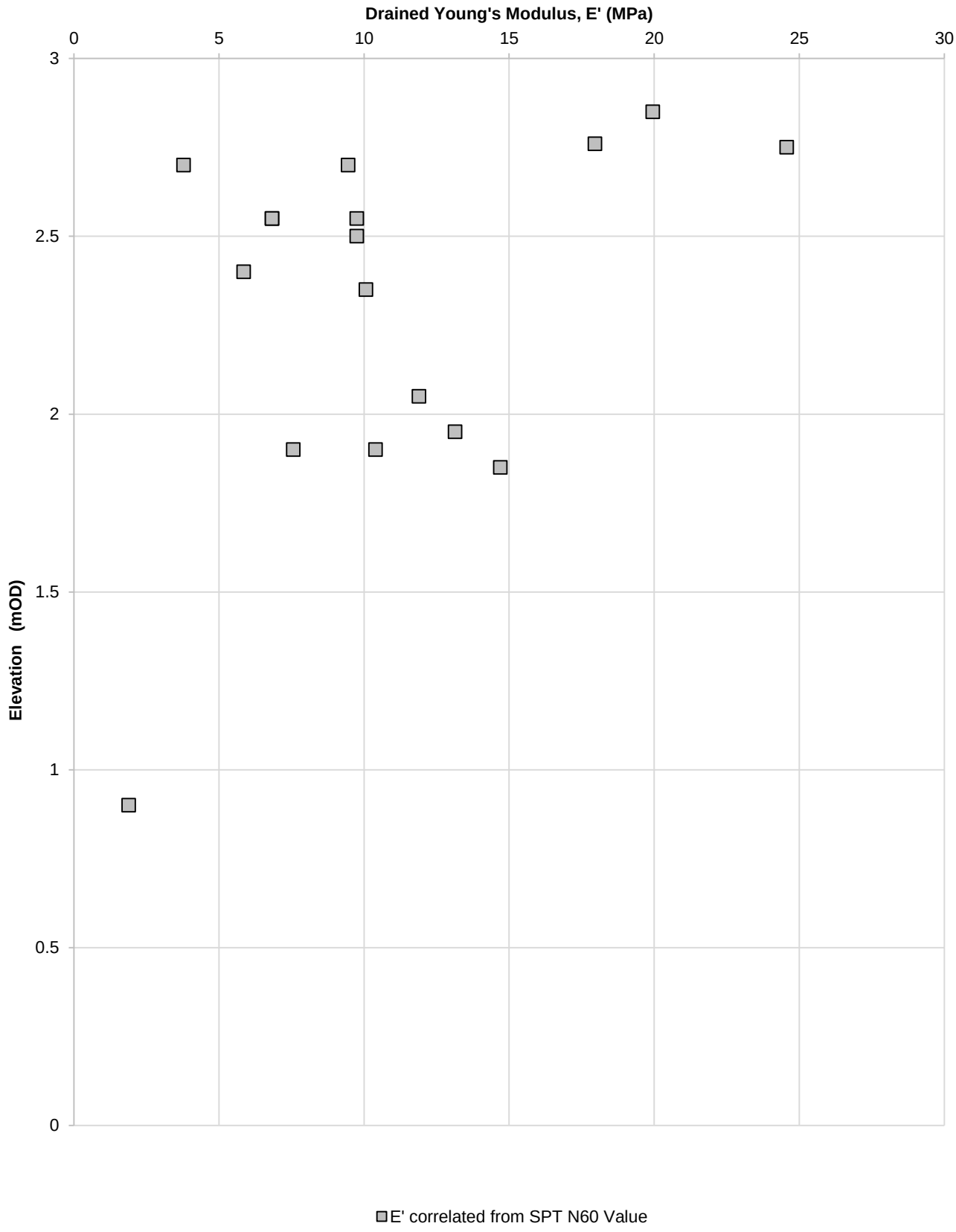

Title:	East Site Hydrogen Production: Drained Young's Modulus by Elevation for Made Ground	**Figure No.:**	D.22
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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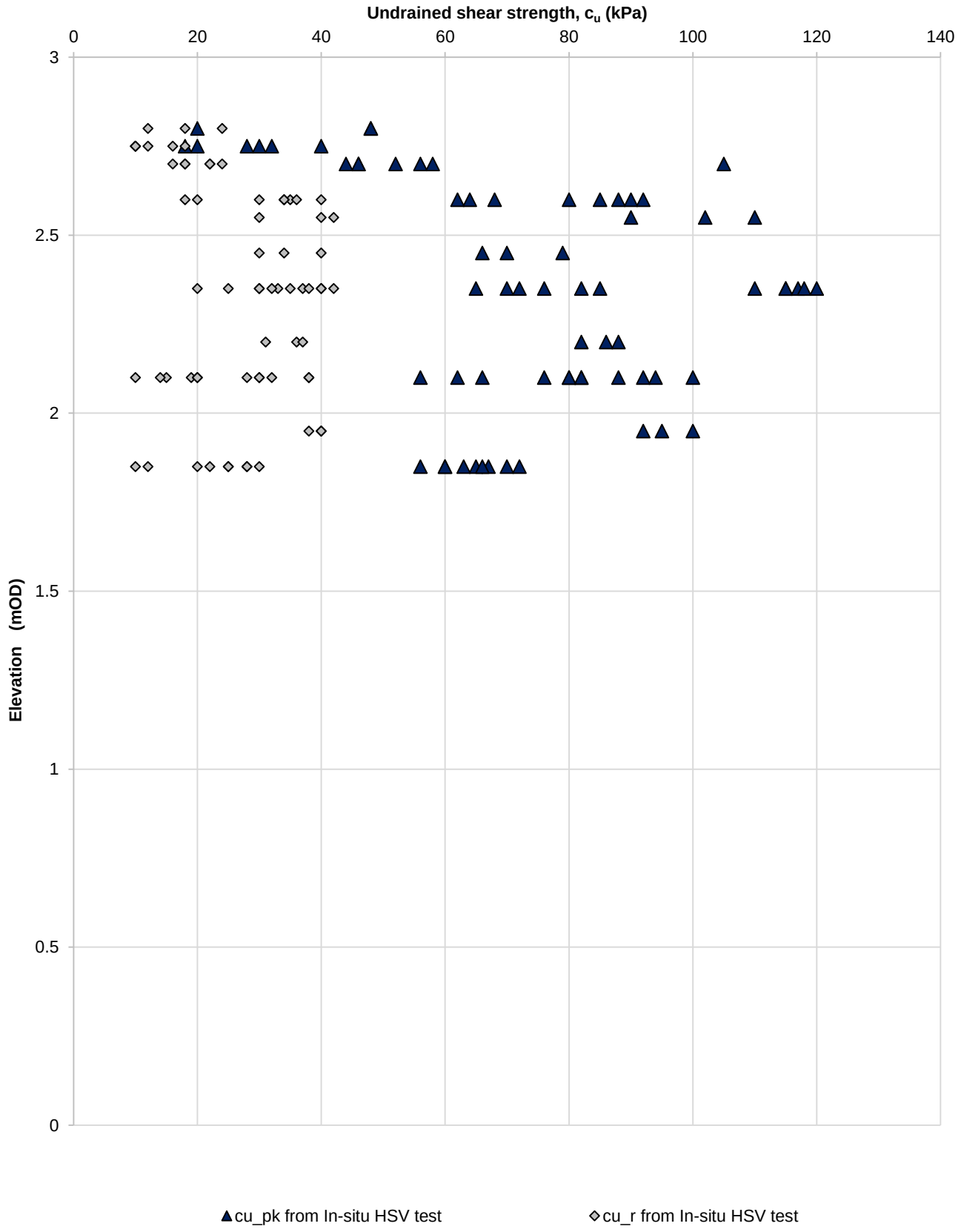

Title:	East Site Ammonia Storage: Undrained Shear Strength by Elevation for Made Ground	**Figure No.:**	D.23
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	01/06/23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	06/06/23

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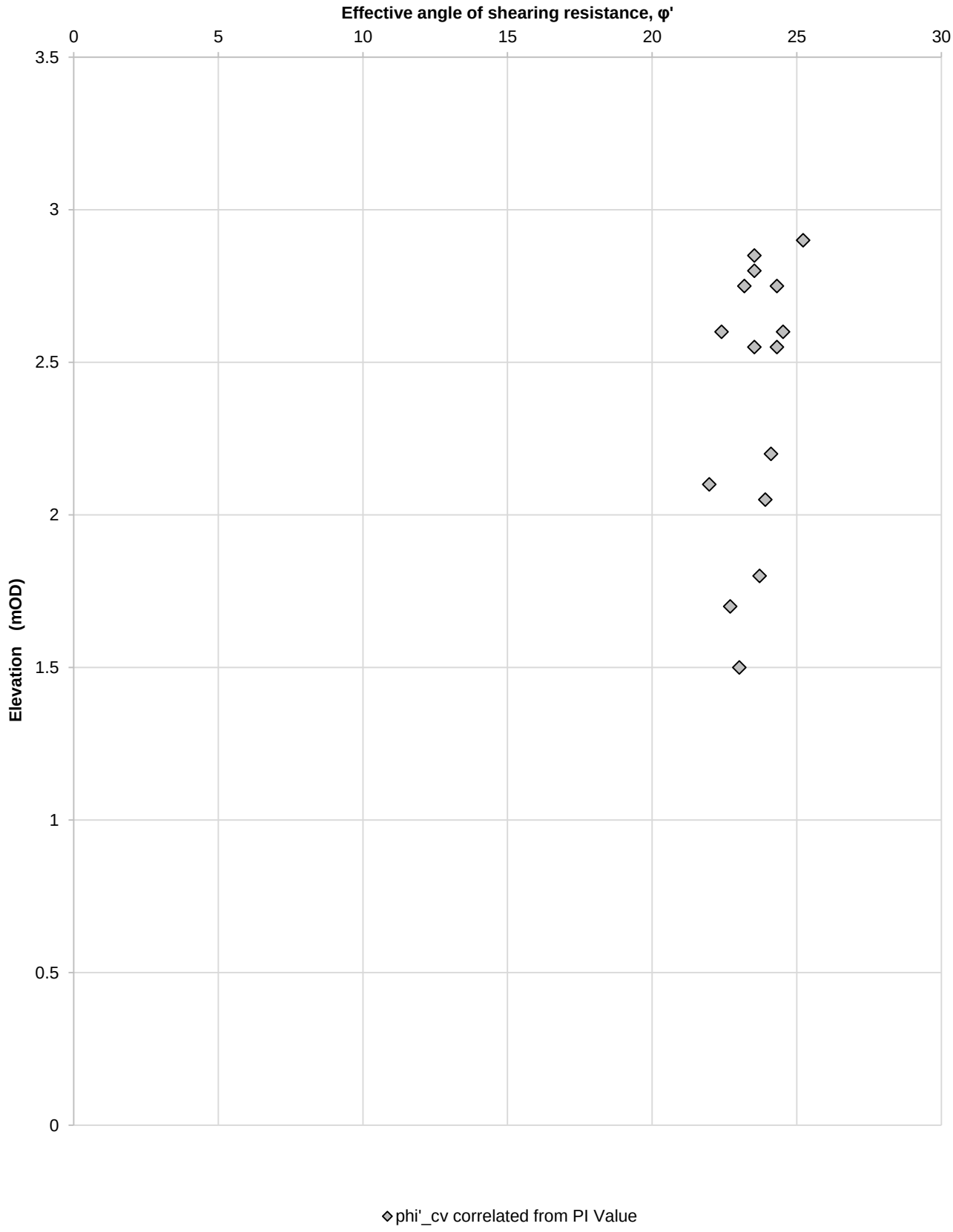

Title:	East Site Ammonia Storage: Effective Angle of Shearing Resistance by Elevation for Made Ground	**Figure No.:**	D.24
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	01/06/23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	06/06/23

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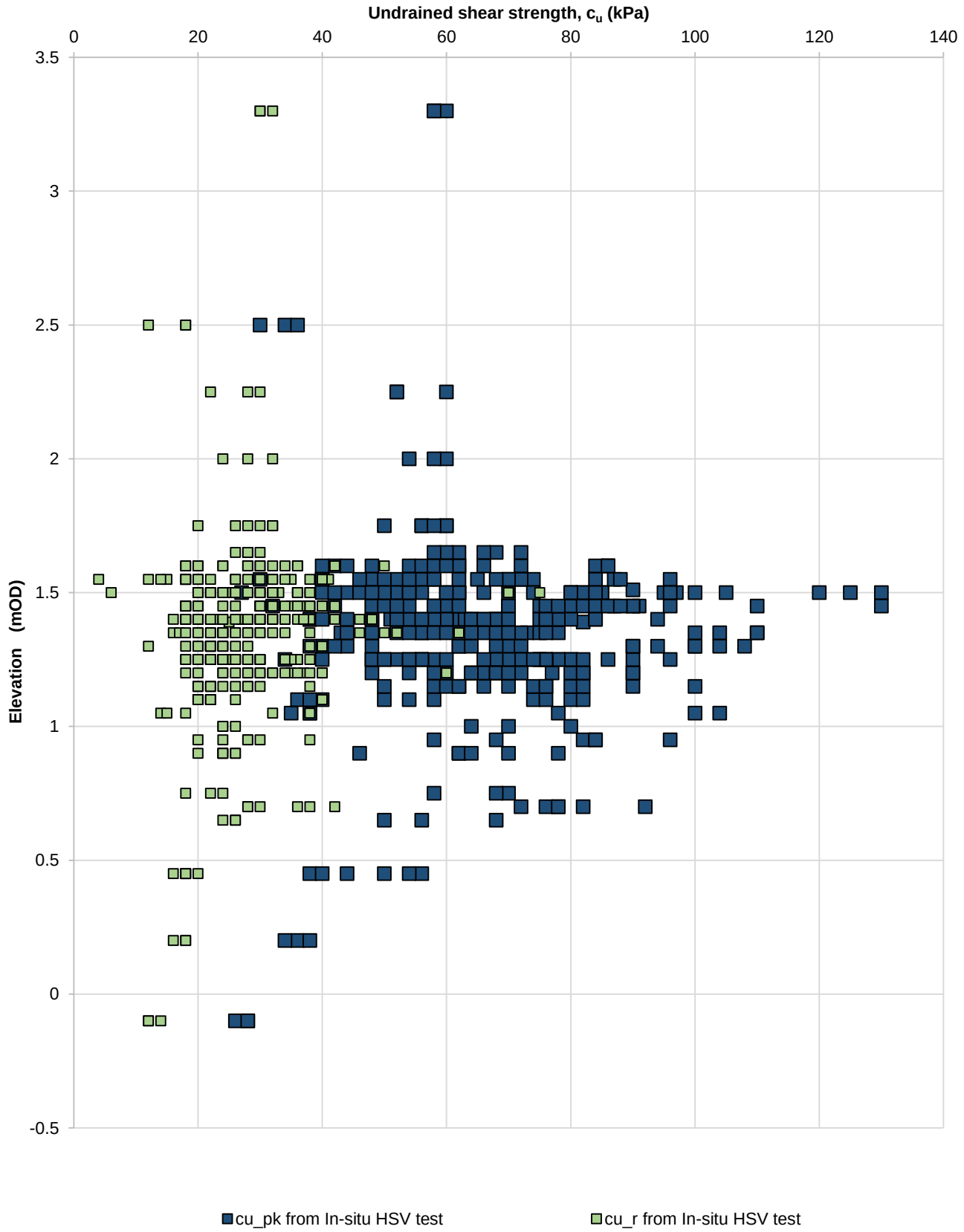

Title:	West Site: Undrained Shear Strength by Elevation for Made Ground	**Figure No.:**	D.25
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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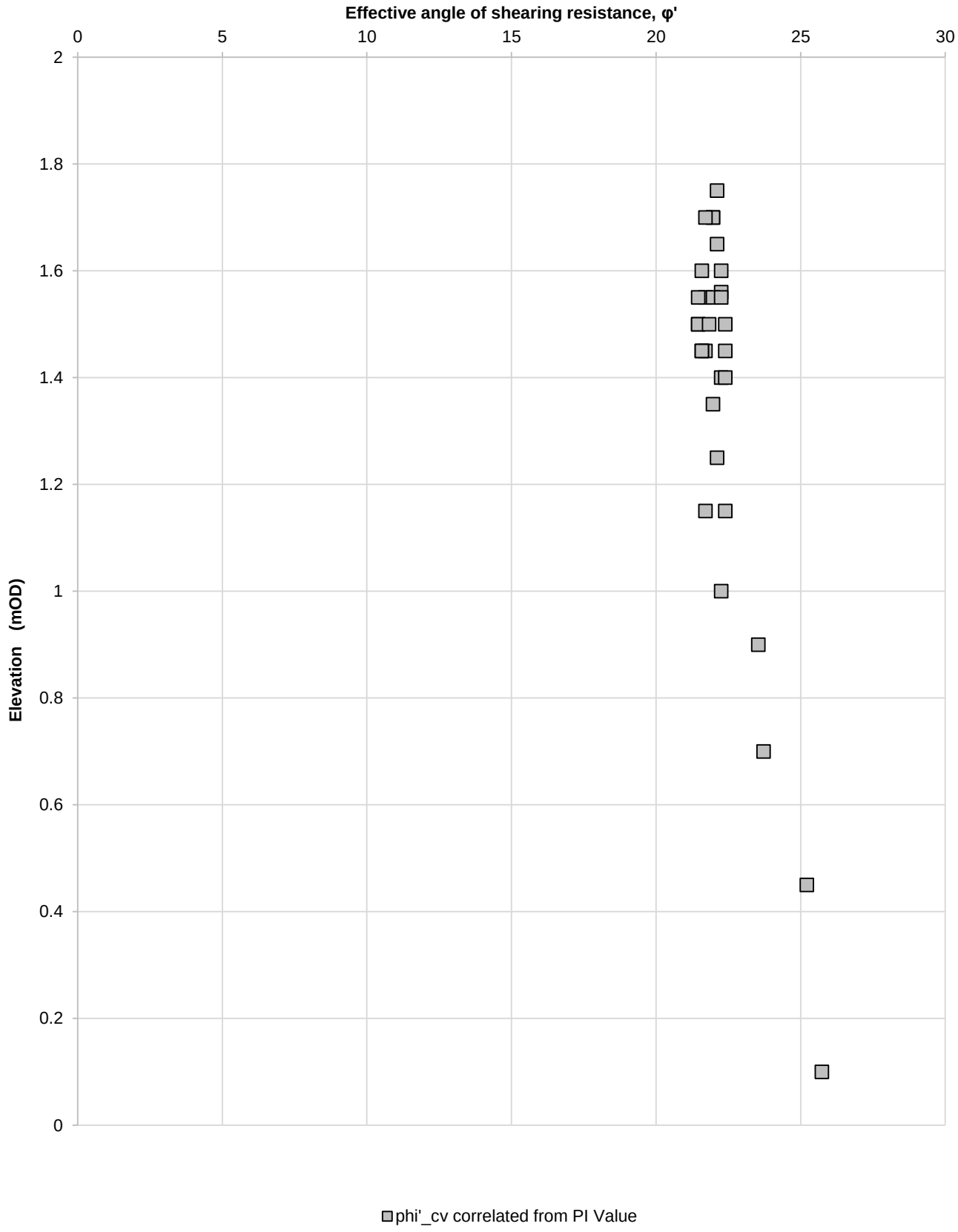

Title:	West Site: Effective Angle of Shearing Resistance by Elevation for Made Ground	**Figure No.:**	D.26
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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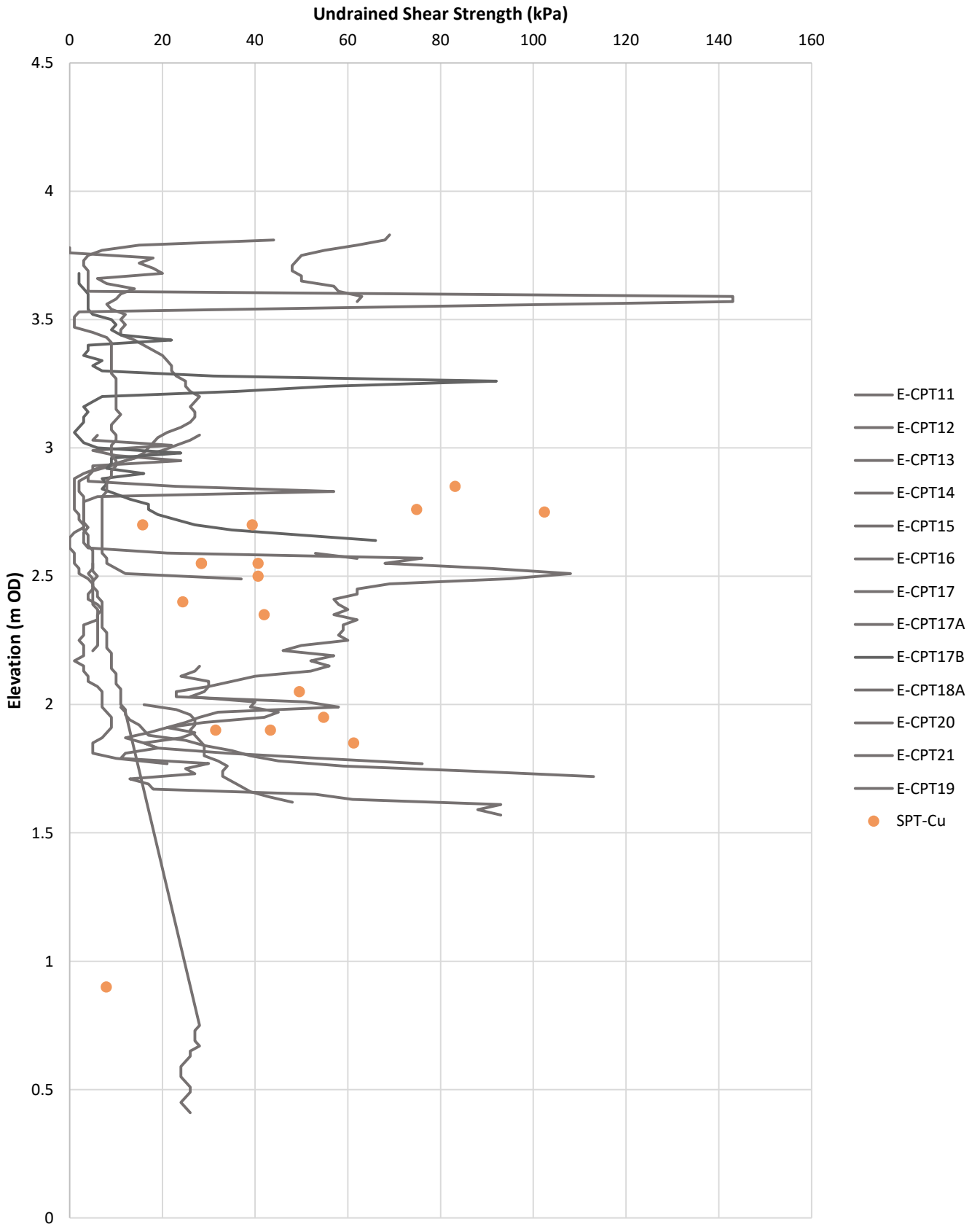

Title:	East Site - Hydrogen Production - MG - Undrained Shear Strength(CPT) vs Elevation	**Figure No.:** D.27	
		Revision:	P01
Project:	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker**	DW
Client:	Air Products PLC	**Date:**	Jun-23

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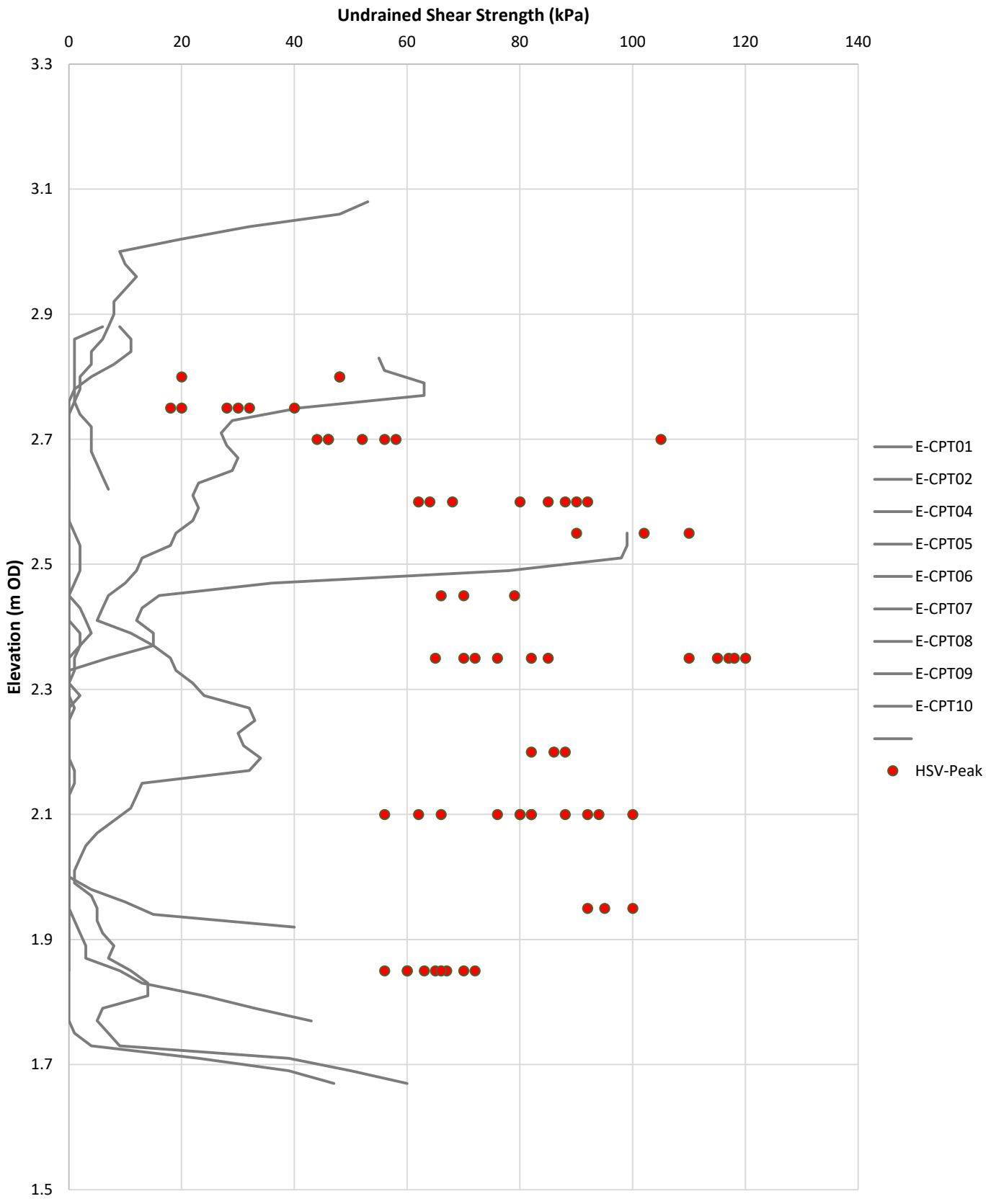

Title:	East Site - Ammonia Storage -MG - Undrained Shear Strength(CPT, HSV) vs Elevation	**Figure No.:** D.28	
		Revision:	P01
Project:	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker**	DW
Client:	Air Products PLC	**Date:**	Jun-23

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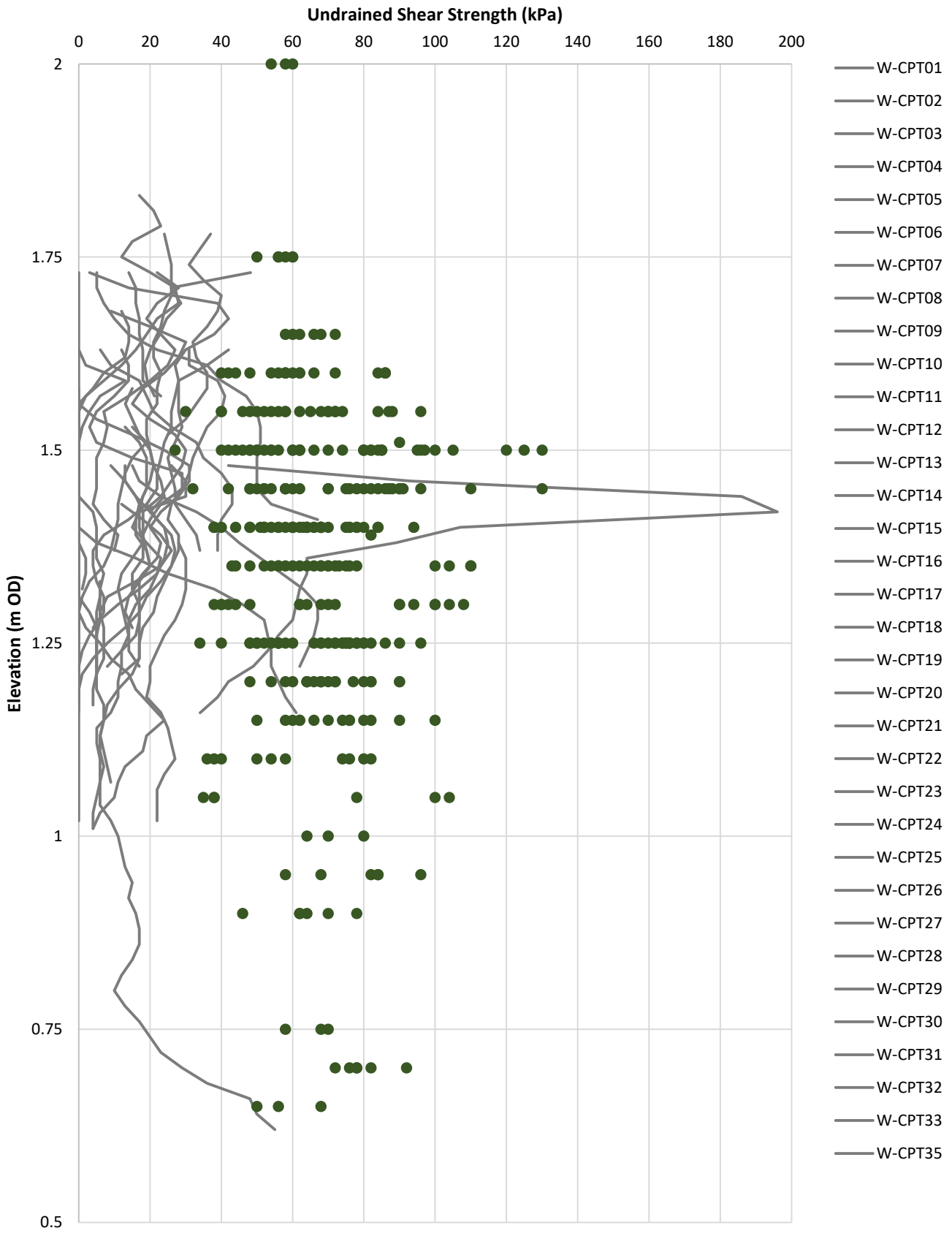

Title:	West Site - MG/TS - Undrained Shear Strength(CPT, HSV) vs Elevation	**Figure No.:** D.29	
		Revision:	P01
Project:	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker**	DW
Client:	Air Products PLC	**Date:**	Jun-23

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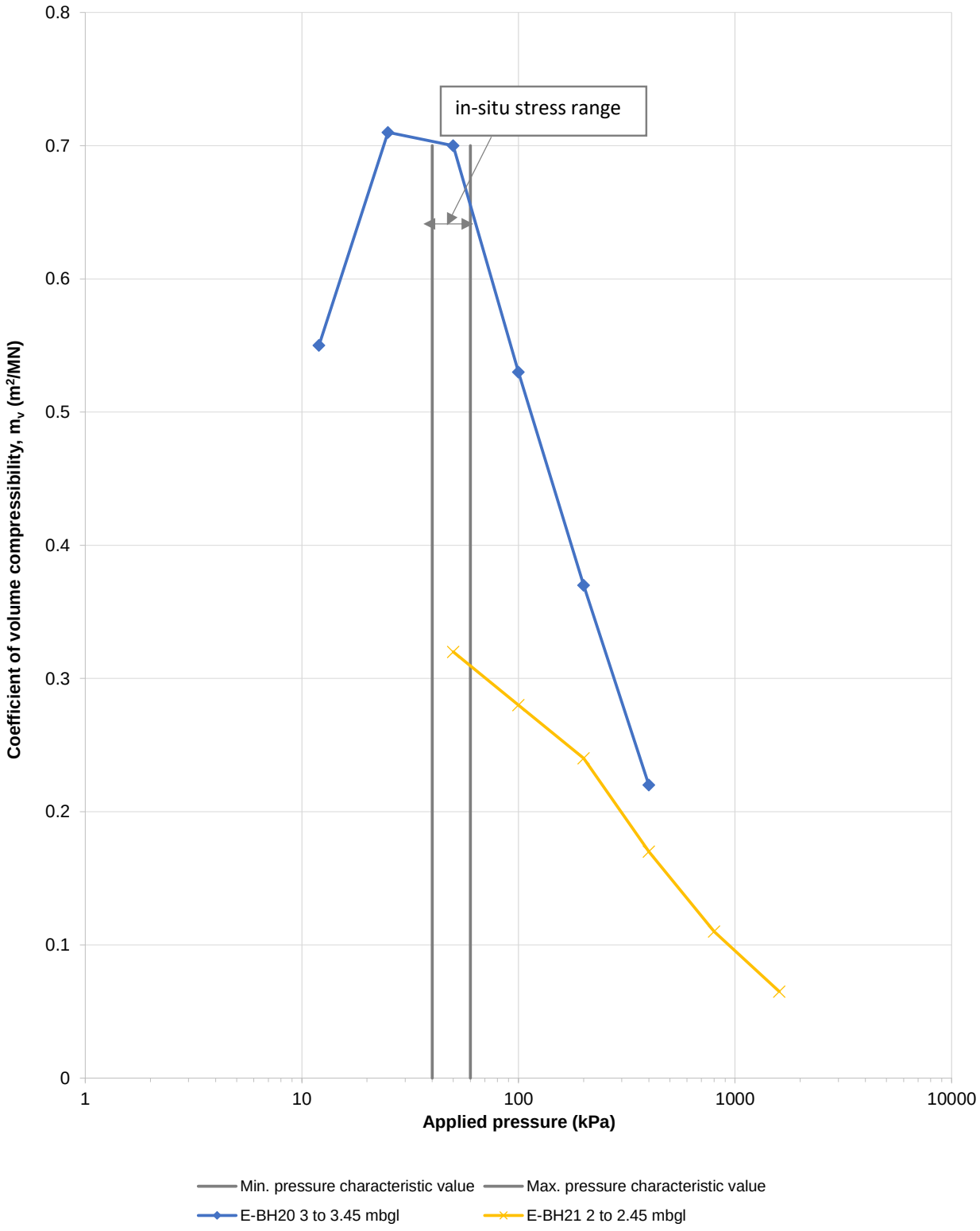

Pressure range (kPa)	
Min. value =	40
Max. value =	60

Title:	East Site Hydrogen Production: Coefficient of volume compressibility (mv) vs Applied pressure by Sample for Made Ground	**Fig No.:**	D.30
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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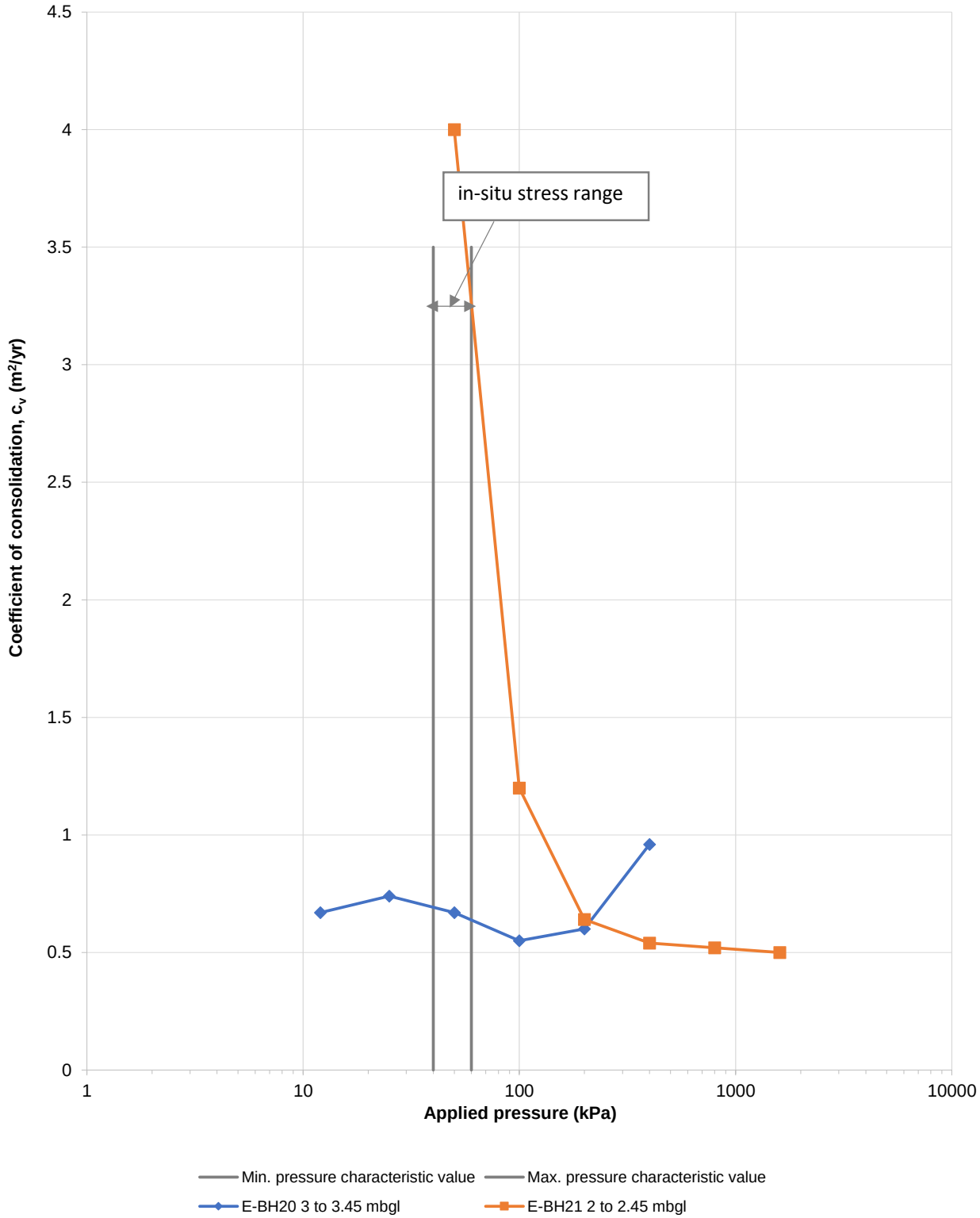

Pressure range (kPa)	
Min. value =	40
Max. value =	60

Title:	East Site Hydrogen Production: Coefficient of consolidation (cv) vs Applied pressure by Sample for Made Ground	**Fig No.:**	D.31
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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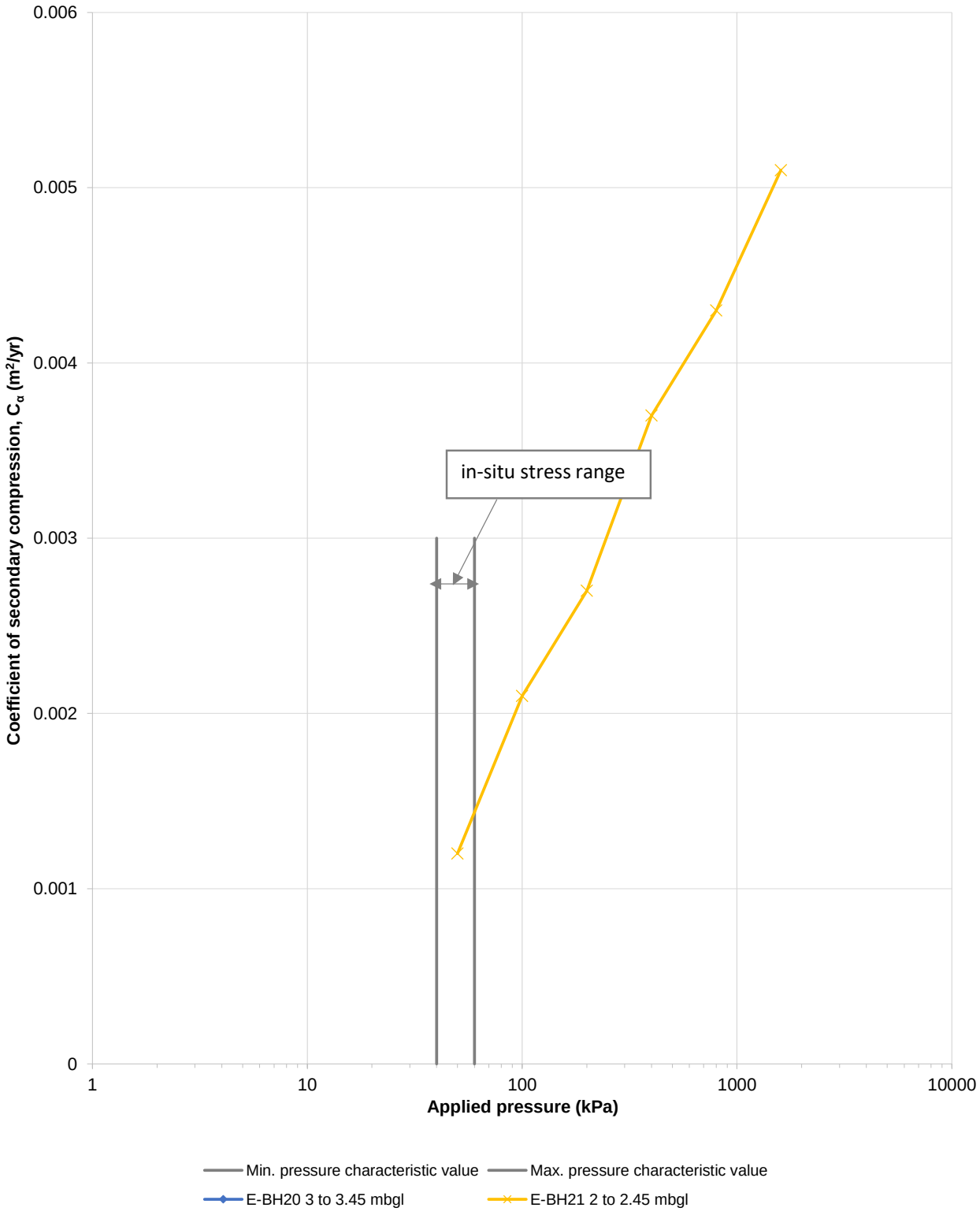

Pressure range (kPa)	
Min. value =	40
Max. value =	60

Title:	East Site Hydrogen Production: Coefficient of secondary compression (Cα) vs Applied pressure by Sample for Made Ground	**Fig No.:**	D.32
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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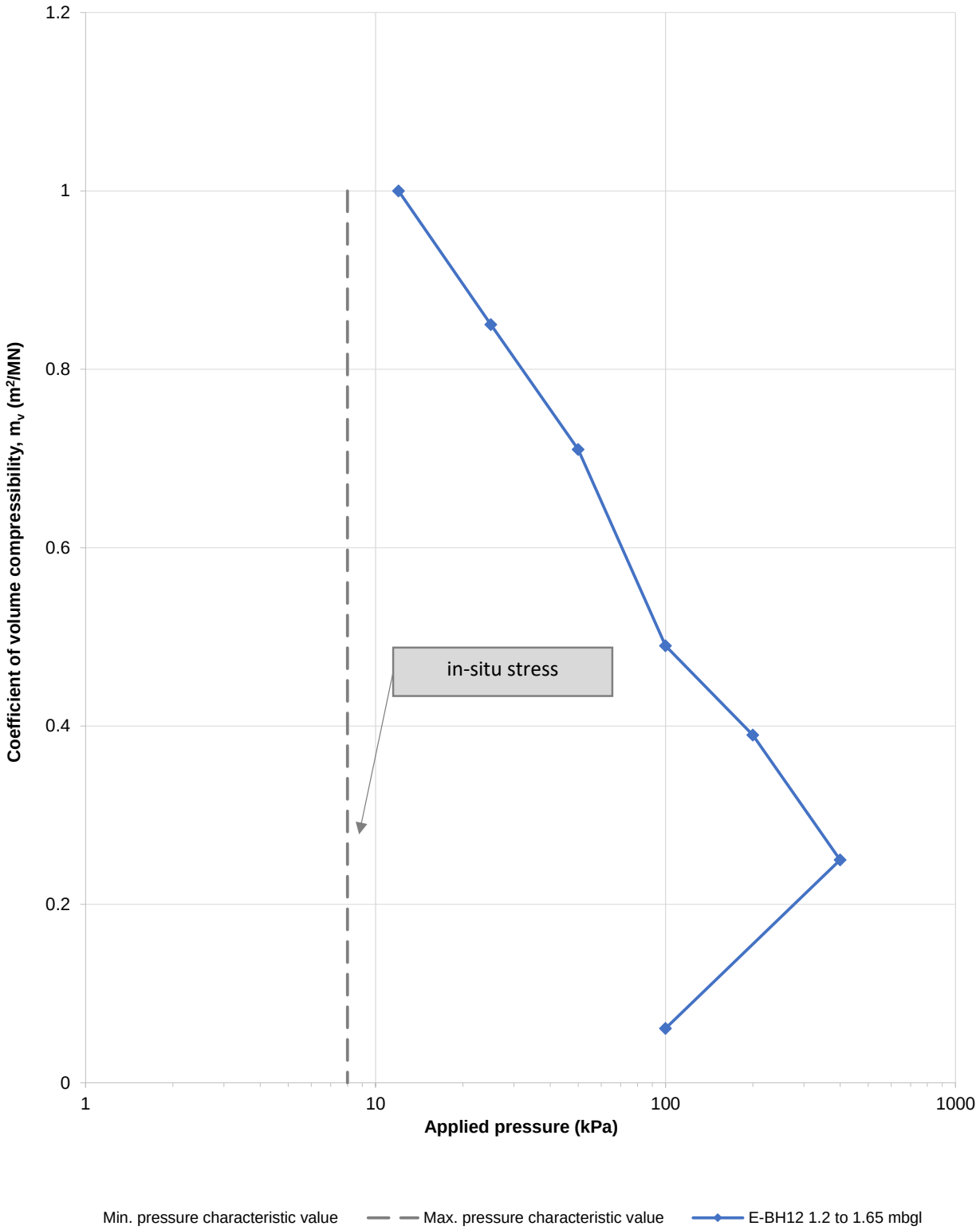

In-situ stress range (kPa)	
Min. value =	4
Max. value =	8

Title:	East Site Ammonia Storage: Coefficient of volume compressibility (mv) vs Applied pressure by Sample for Made Ground	**Fig No.:**	D.33
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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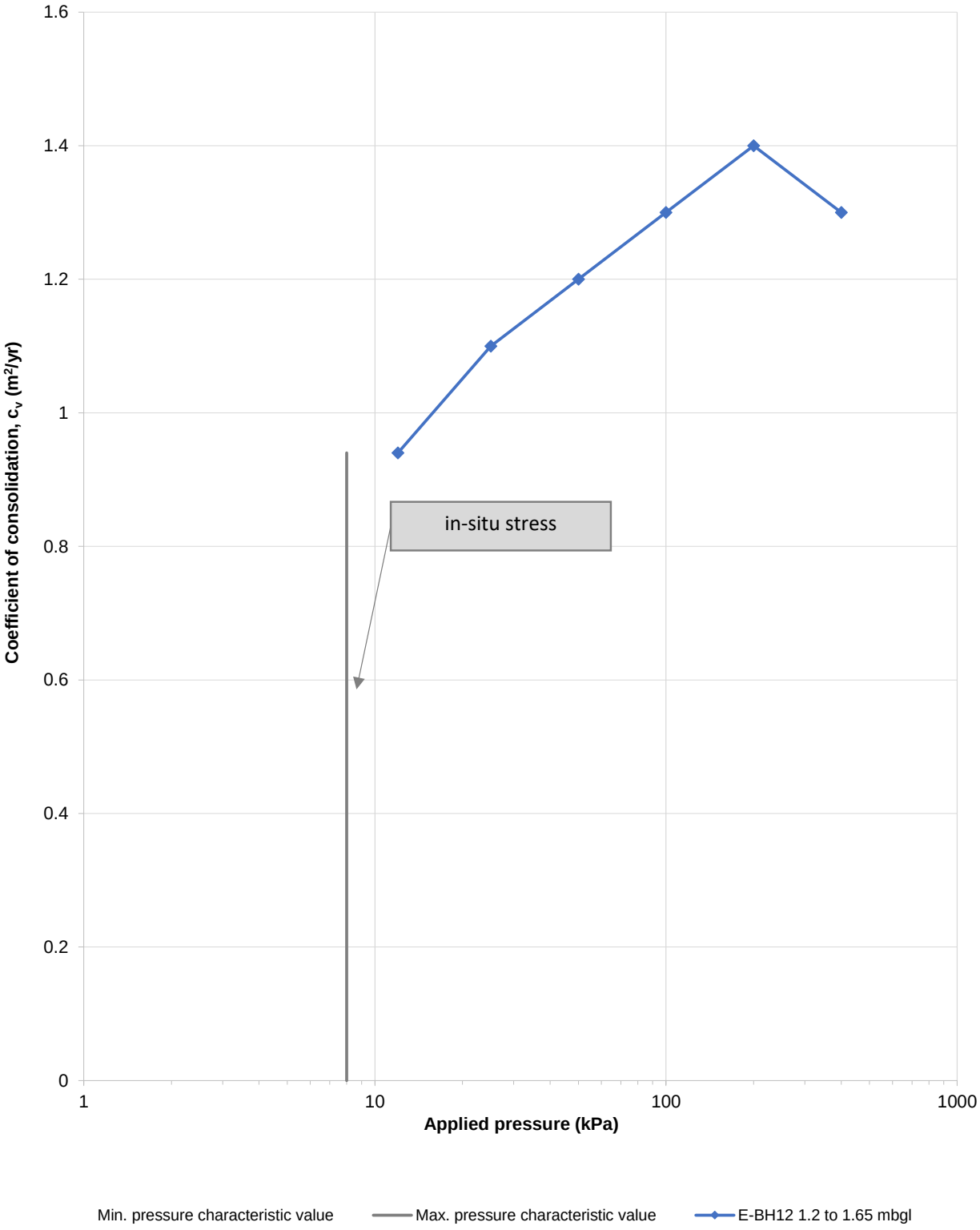

In-situ stress range (kPa)	
Min. value =	4
Max. value =	8

Title:	East Site Ammonia Storage: Coefficient of consolidation (cv) vs Applied pressure by Sample for Made Ground	**Fig No.:**	D.34
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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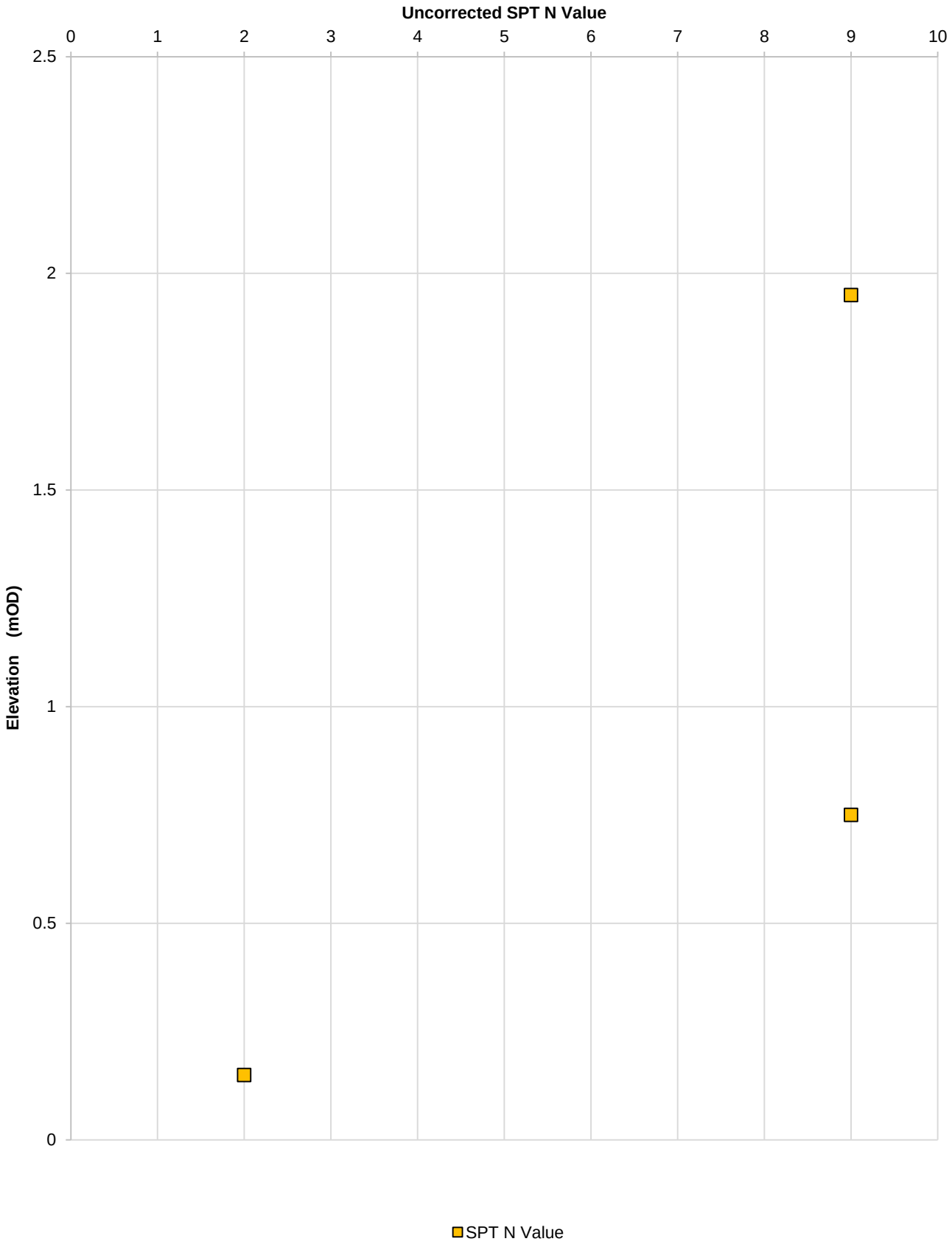

Title:	East Site Hydrogen Production: Uncorrected SPT N Value by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.35
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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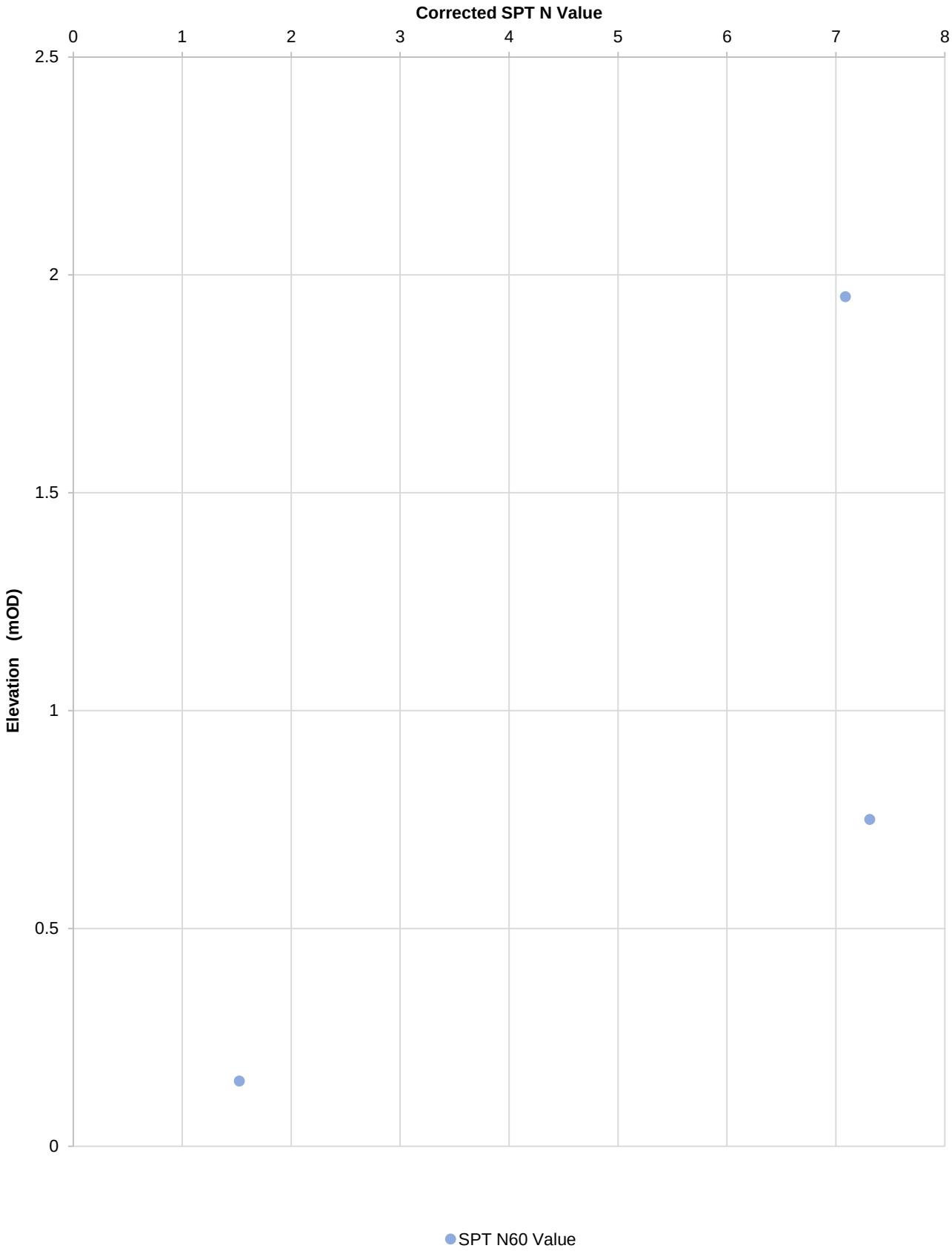

Title:	East Site Hydrogen Production: Corrected SPT N Value by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.36
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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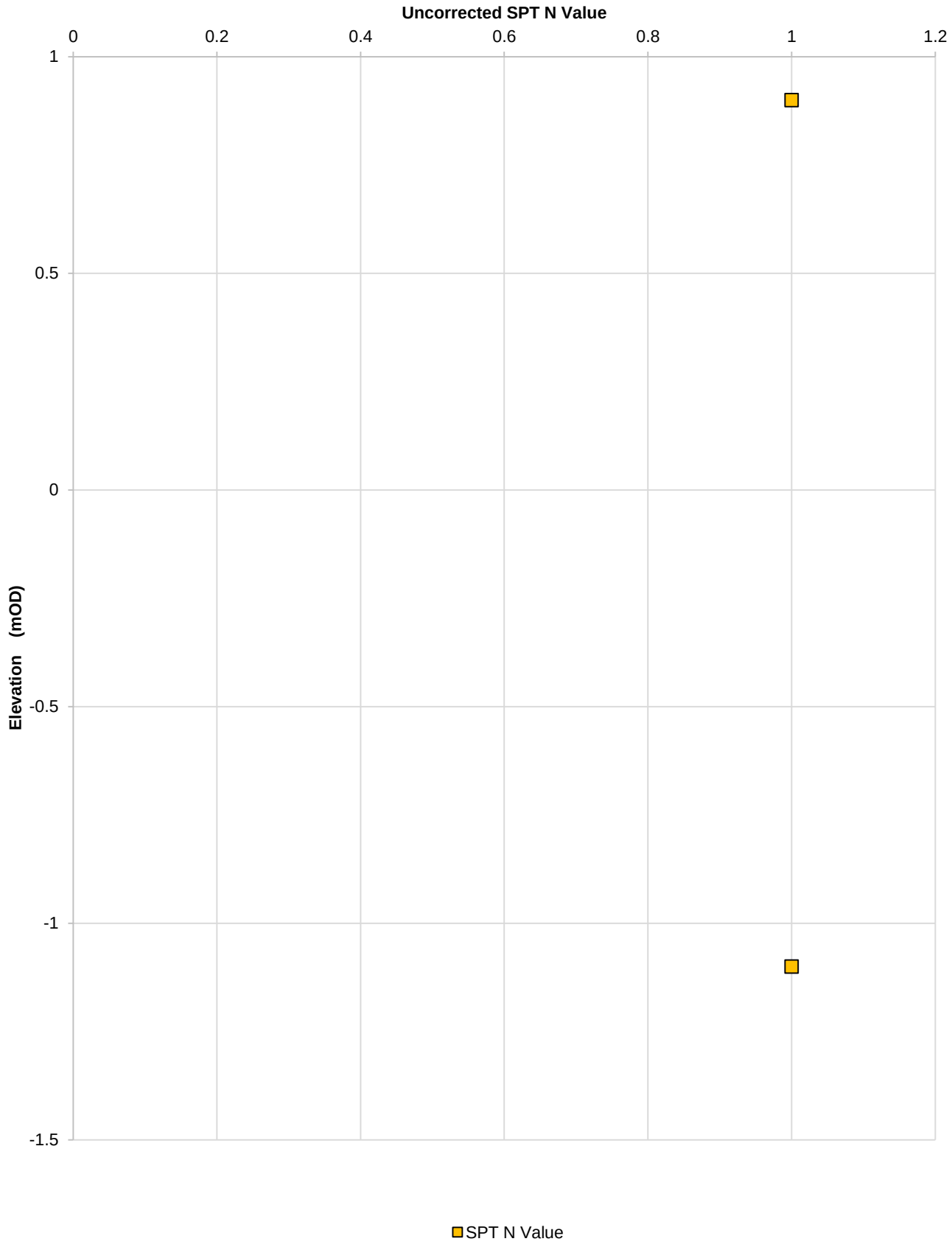

Title:	East Site Ammonia Storage: Uncorrected SPT N Value by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.37
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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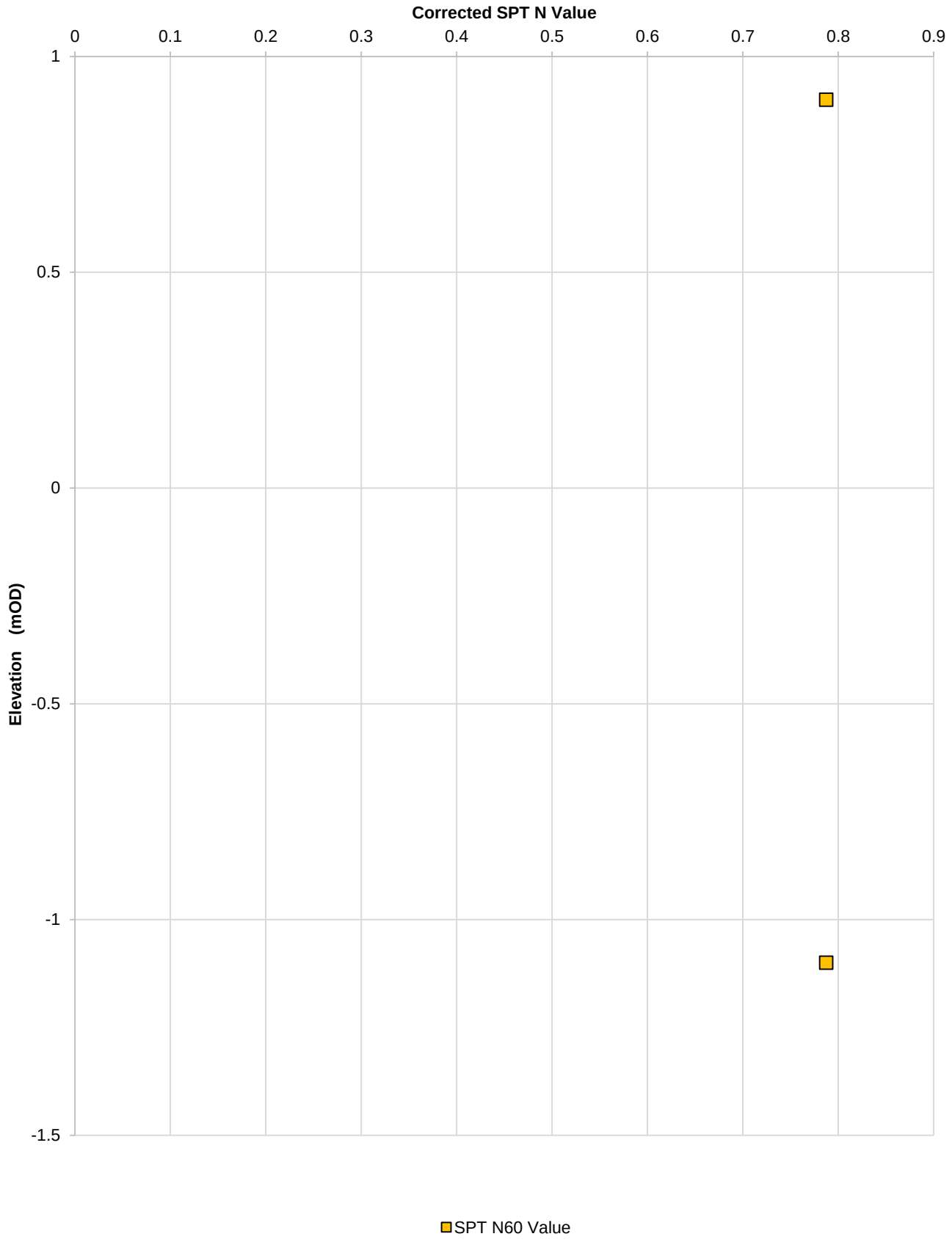

Title:	East Site Ammonia Storage: Corrected SPT N Value by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.38
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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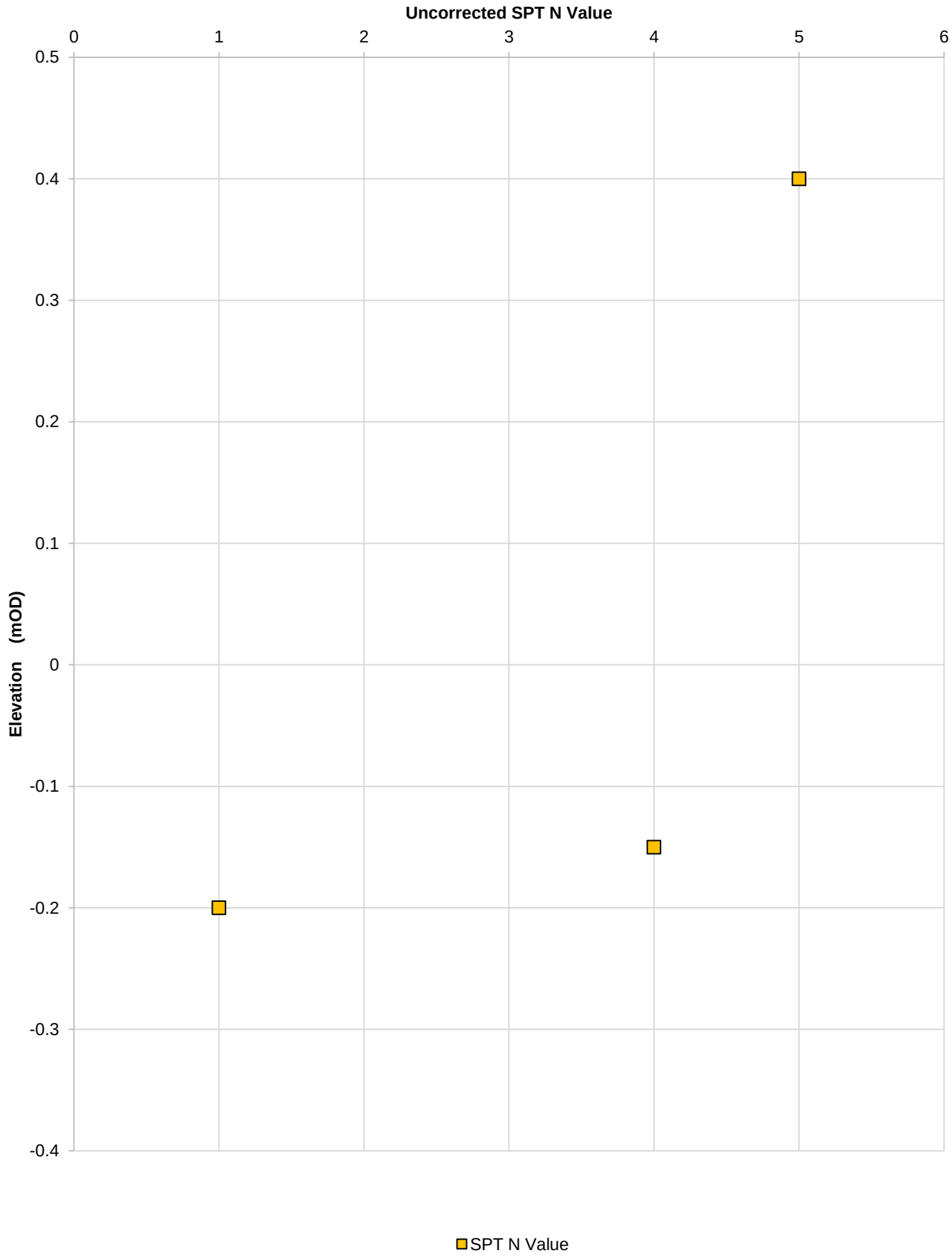

Title:	West Site: Uncorrected SPT N Value by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.39
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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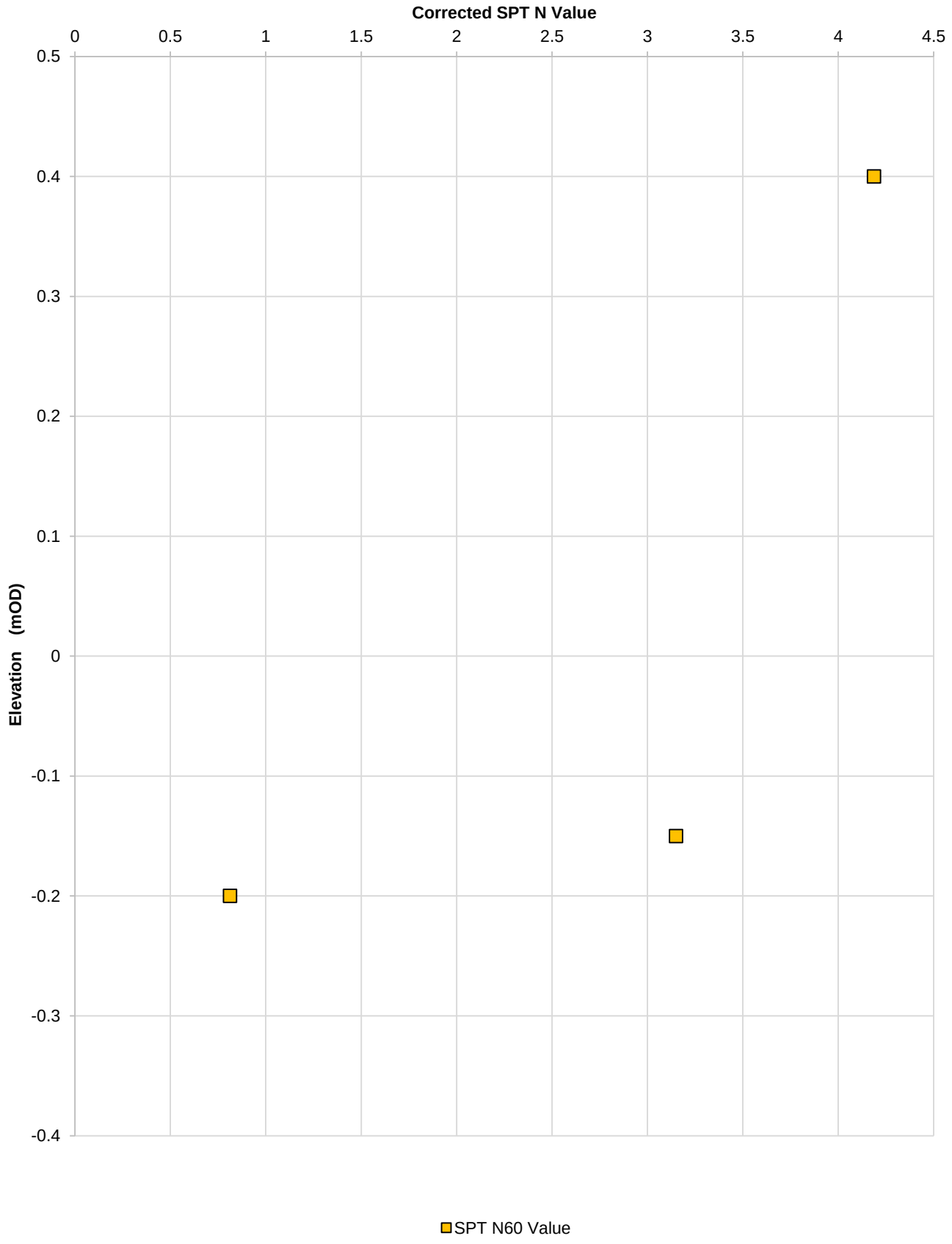
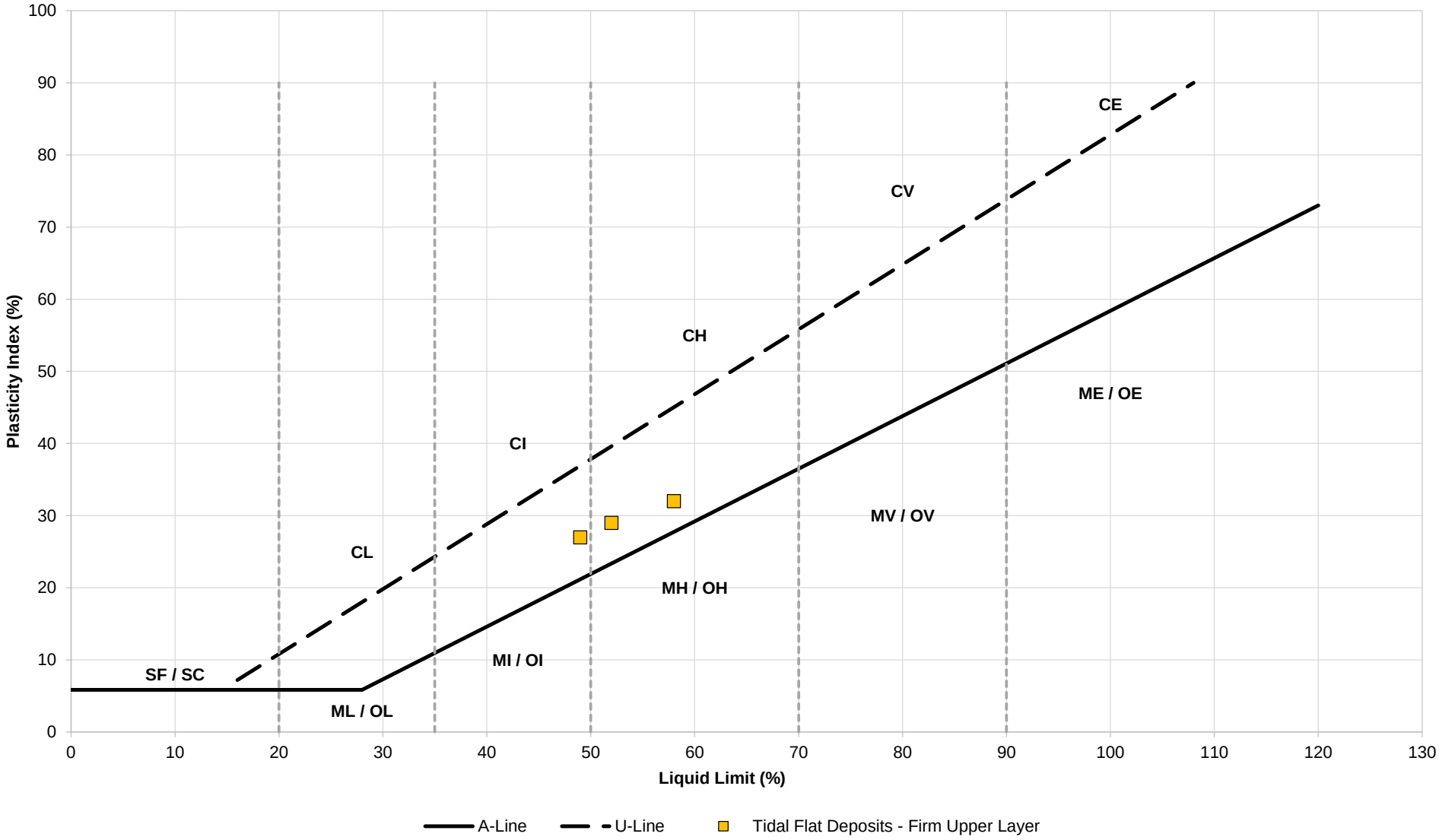


Title:	West Site: Corrected SPT N Value by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.40
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

AECOM

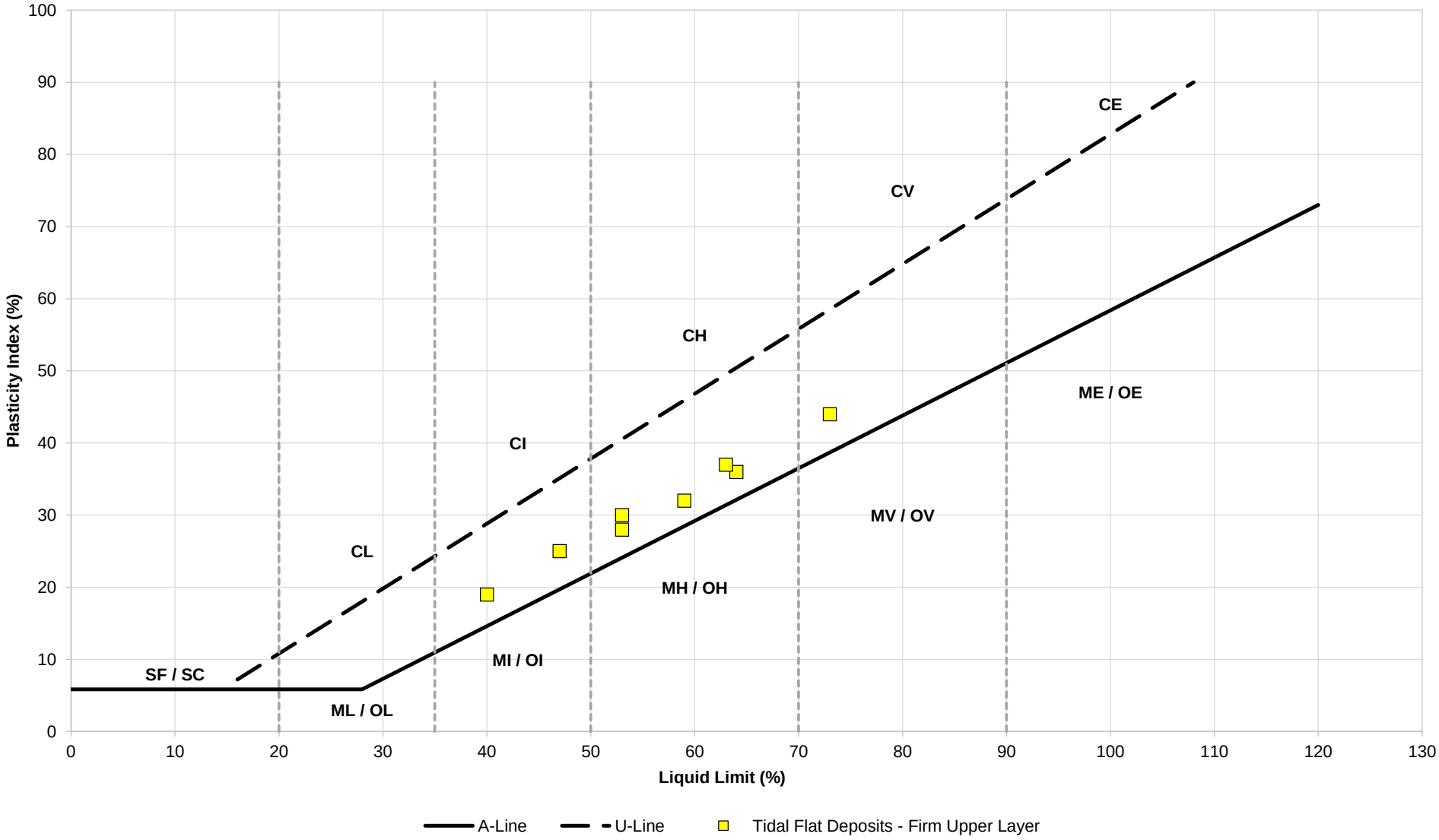
Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



Title:	East Site - Hydrogen Production - Plasticity chart - Tidal Flat Deposits - Firm Upper Layer					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.41	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	P01	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

AECOM

Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



Title:	East Site - Ammonia Storage - Plasticity chart - Tidal Flat Deposits - Firm Upper Layer					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.42	**Author:**	CC	**Date:**	June-23	**Location:**	Immingham
Revision:	P01	**Checker:**	DW	**Date:**	June-23	**Client:**	Air Products

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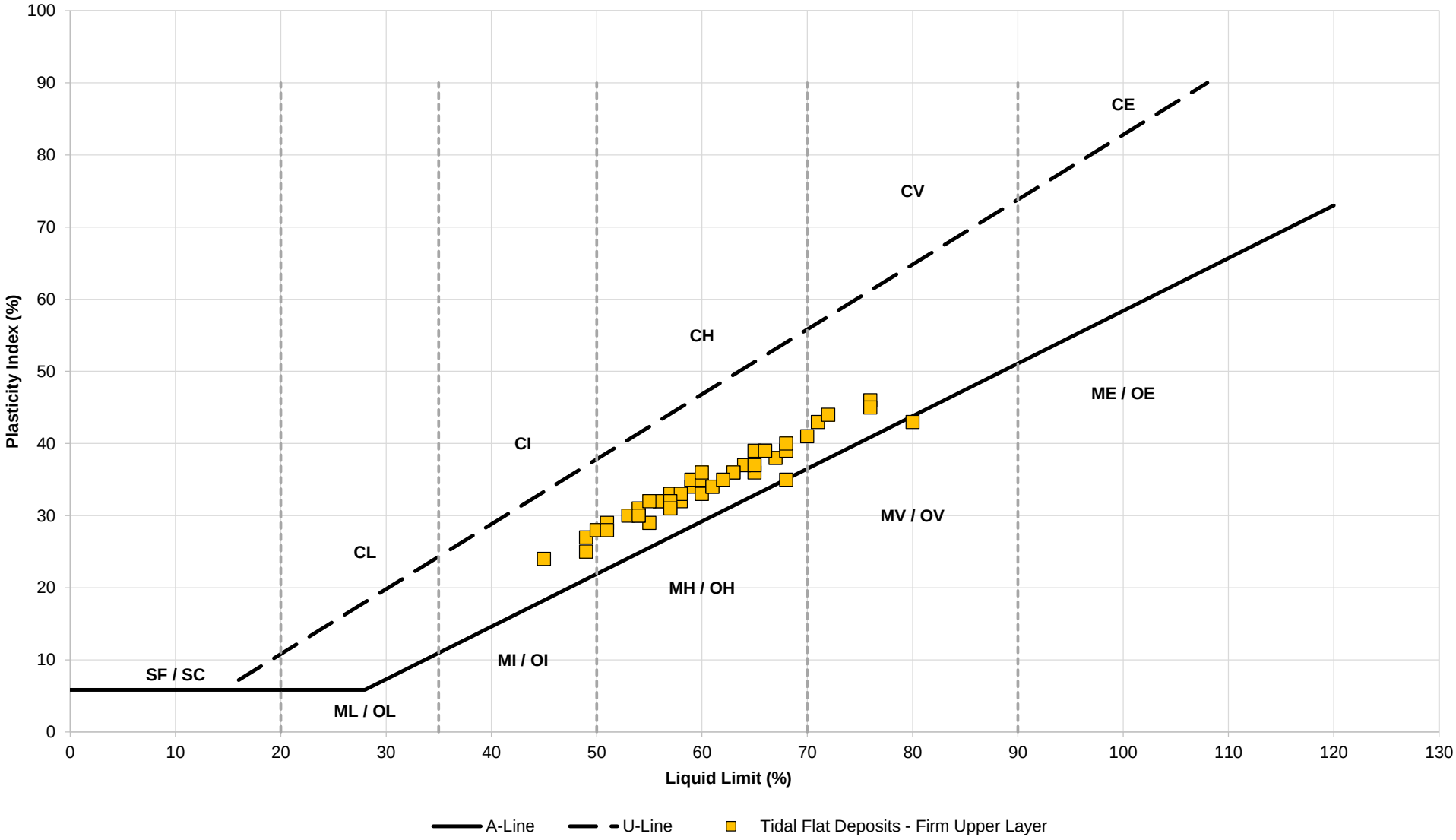
Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



Title:	West Site - Plasticity chart - Tidal Flat Deposits - Firm Upper Layer					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.43	**Author:**	CC	**Date:**	June-23	**Location:**	Immingham
Revision:	P01	**Checker:**	DW	**Date:**	June-23	**Client:**	Air Products

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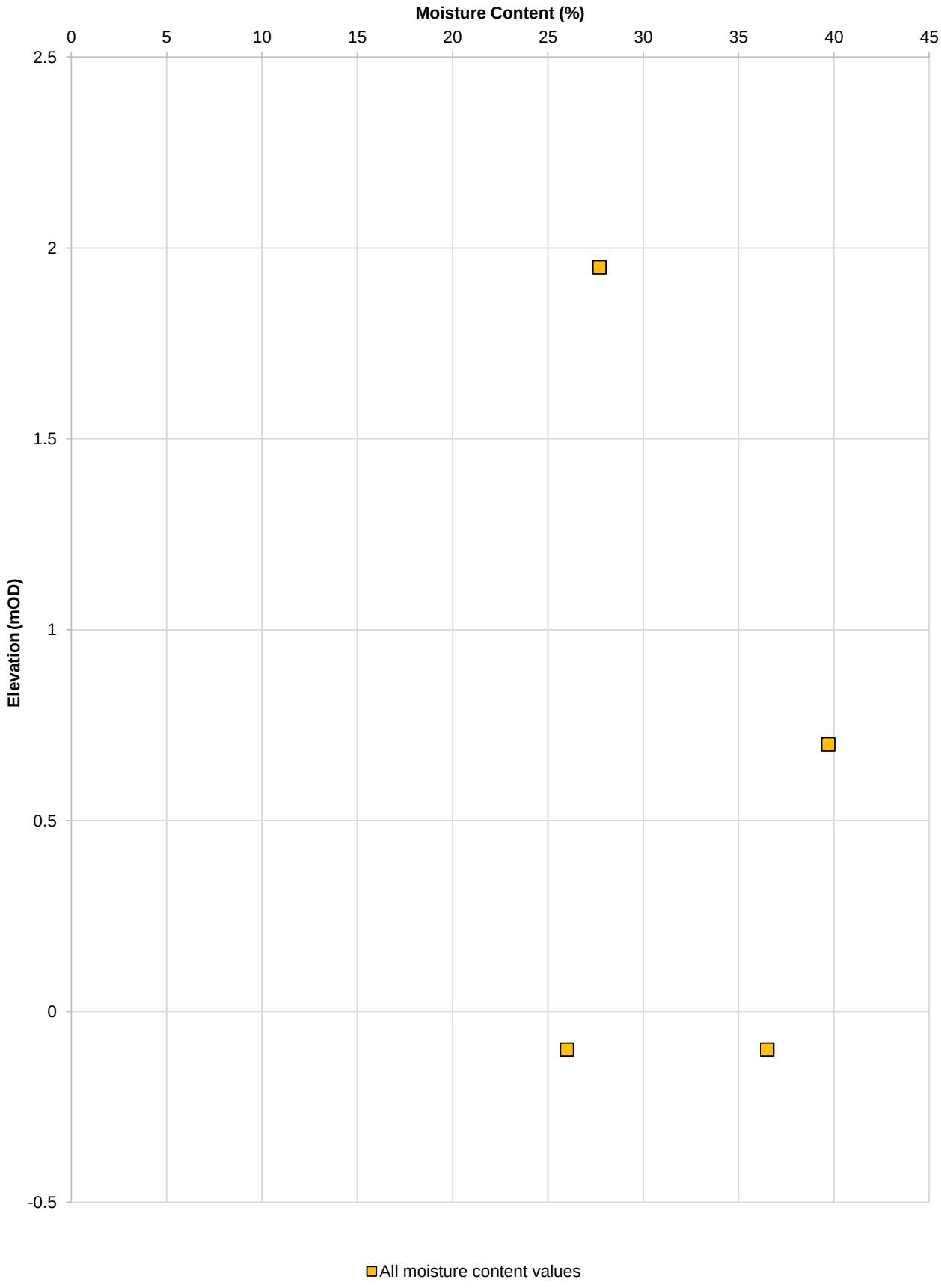

Title:	East Site - Hydrogen Production: Moisture content by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.44
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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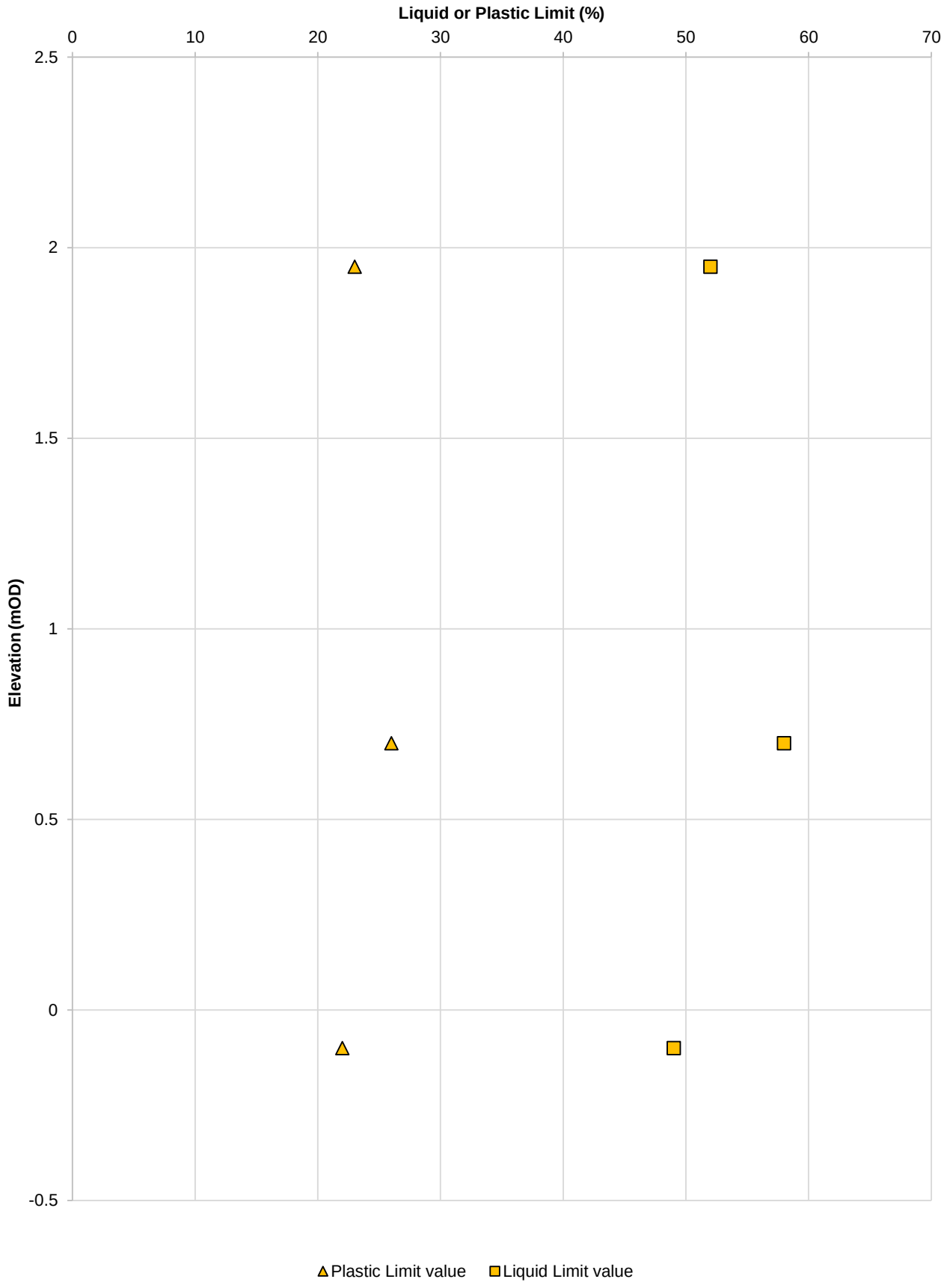

Title:	East Site - Hydrogen Production: Liquid Limit and Plastic Limit by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.45
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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Title:	East Site - Hydrogen Production: Plasticity Index by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.46
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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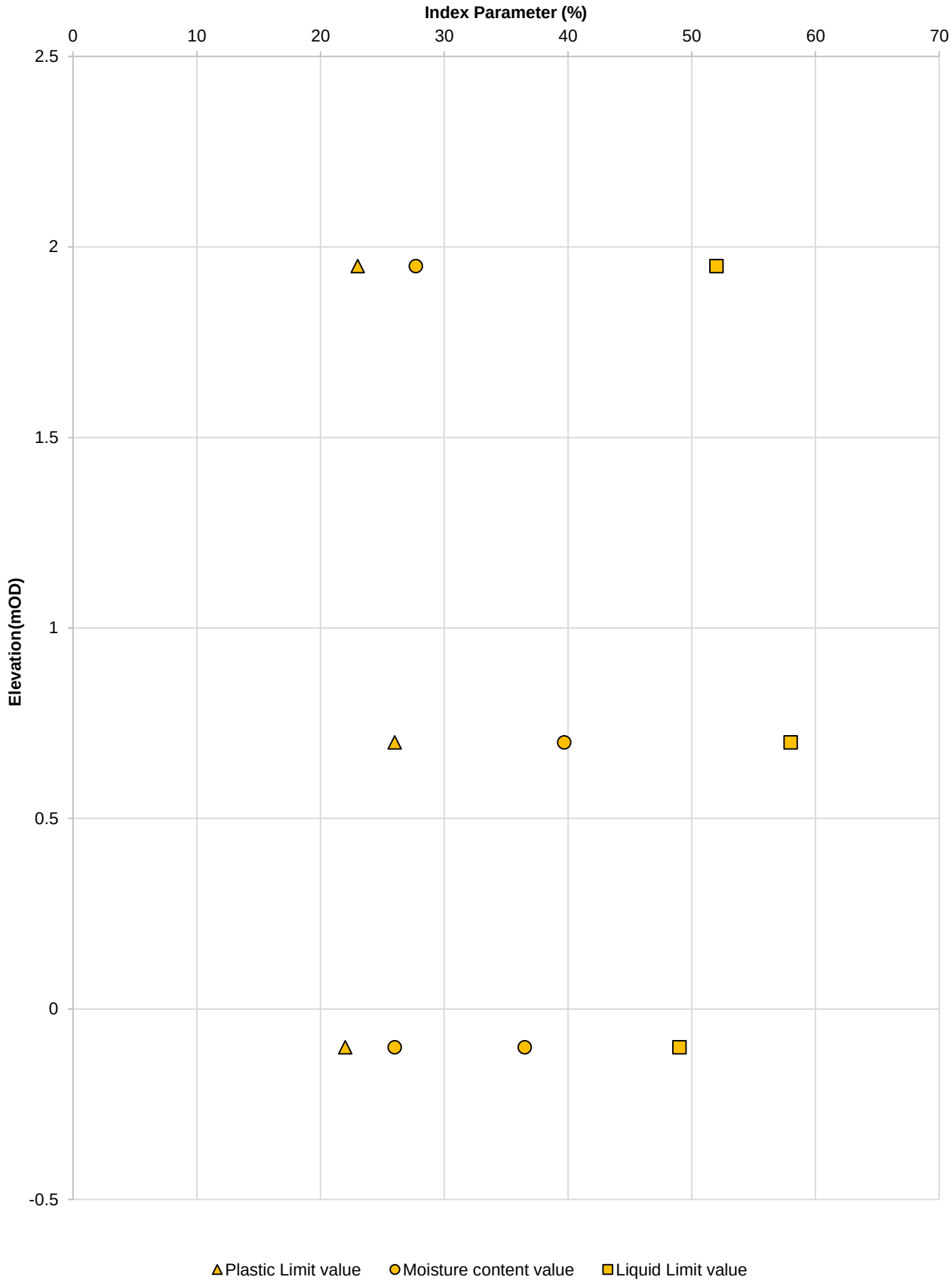

Title:	East Site - Hydrogen Production: Moisture content & Atterberg Limits by Elevation - Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.47
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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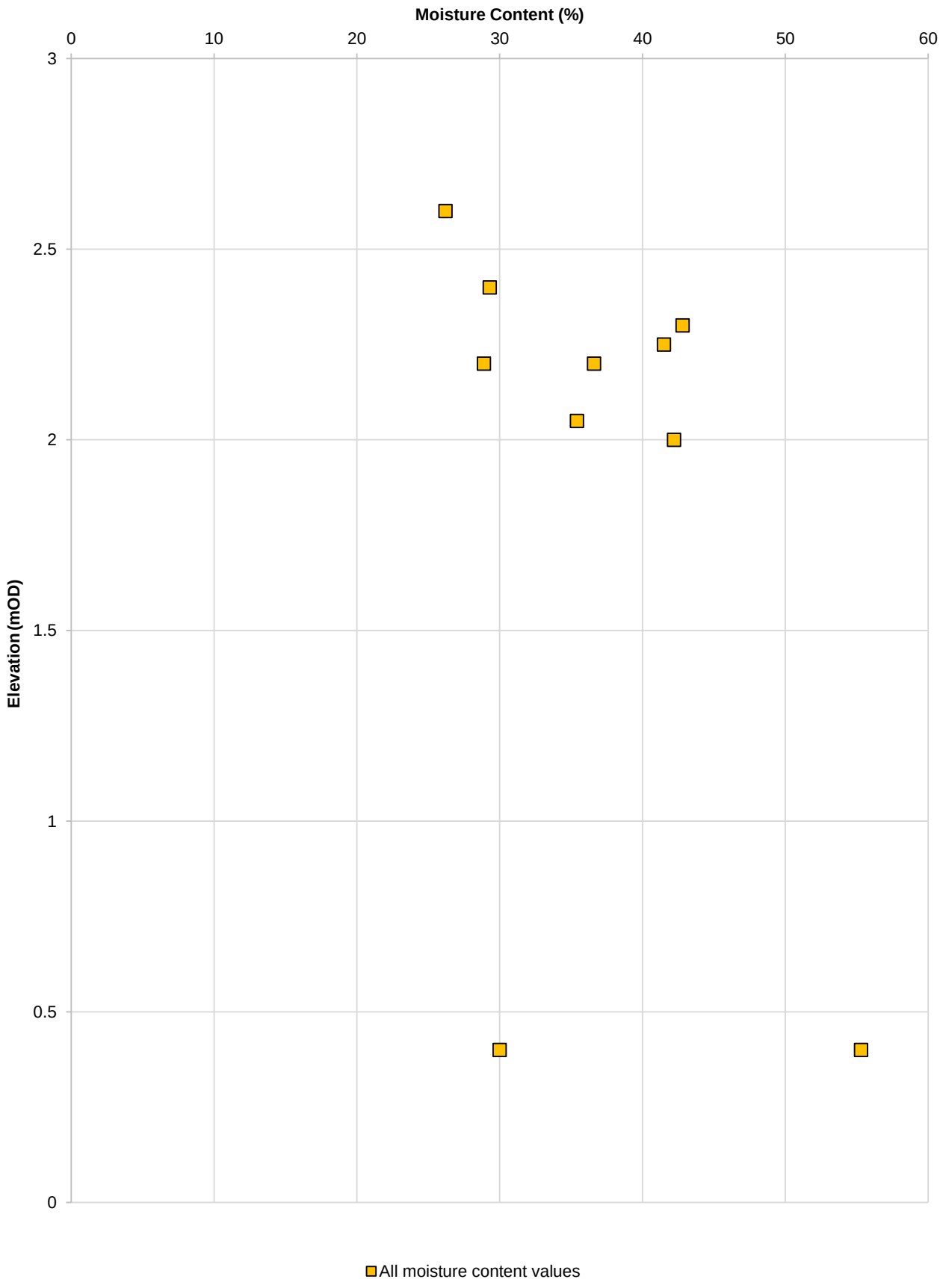

Title:	East Site Ammonia Storage - Moisture content by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.48
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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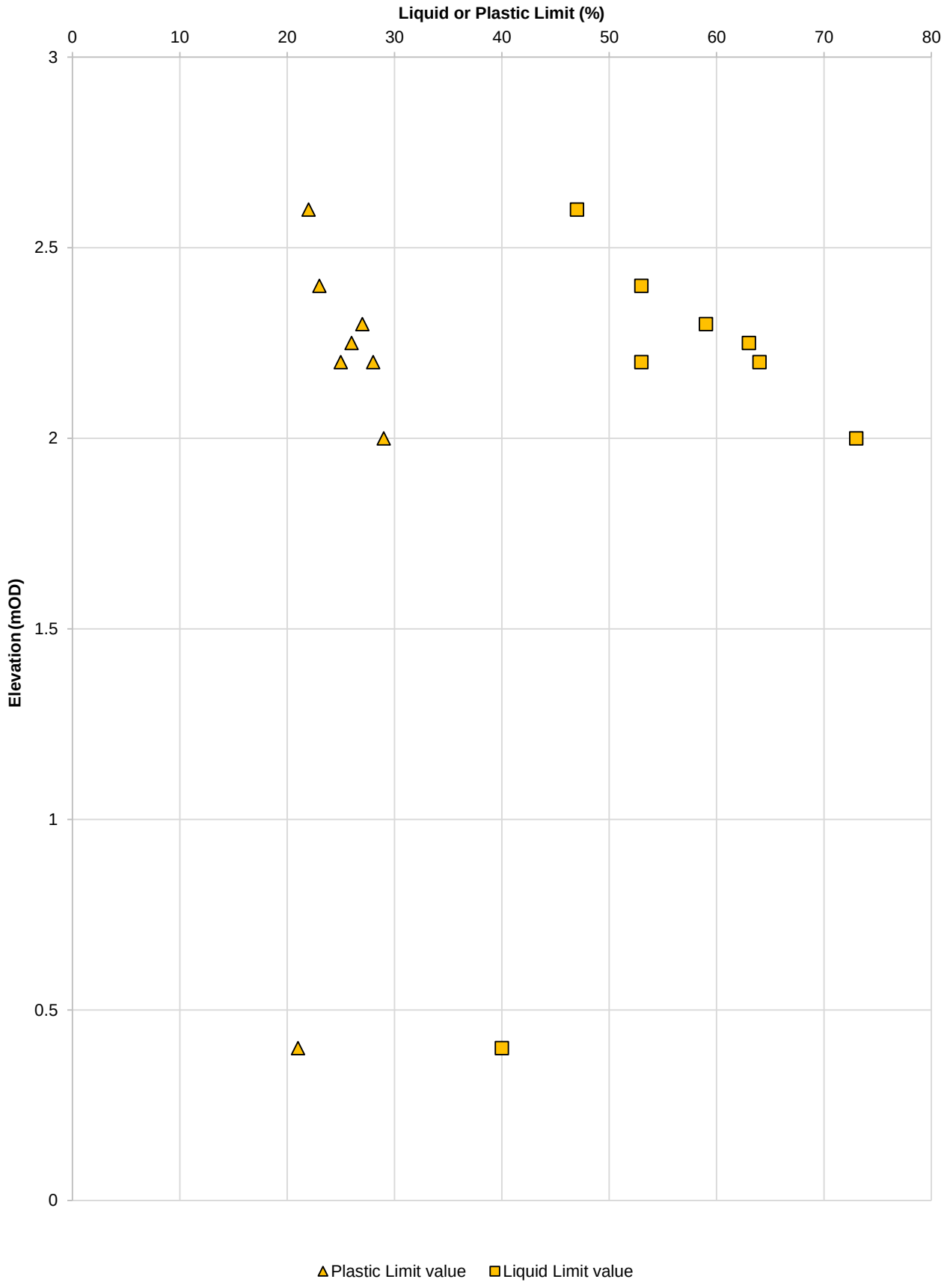

Title:	East Site Ammonia Storage - Liquid Limit and Plastic Limit by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.49
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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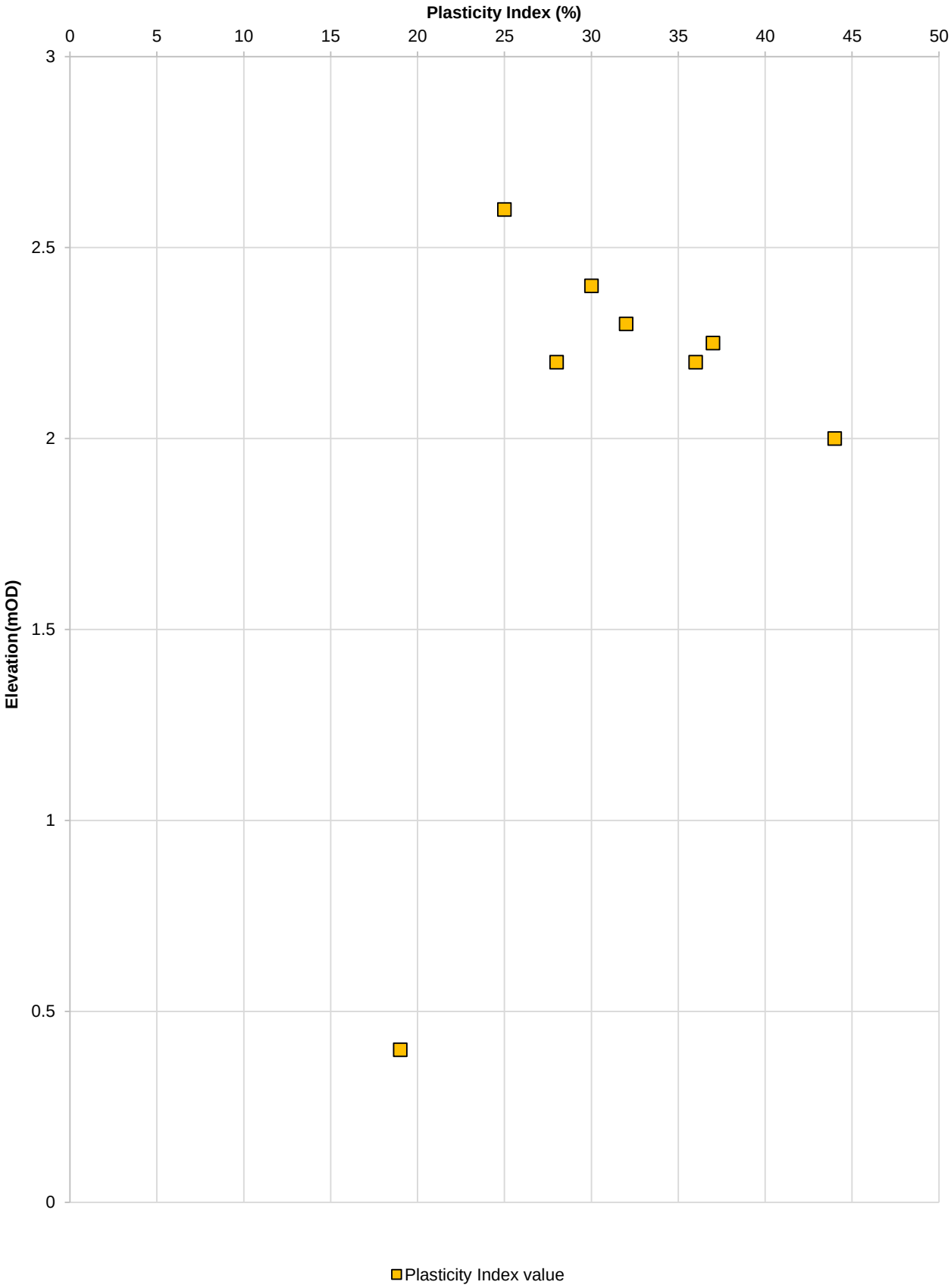

Title:	East Site Ammonia Storage - Plasticity Index by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.50
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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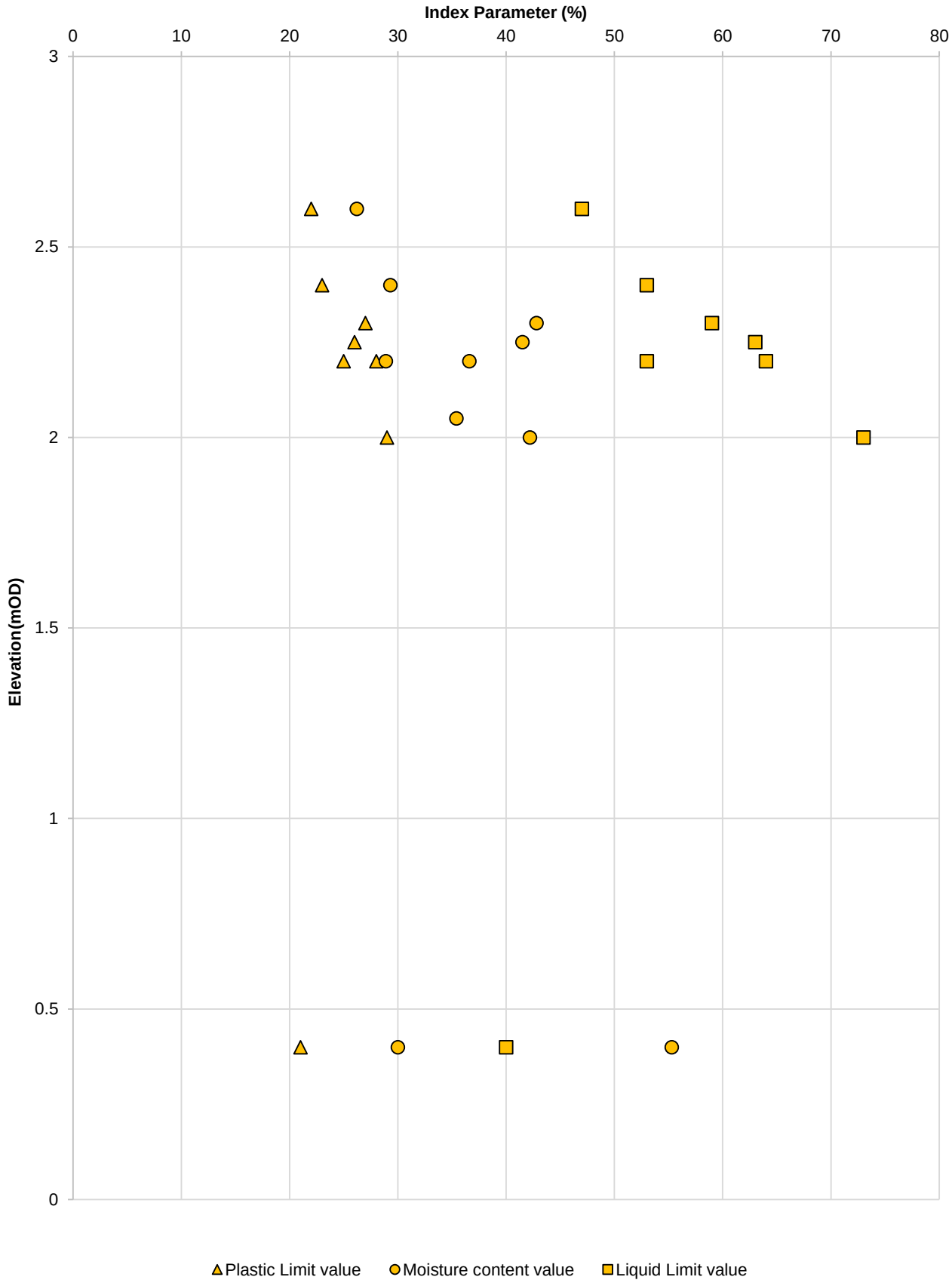

Title:	East Site Ammonia Storage - Moisture content & Atterberg Limits by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.51
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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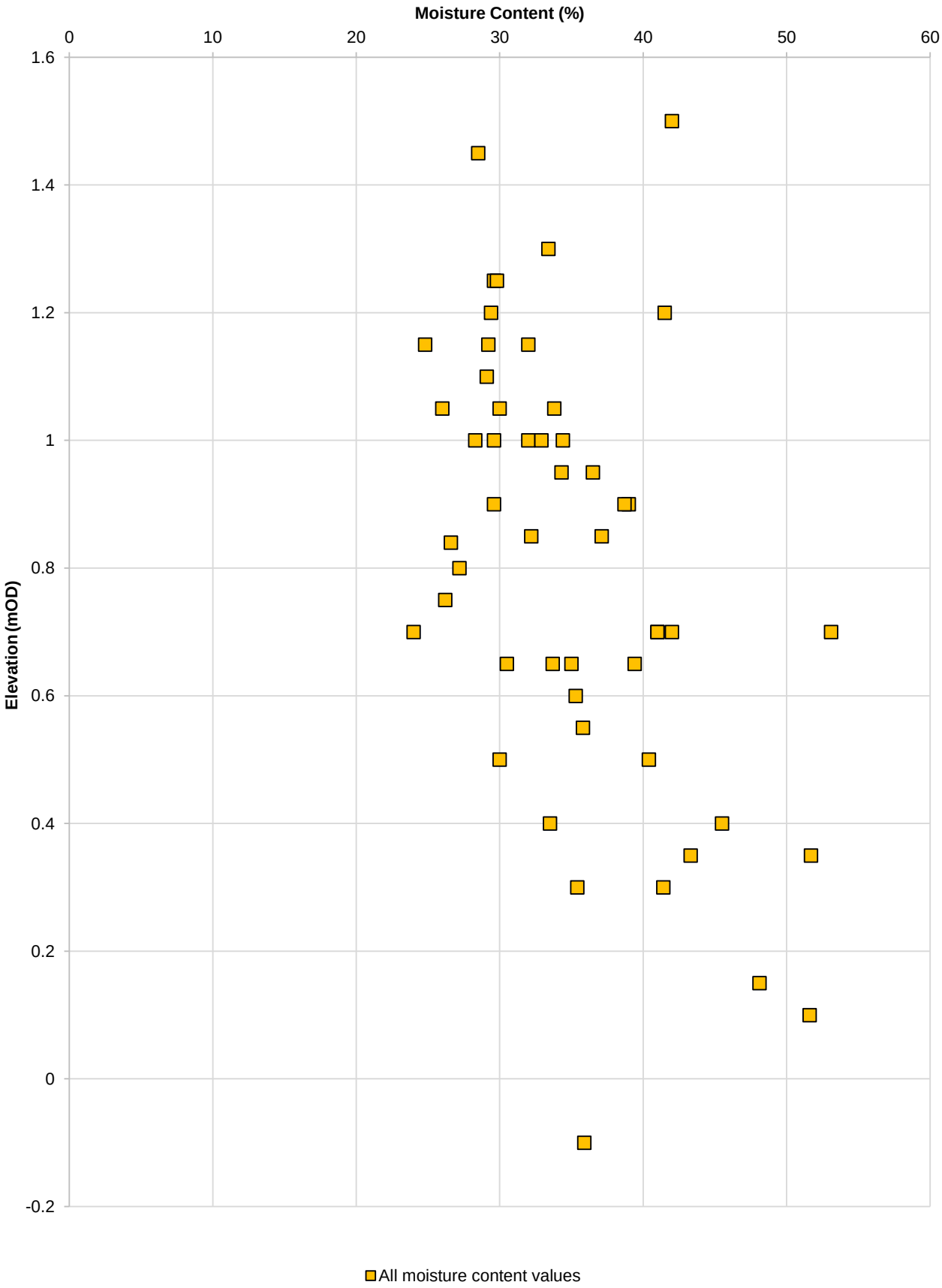

Title:	West Site - Moisture content by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.52
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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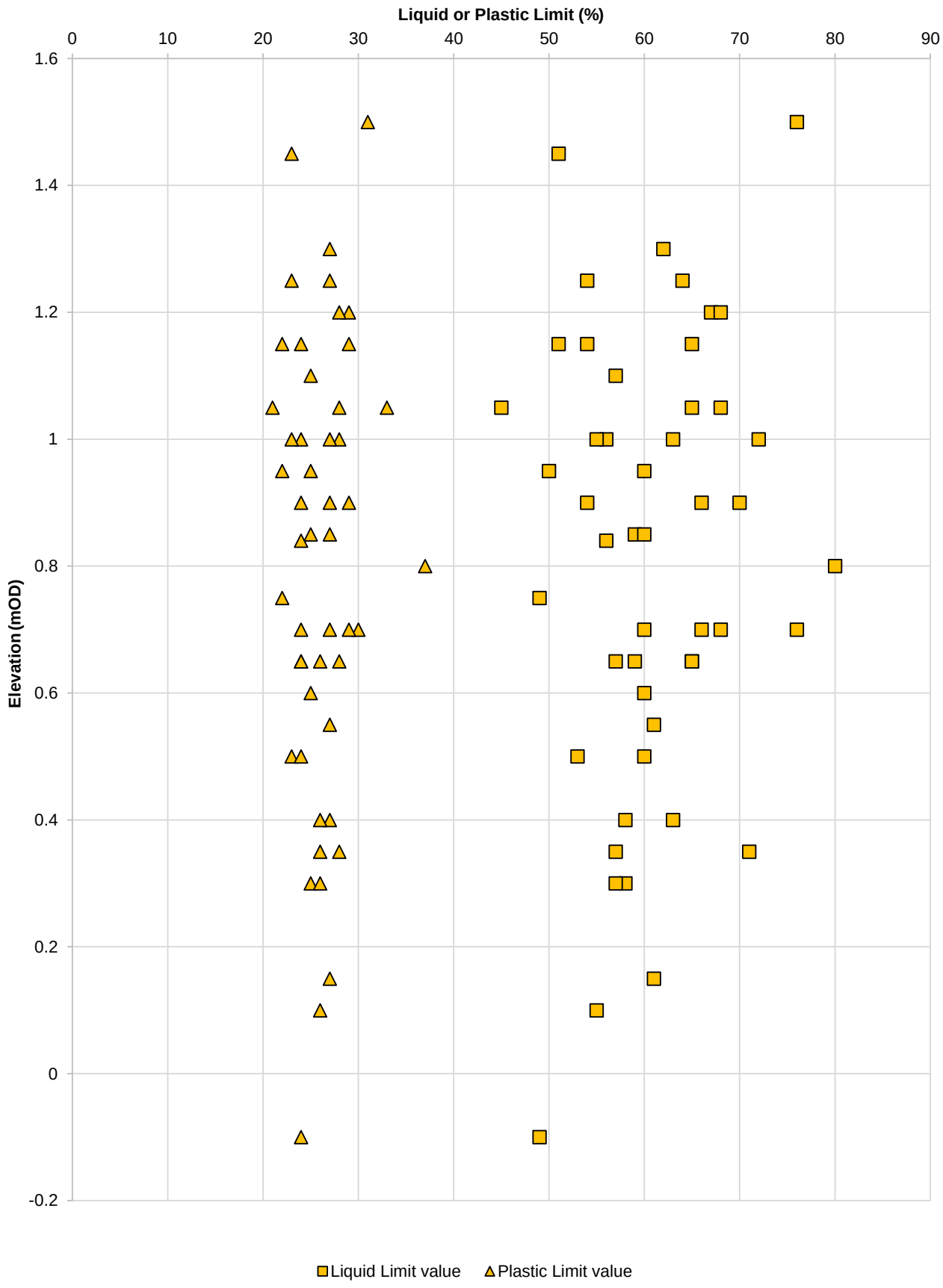

Title:	West Site - Liquid Limit and Plastic Limit by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.53
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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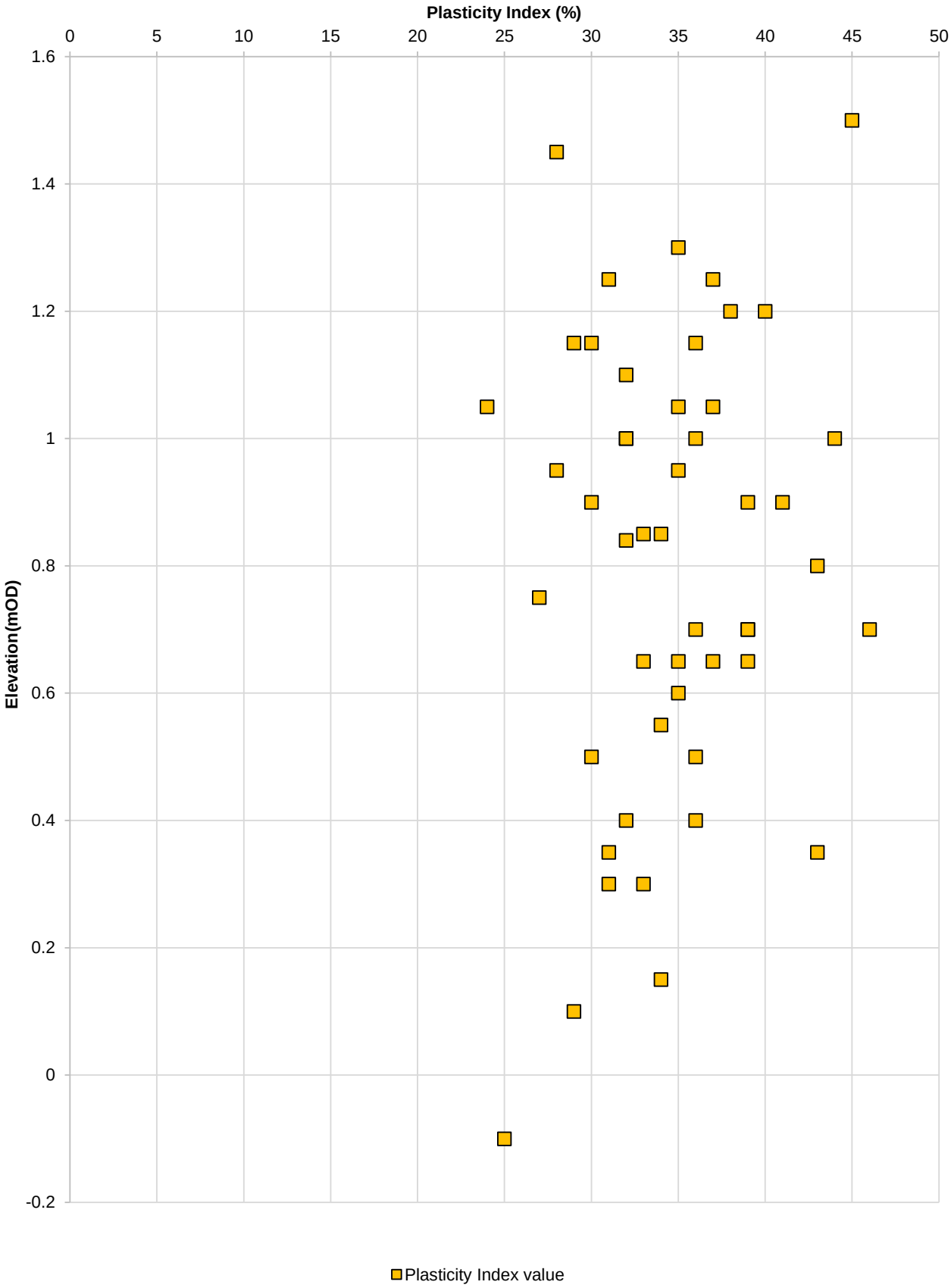

Title:	West Site - Plasticity Index by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.54
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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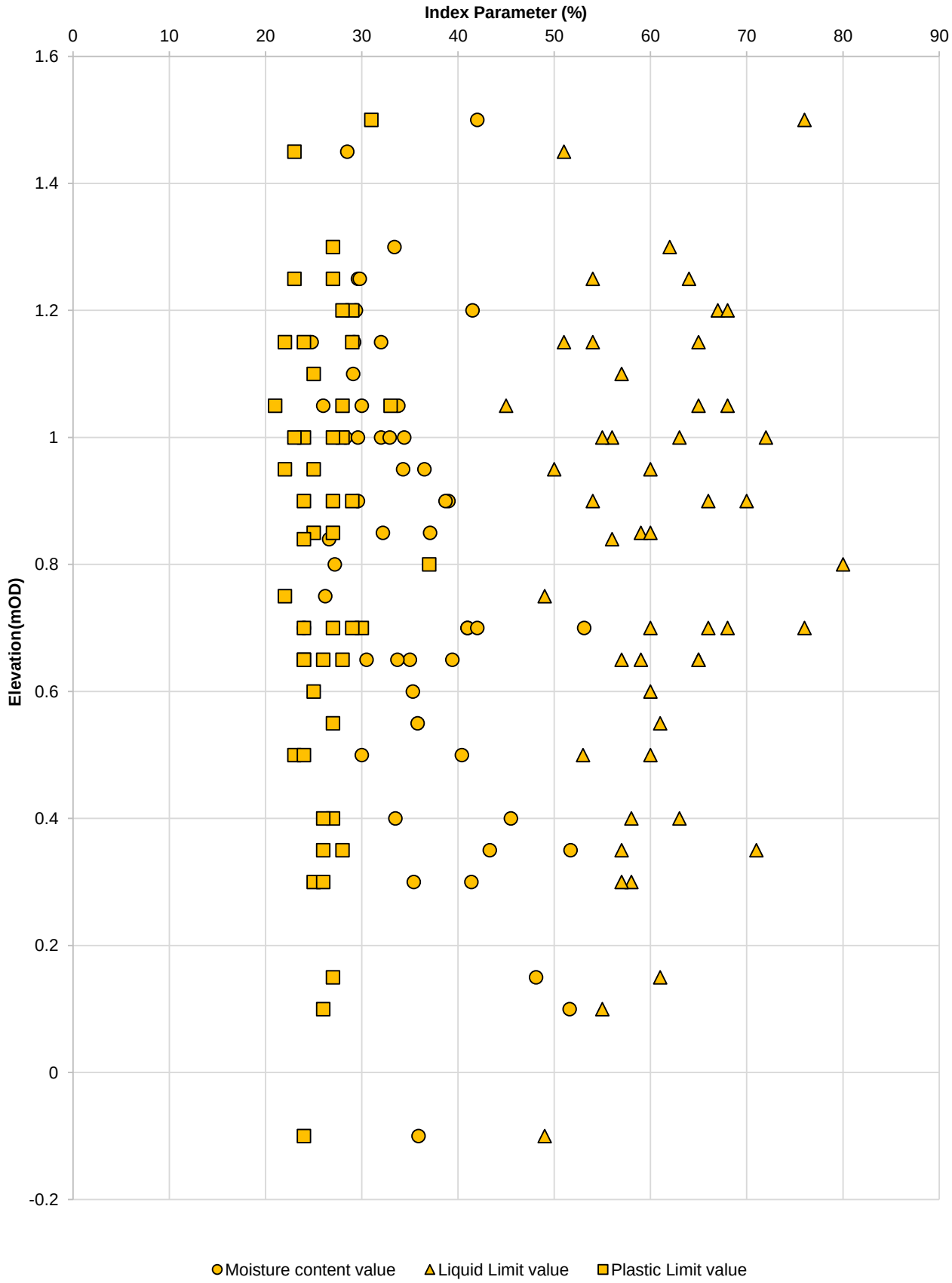

Title:	West Site - Moisture content & Atterberg Limits by Elevation - Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.55
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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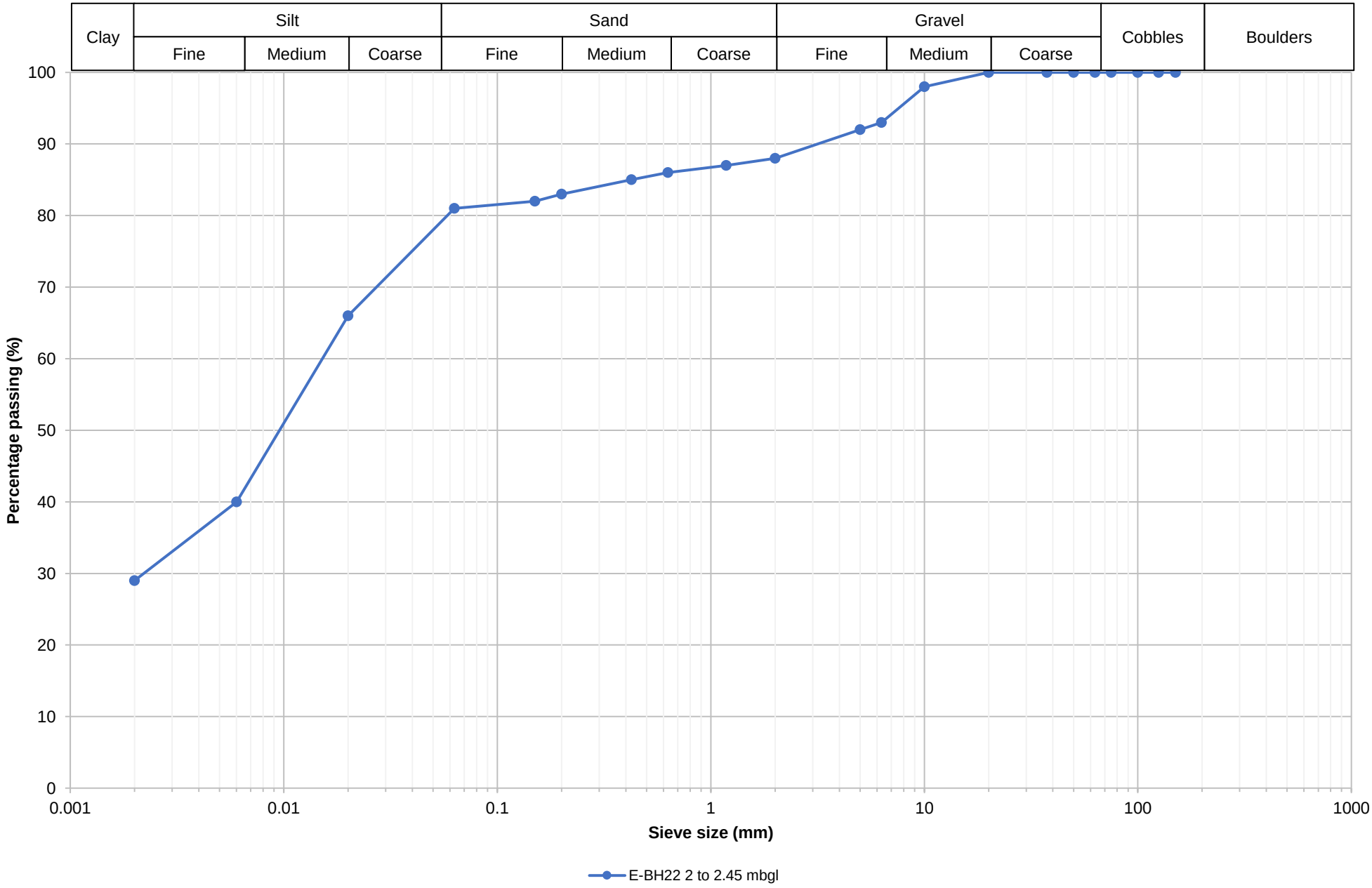

Title:	East Site Hydrogen Production: Plot of Particle size distribution (PSD) by Sample for TFD2					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.56	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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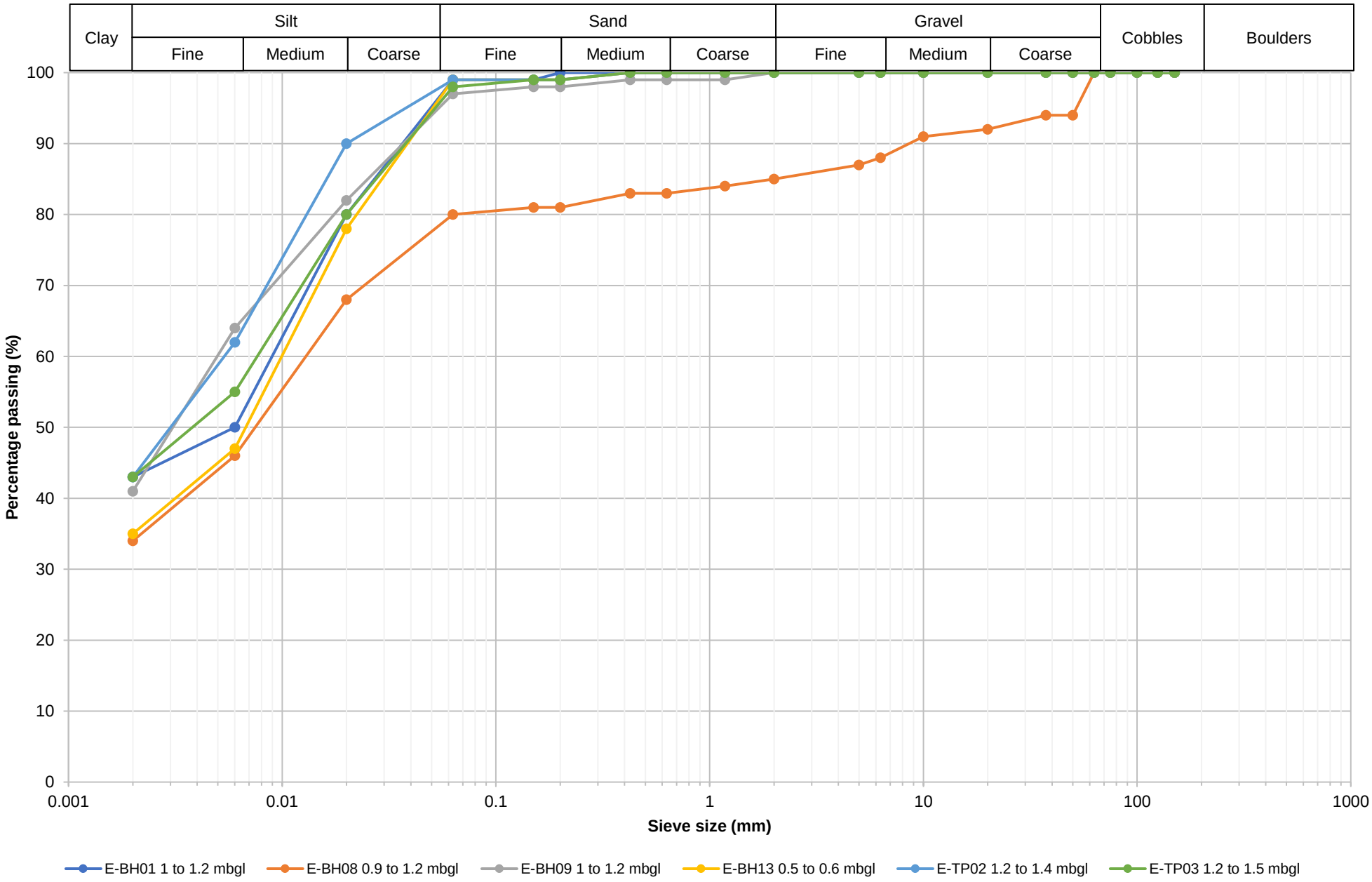

Title:	East Site Ammonia Storage: Plot of Particle size distribution (PSD) by Sample for Firm Tidal Flat Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.57	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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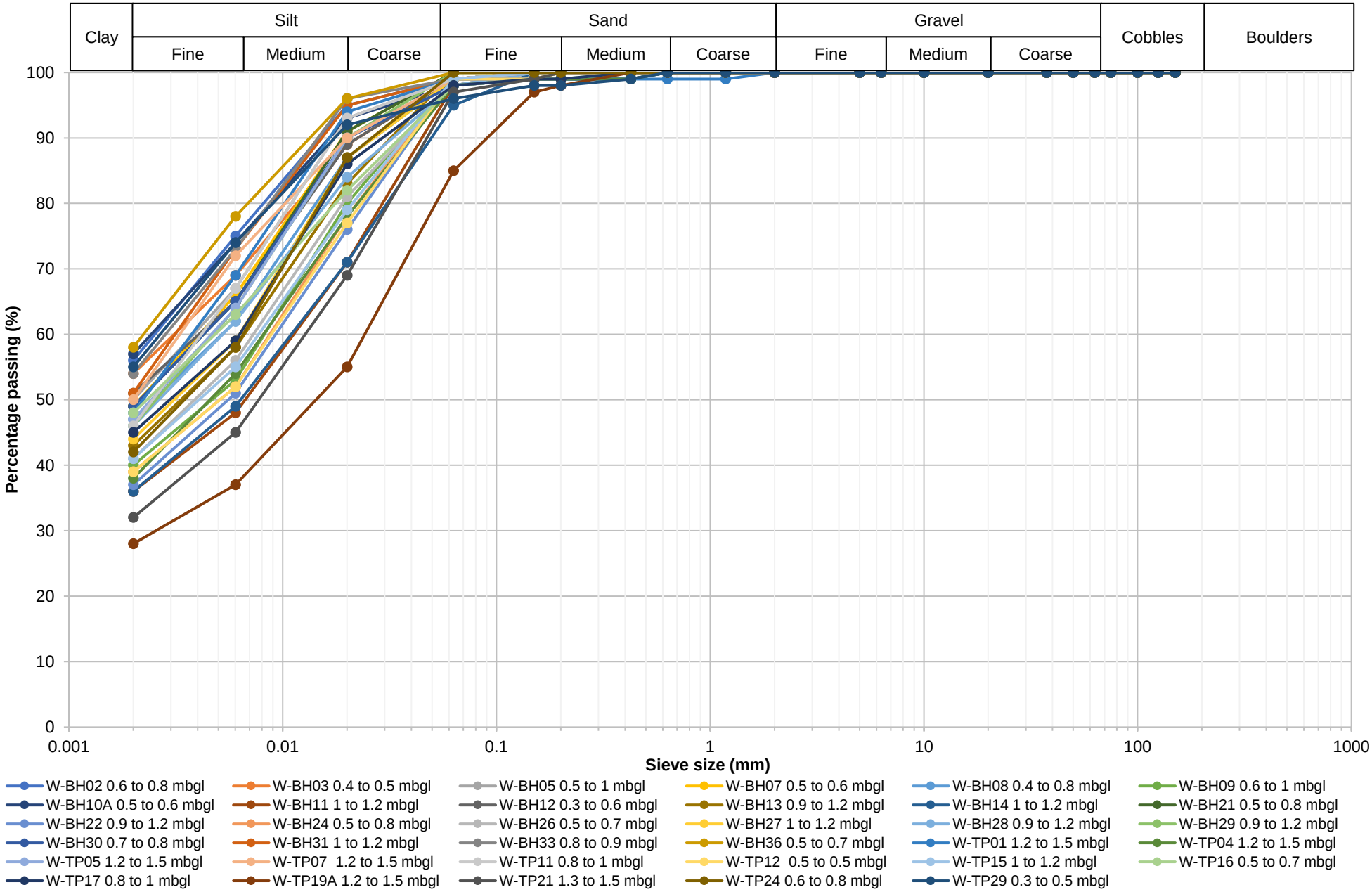

Title:	West Site: Plot of Particle size distribution (PSD) by Sample for Firm Tidal Flat Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.58	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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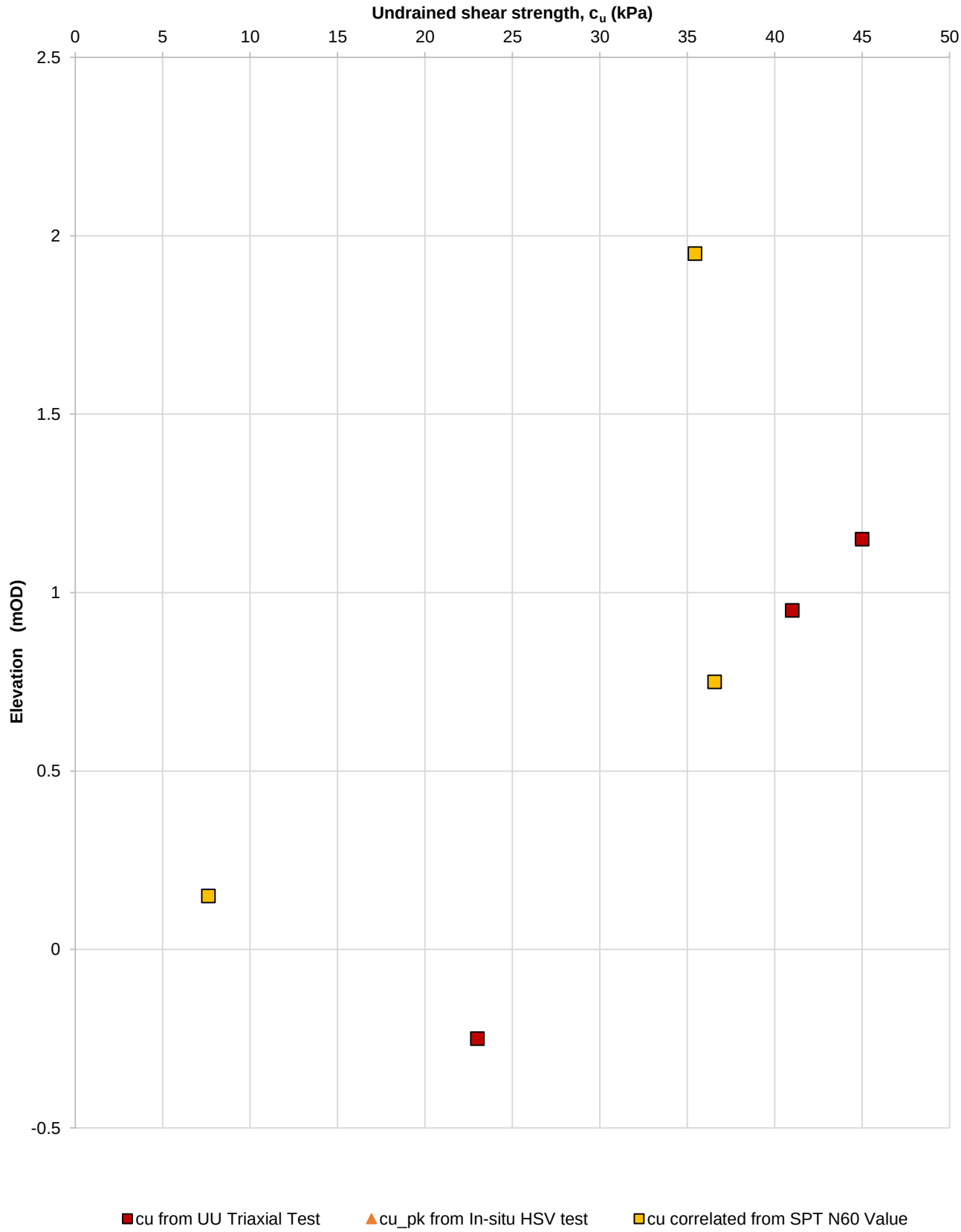

Title:	East Site Hydrogen Production: Undrained Shear Strength by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.59
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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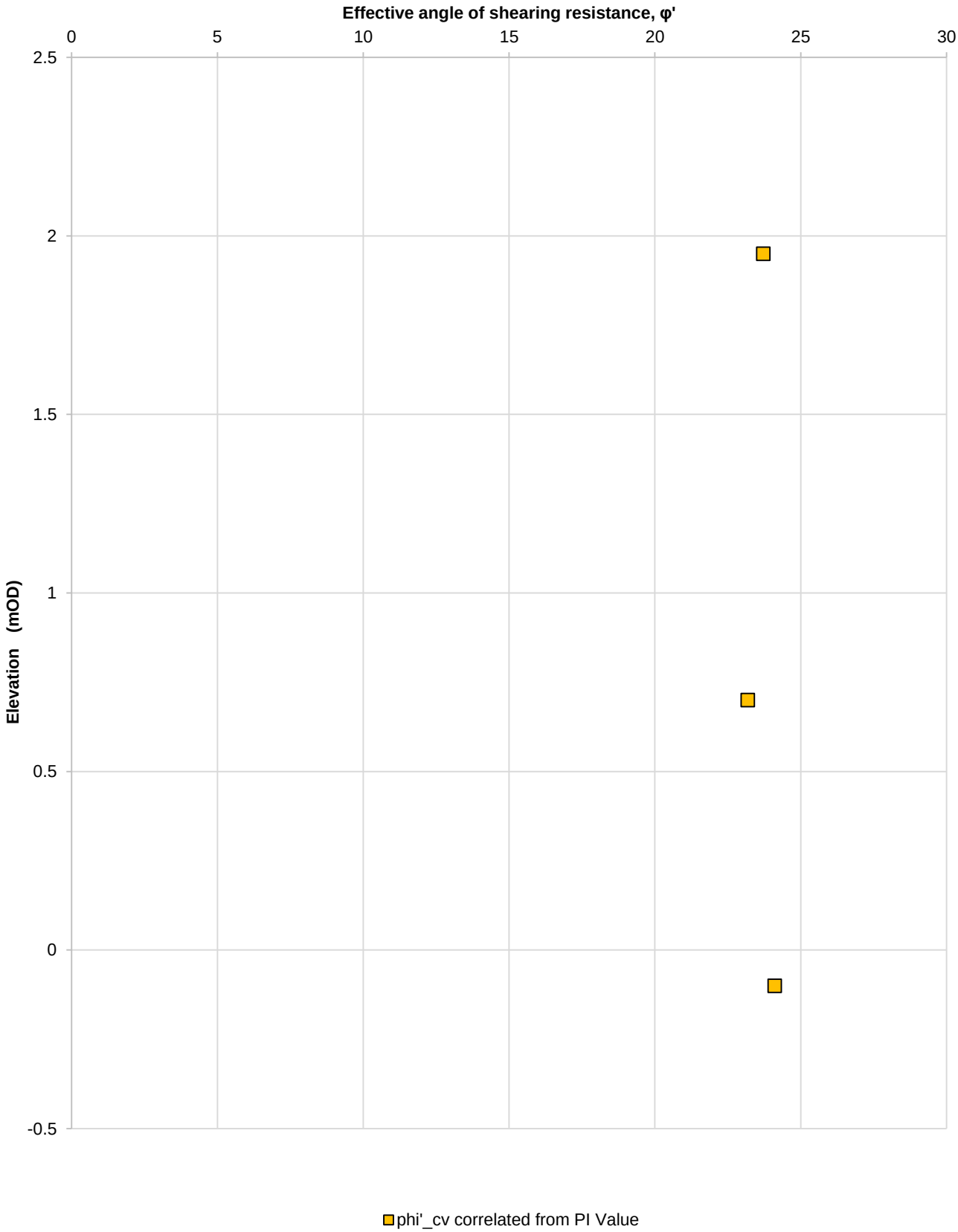

Title:	East Site Hydrogen Production: Effective Angle of Shearing Resistance by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.60
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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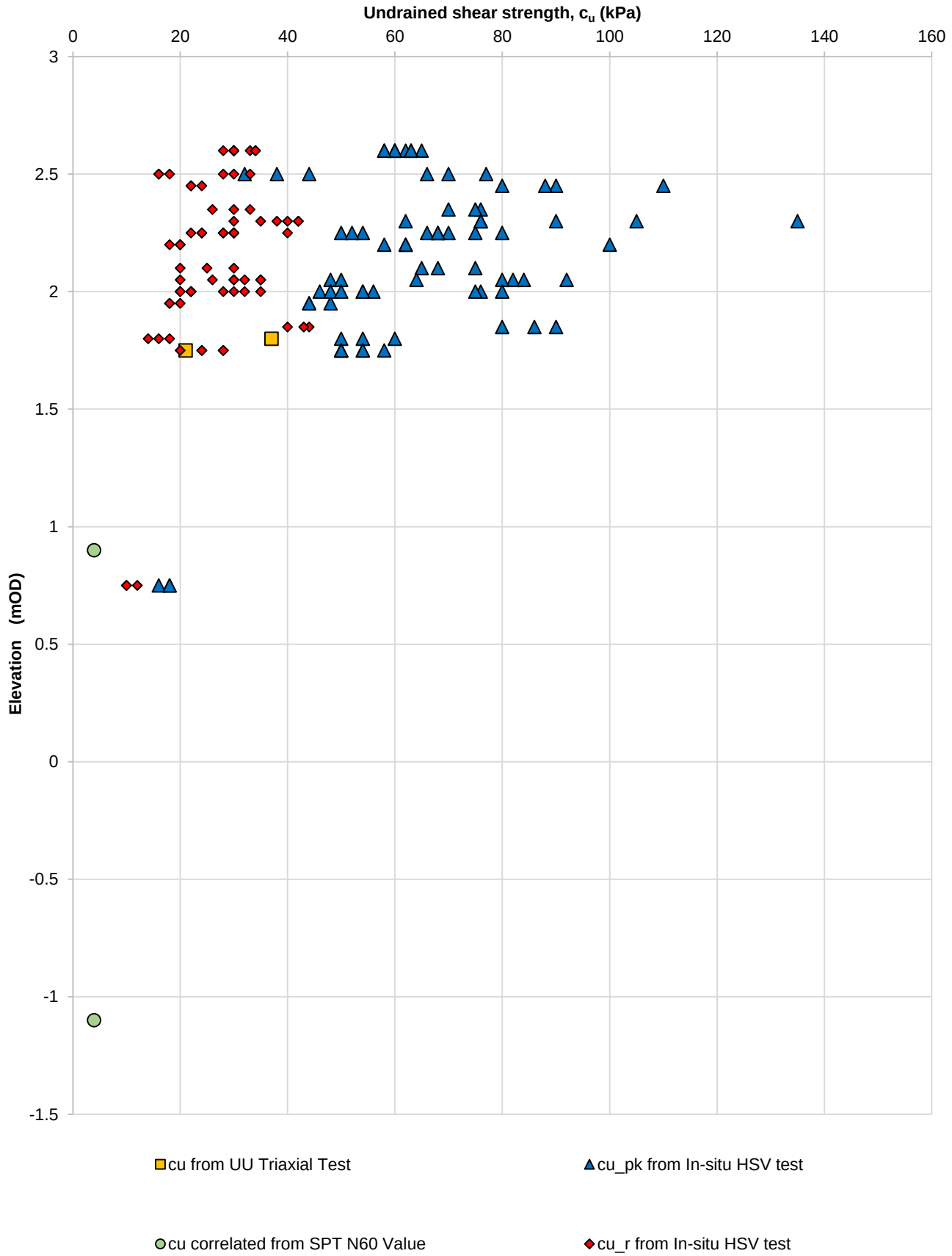

Title:	East Site Ammonia Storage: Undrained Shear Strength by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.61
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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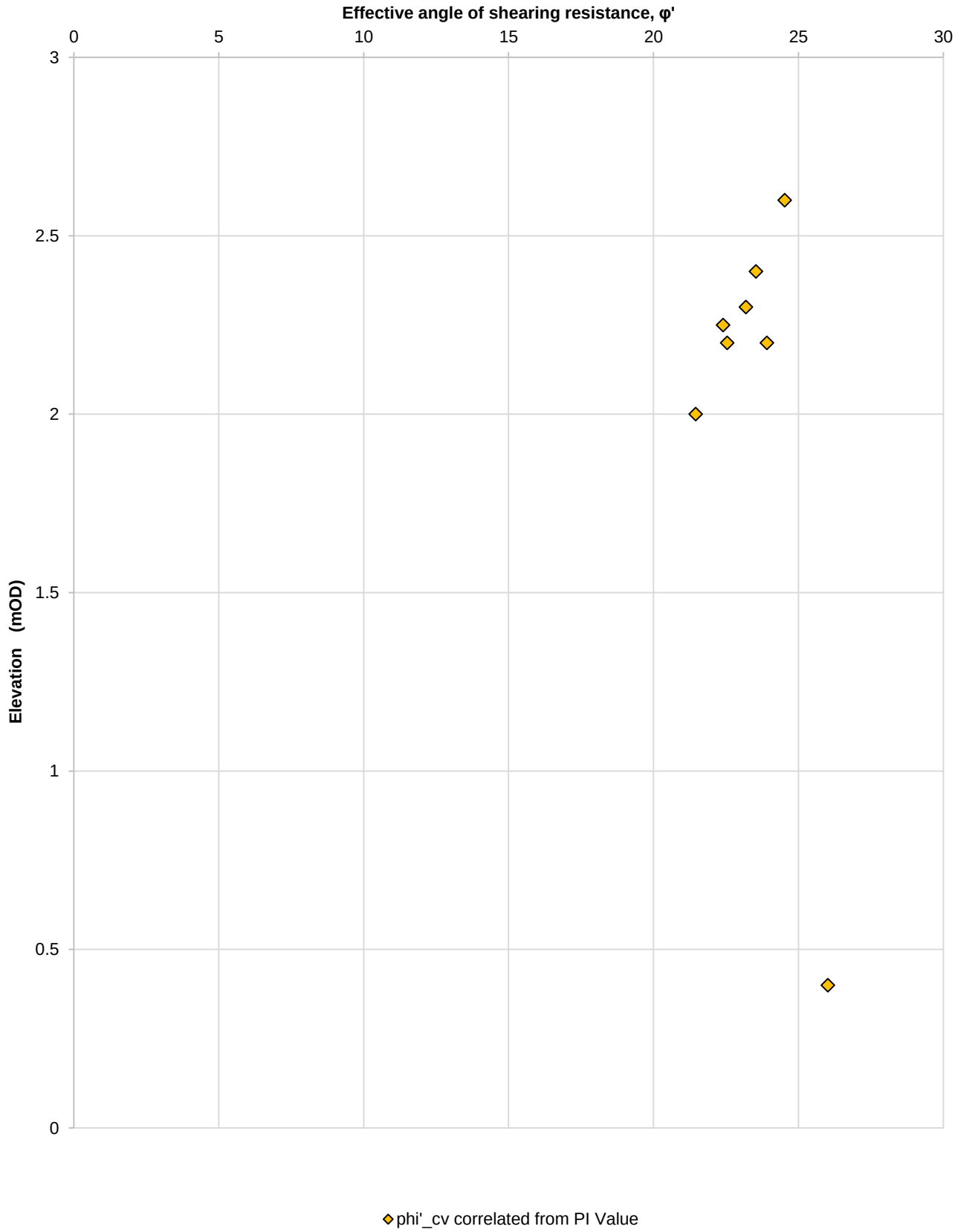

Title:	East Site Ammonia Storage: Effective Angle of Shearing Resistance by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.62
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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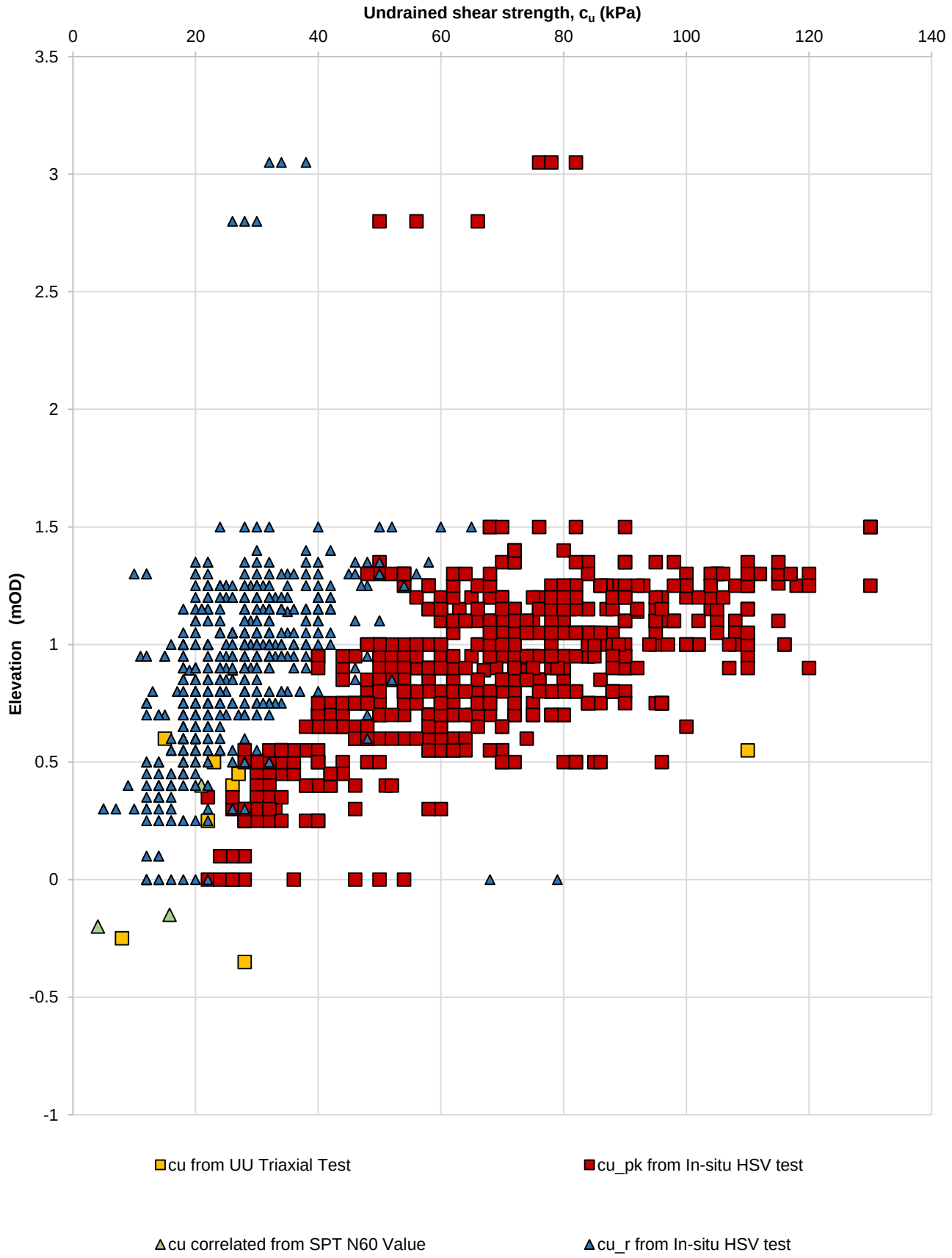

Title:	West Site: Undrained Shear Strength by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.63
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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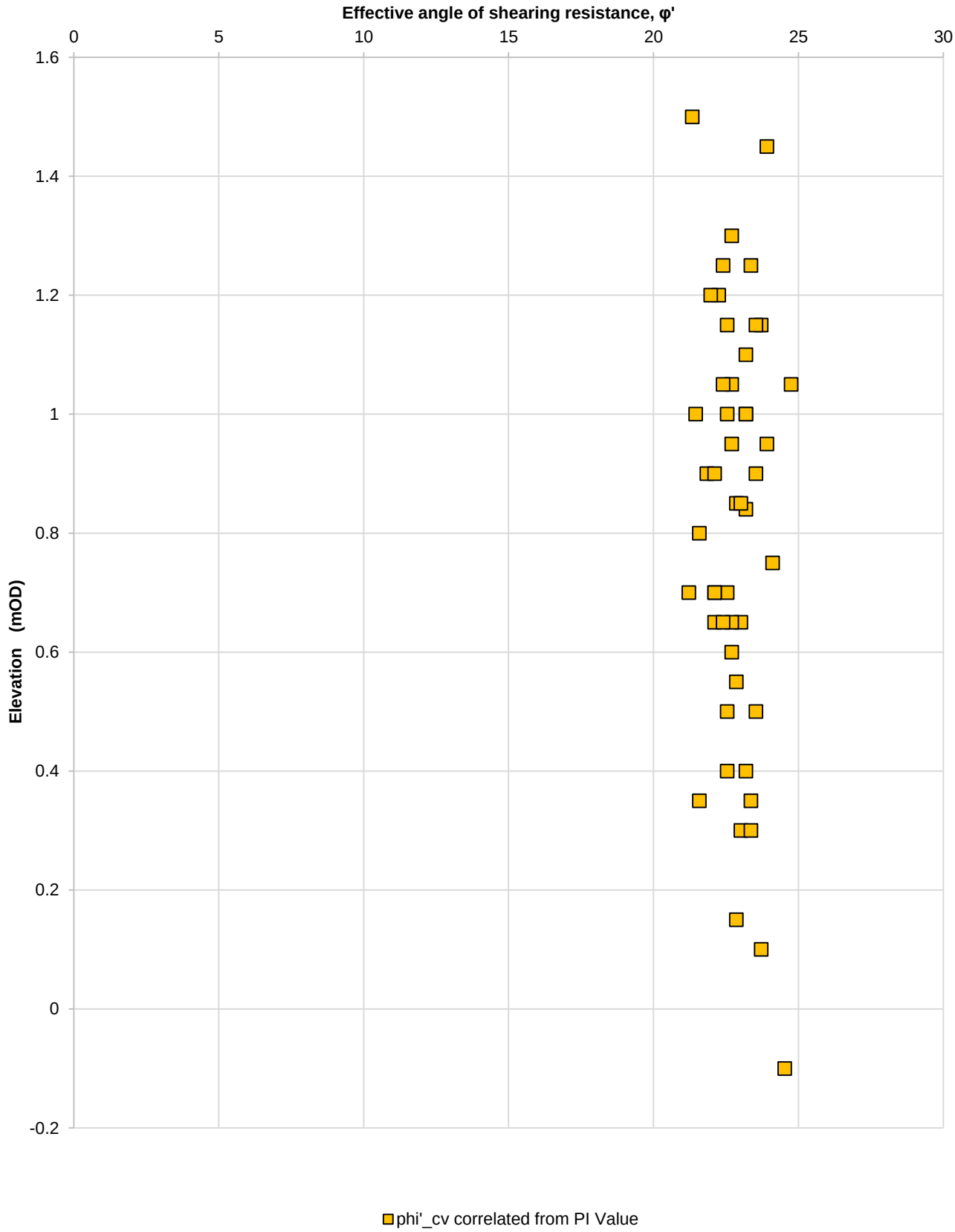

Title:	West Site: Effective Angle of Shearing Resistance by Elevation for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.64
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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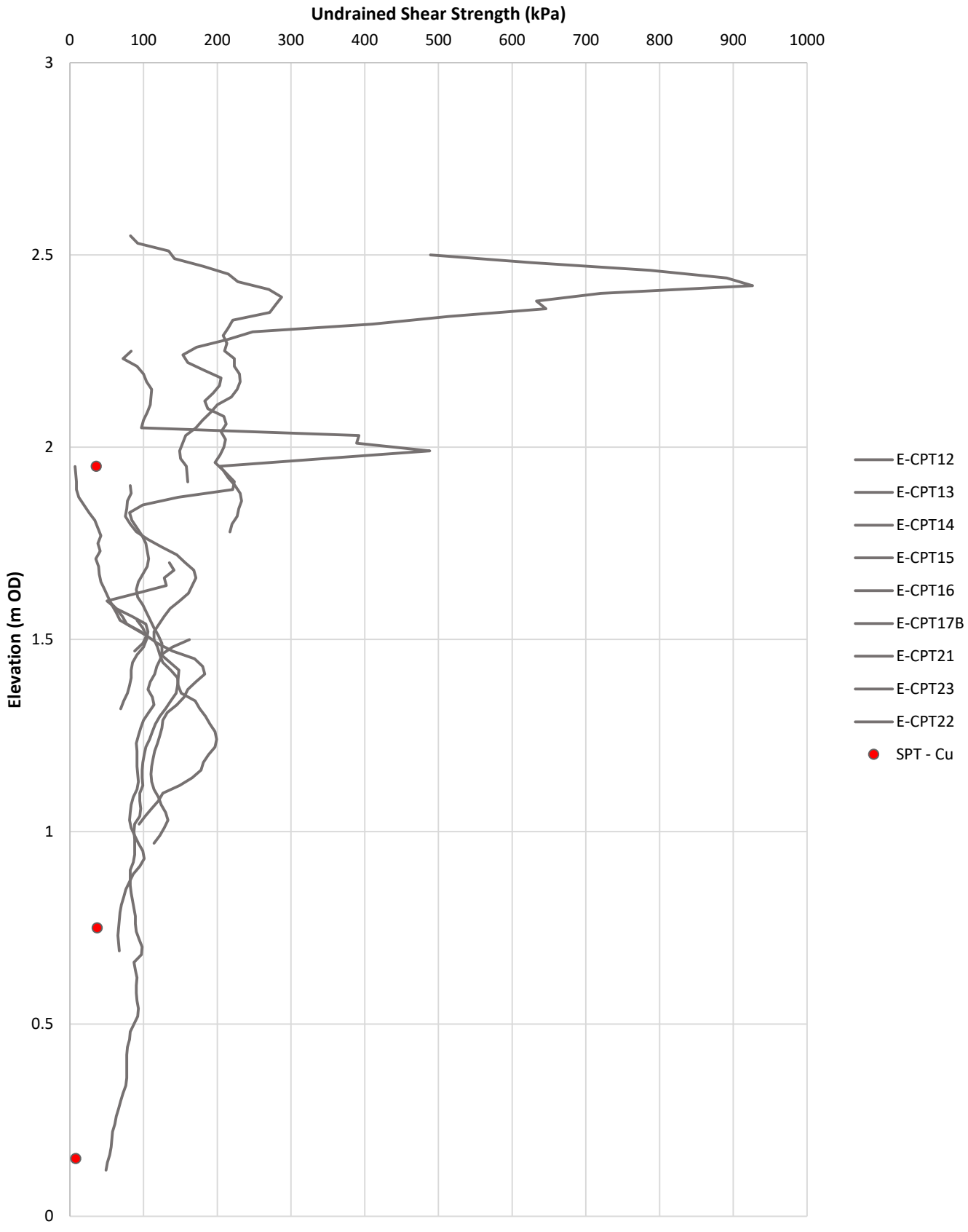

Title	East Site - Hydrogen Production - FTFD - Undrained Shear Strength (CPT, SPT) vs Elevation	**Figure No.:** D.65	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

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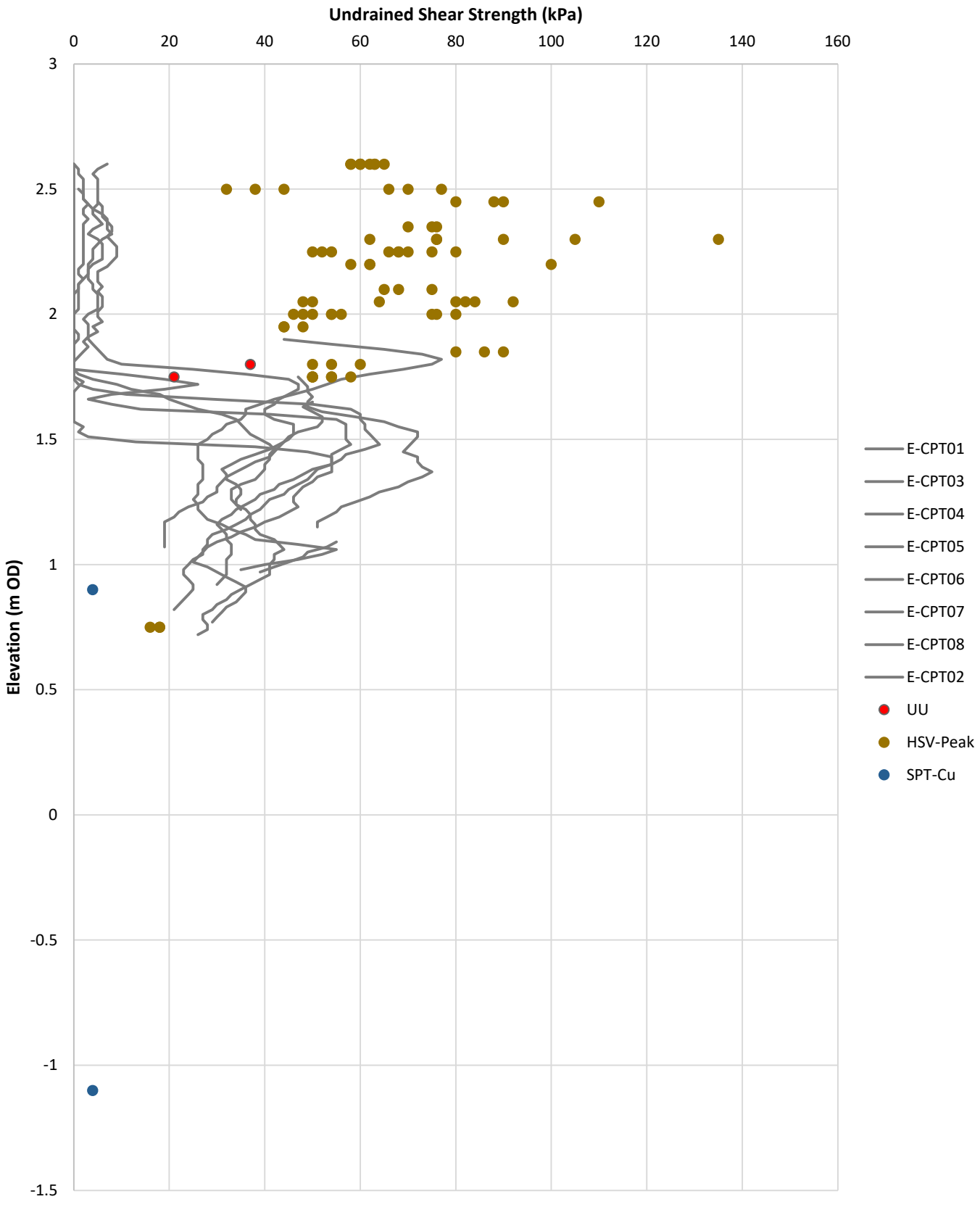

Title	East Site - Ammonia Storage - FTFD - Undrained Shear Strength (CPT, SPT, UU) vs Elevation	**Figure No.:** D.66	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author**	AL
Proj. No	60687114	**Date**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

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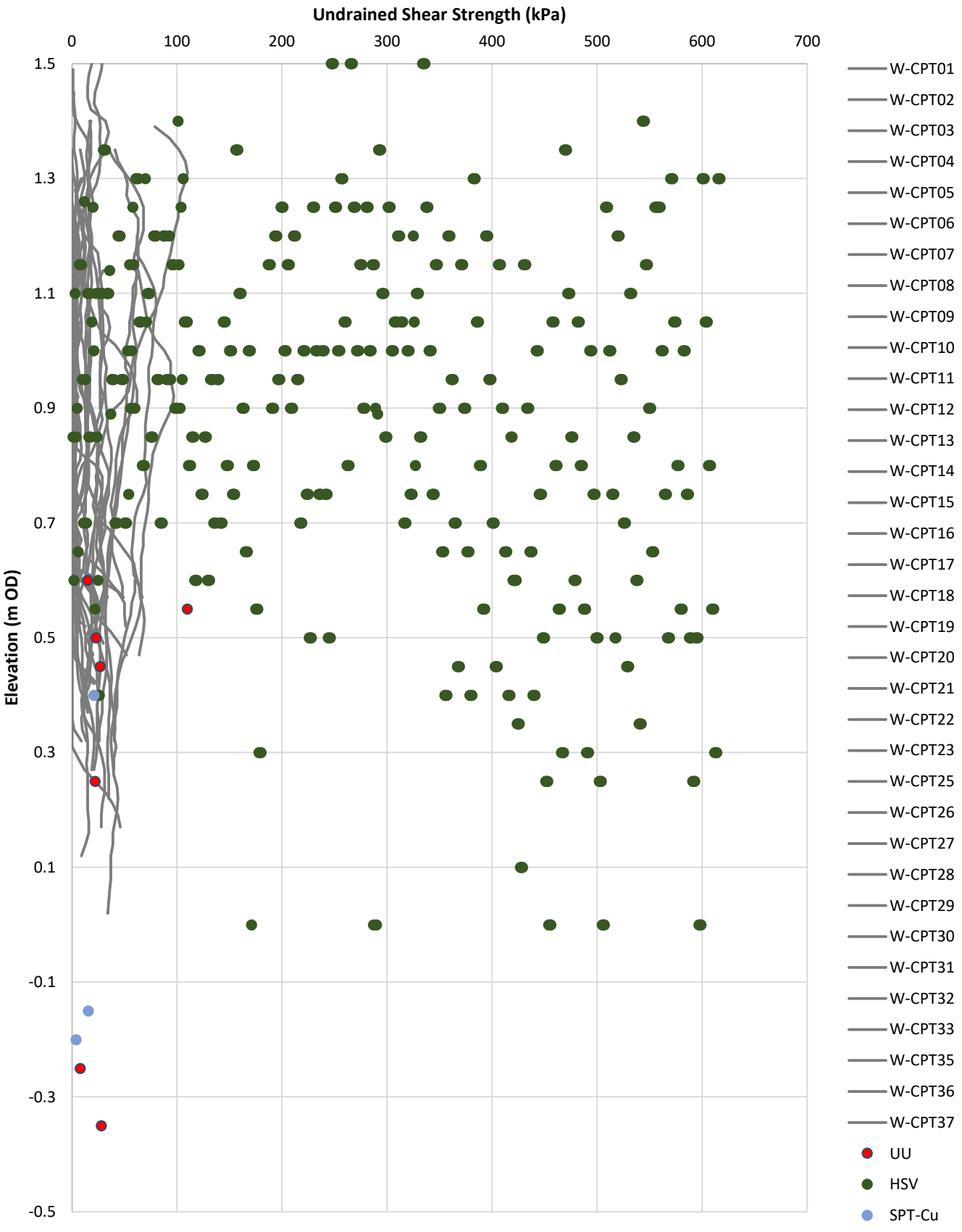
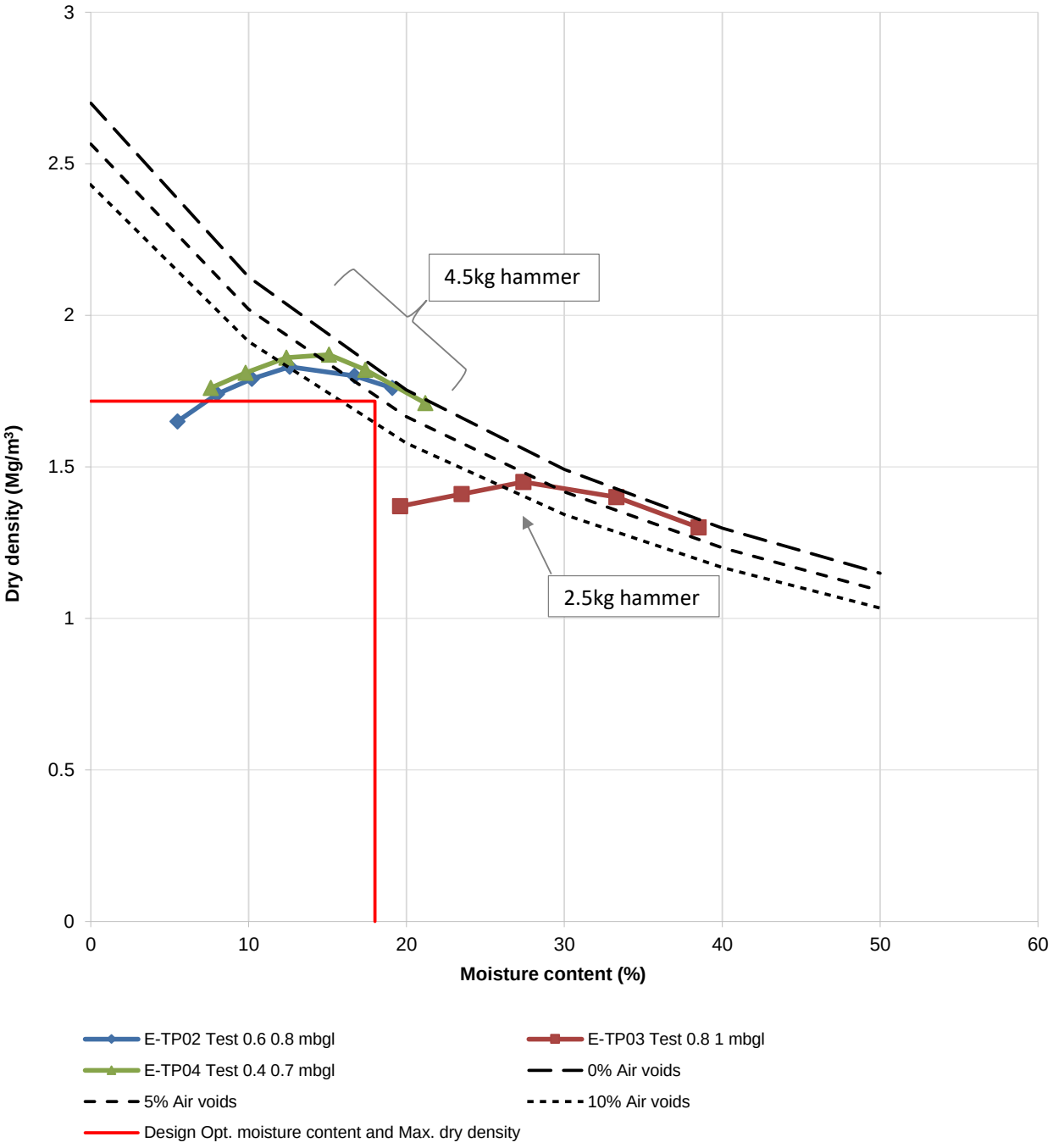


Title	West Site - FTFD - Undrained Shear Strength (CPT, HSV, SPT, UU) vs Elevation	**Figure No.:** D.67	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

AECOM



Test methods		Compaction types: 4.5KG, 2.5KG Moulds: 1L mould			
Mean proportion retained (%)		On 20mm sieve =	#N/A	On 37.5mm sieve =	#N/A
Values	**Optimum moisture content (%)**	Mean =	18.00	**Maximum dry density (Mg/m³)** Mean =	1.72
		Design =	18	Design =	1.72
Remarks	Symbols denote particle densities are: * measured values, # assumed values, ^ assumed and measured values				

Title:	East Site Ammonia Storage: Dry density vs Moisture content relationship by Sample for TFD2	**Figure No.:**	D.68
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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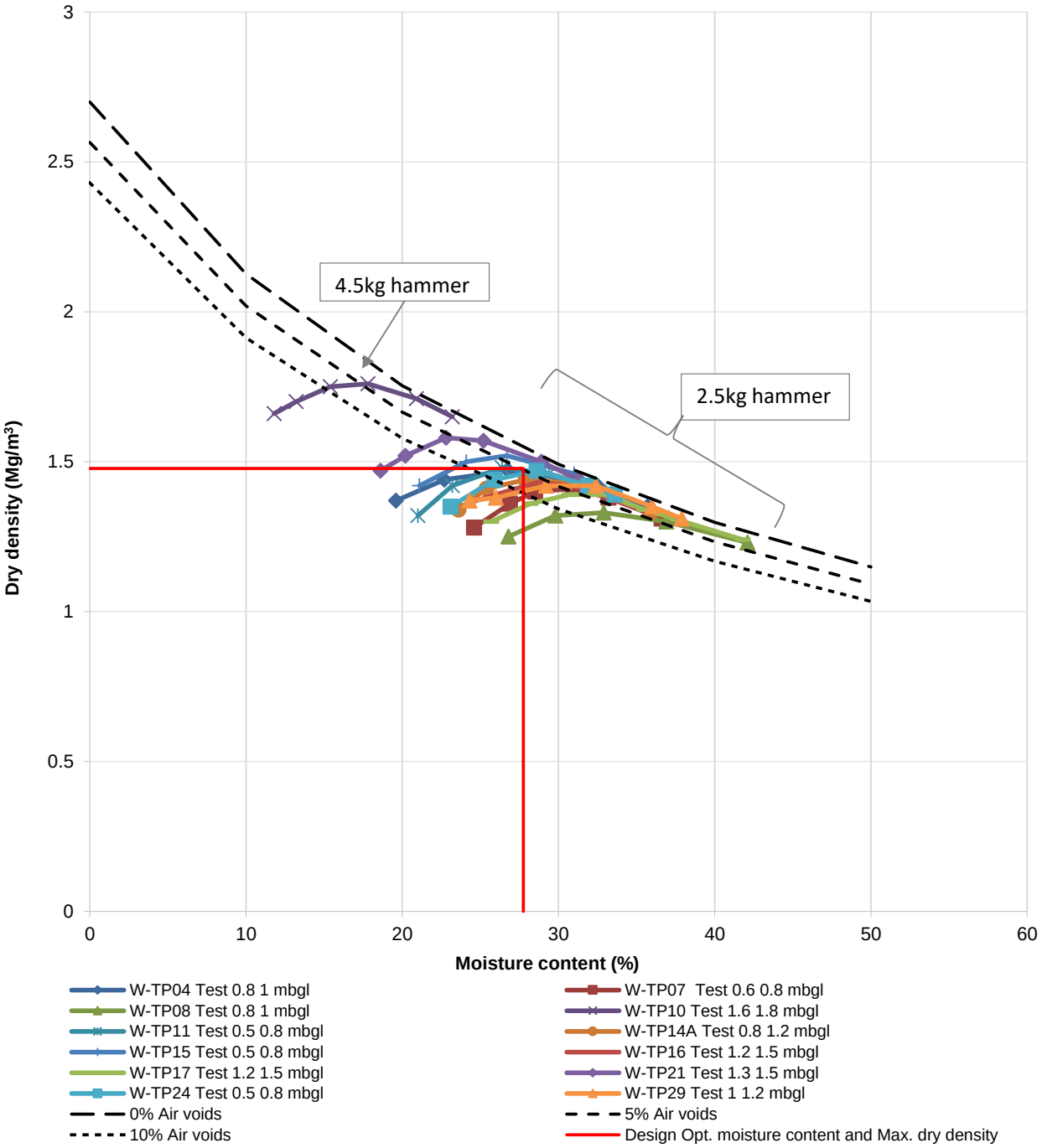

Test methods		Compaction types: 2.5KG, 4.5KG Moulds: 1L mould			
Mean proportion retained (%)		On 20mm sieve = #N/A		On 37.5mm sieve =	#N/A
Values	**Optimum moisture content (%)**	Mean = 27.75	**Maximum dry density (Mg/m³)**	Mean =	1.48
		Design = 27.75		Design =	1.48
Remarks	Symbols denote particle densities are: * measured values, # assumed values, ^ assumed and measured values				

Title:	West Site: Dry density vs Moisture content relationship by Sample for TFD2	**Figure No.:**	D.69
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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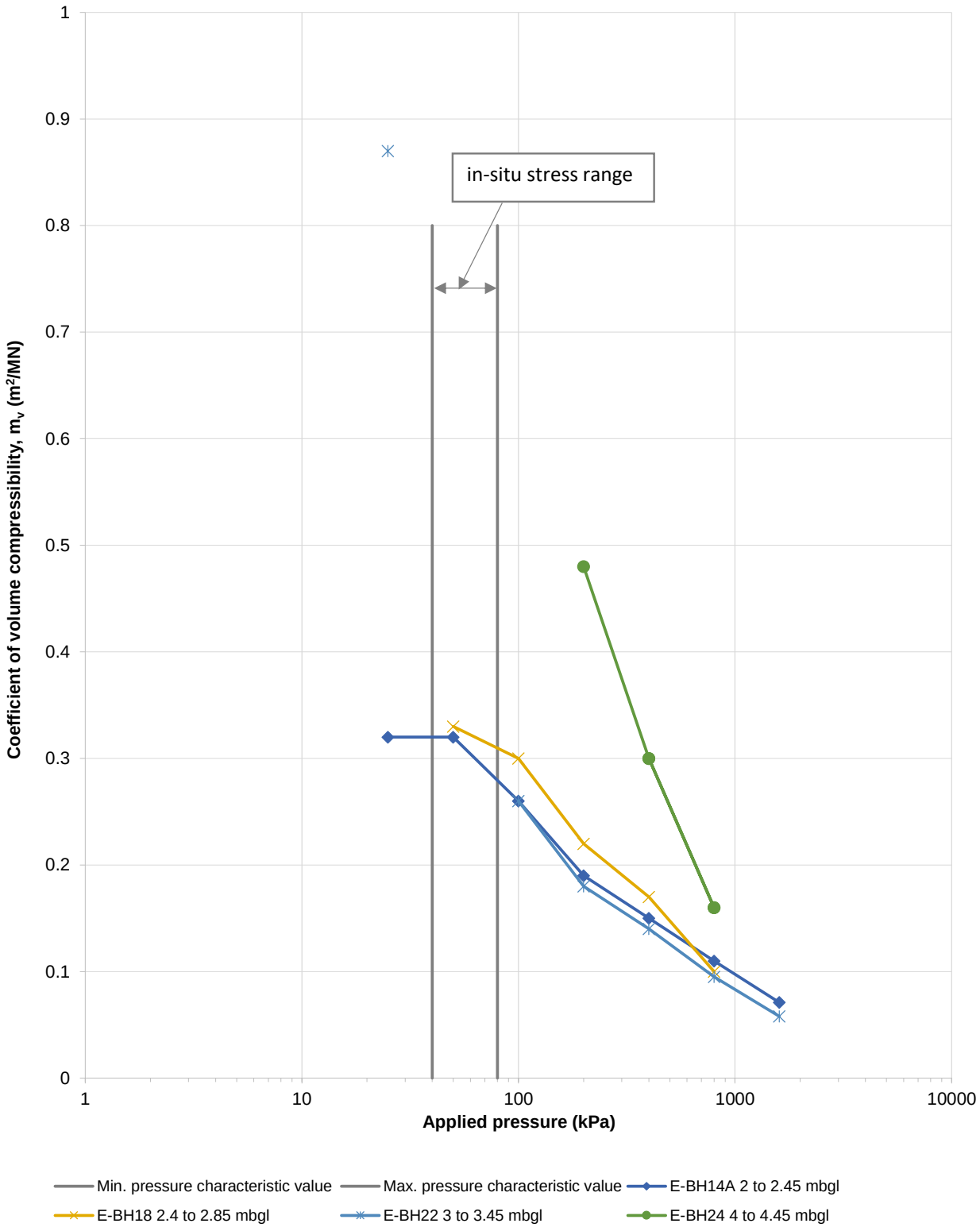

Pressure range (kPa)	
Min. value =	40
Max. value =	80

Title:	East Site Hydrogen Production: Coefficient of volume compressibility (mv) vs Applied pressure by Sample for Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.70
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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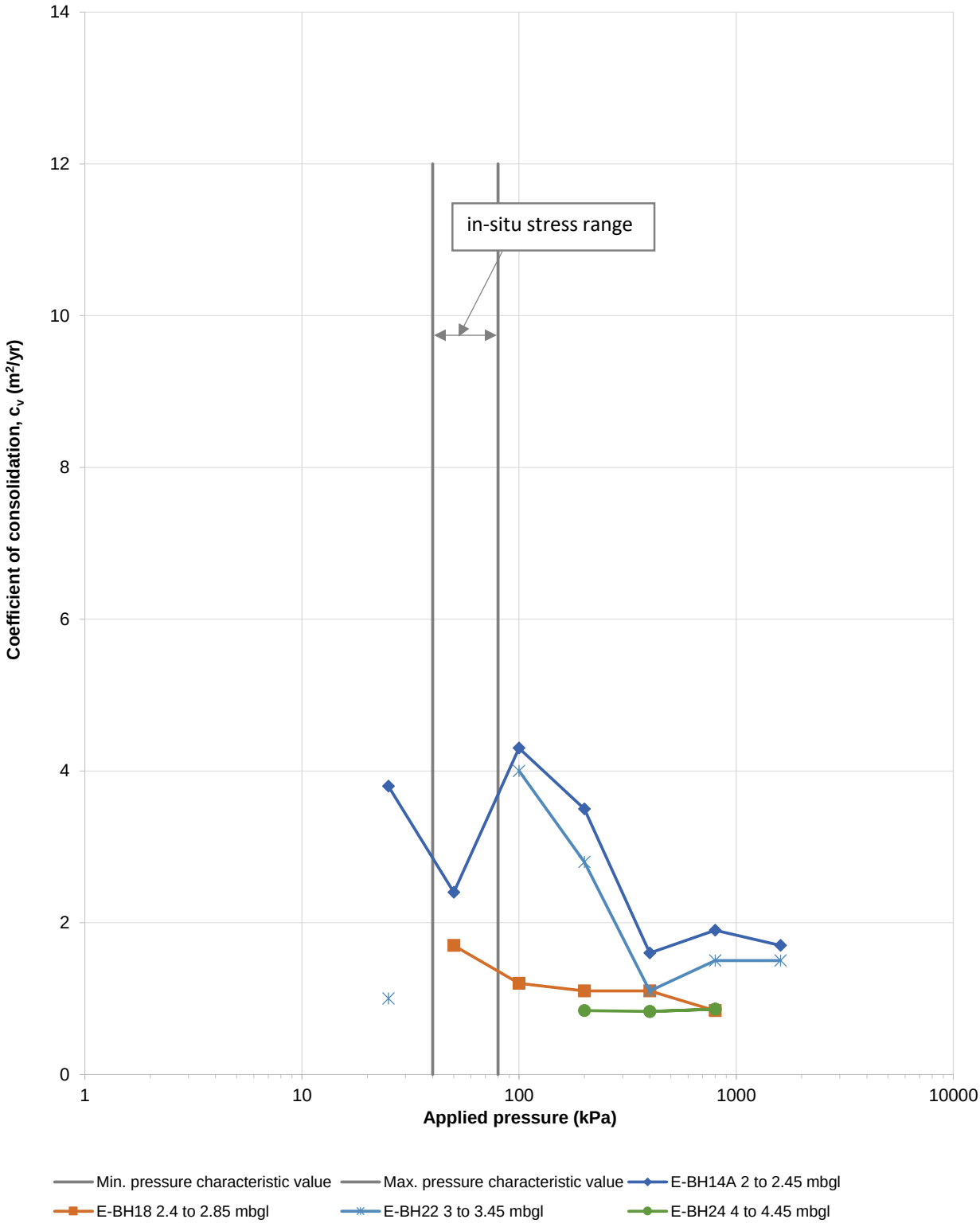

Pressure range (kPa)	
Min. value =	40
Max. value =	80

Title:	East Site Hydrogen Production: Coefficient of consolidation (cv) vs Applied pressure by Sample for Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.71
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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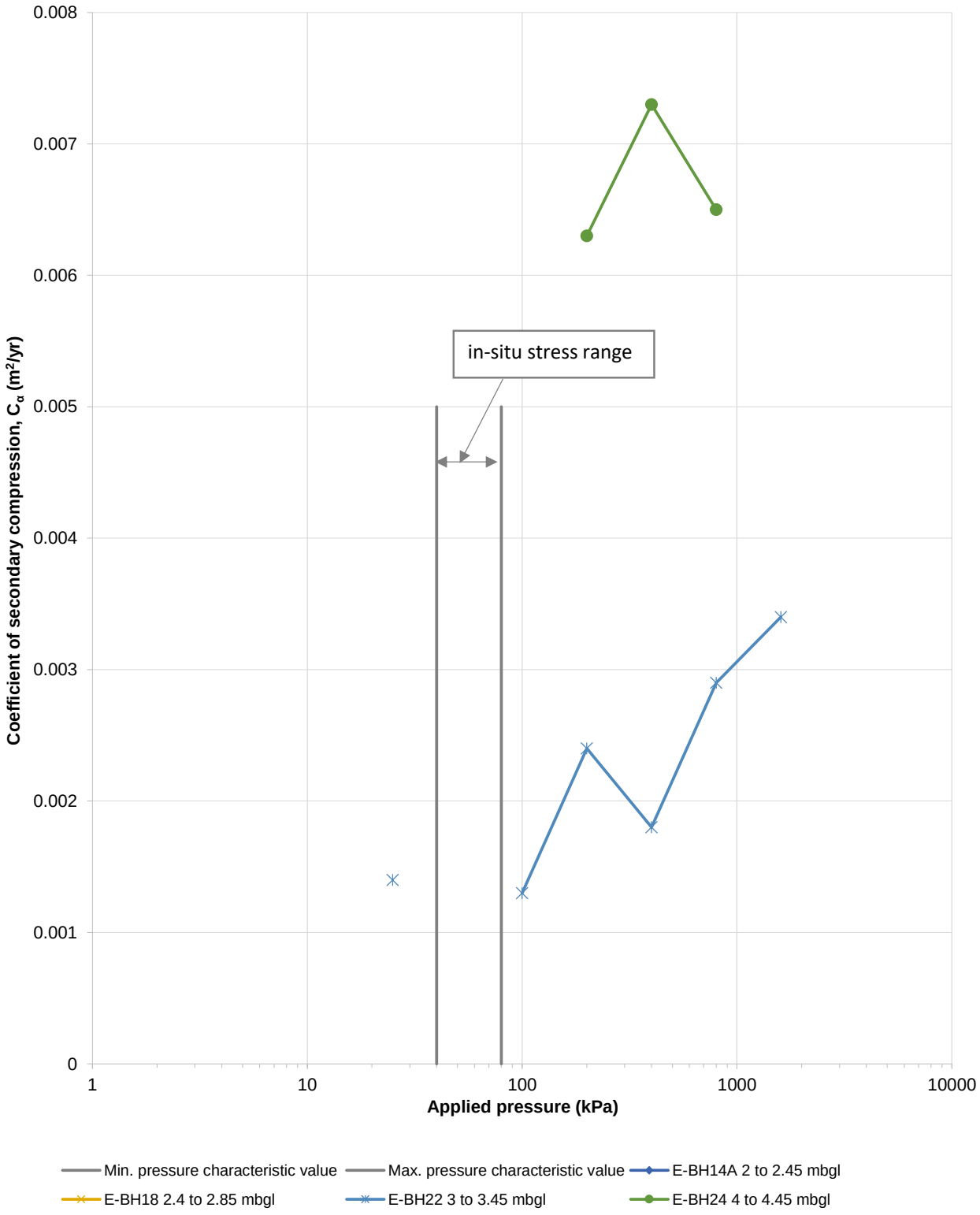

Pressure range (kPa)	
Min. value =	40
Max. value =	80

Title:	East Site Hydrogen Production: Coefficient of secondary compression (Cα) vs Applied pressure by Sample for Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.72
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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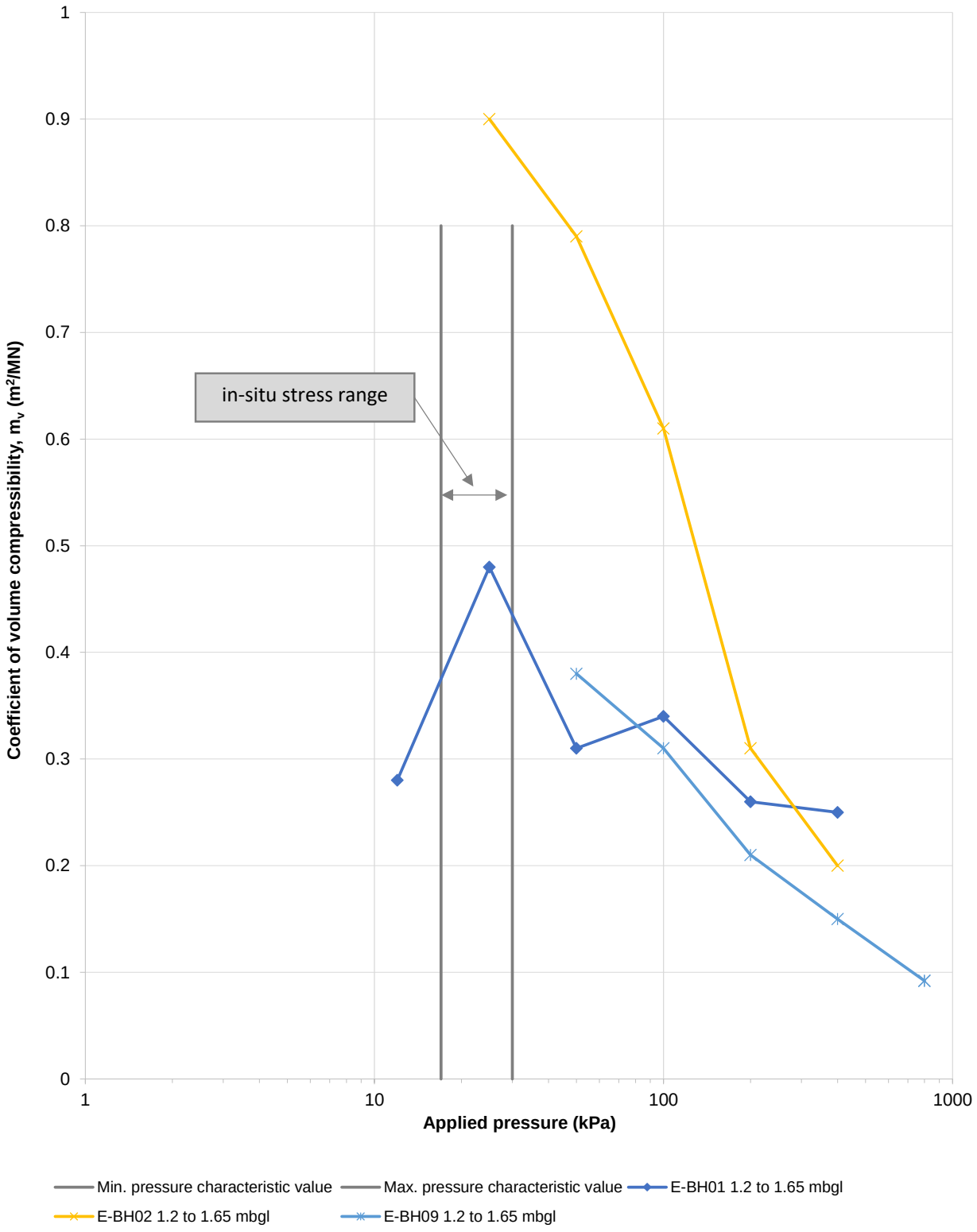

Pressure range (kPa)	
Min. value =	17
Max. value =	30

Title:	East Site Ammonia Storage: Coefficient of volume compressibility (mv) vs Applied pressure by Sample for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.73
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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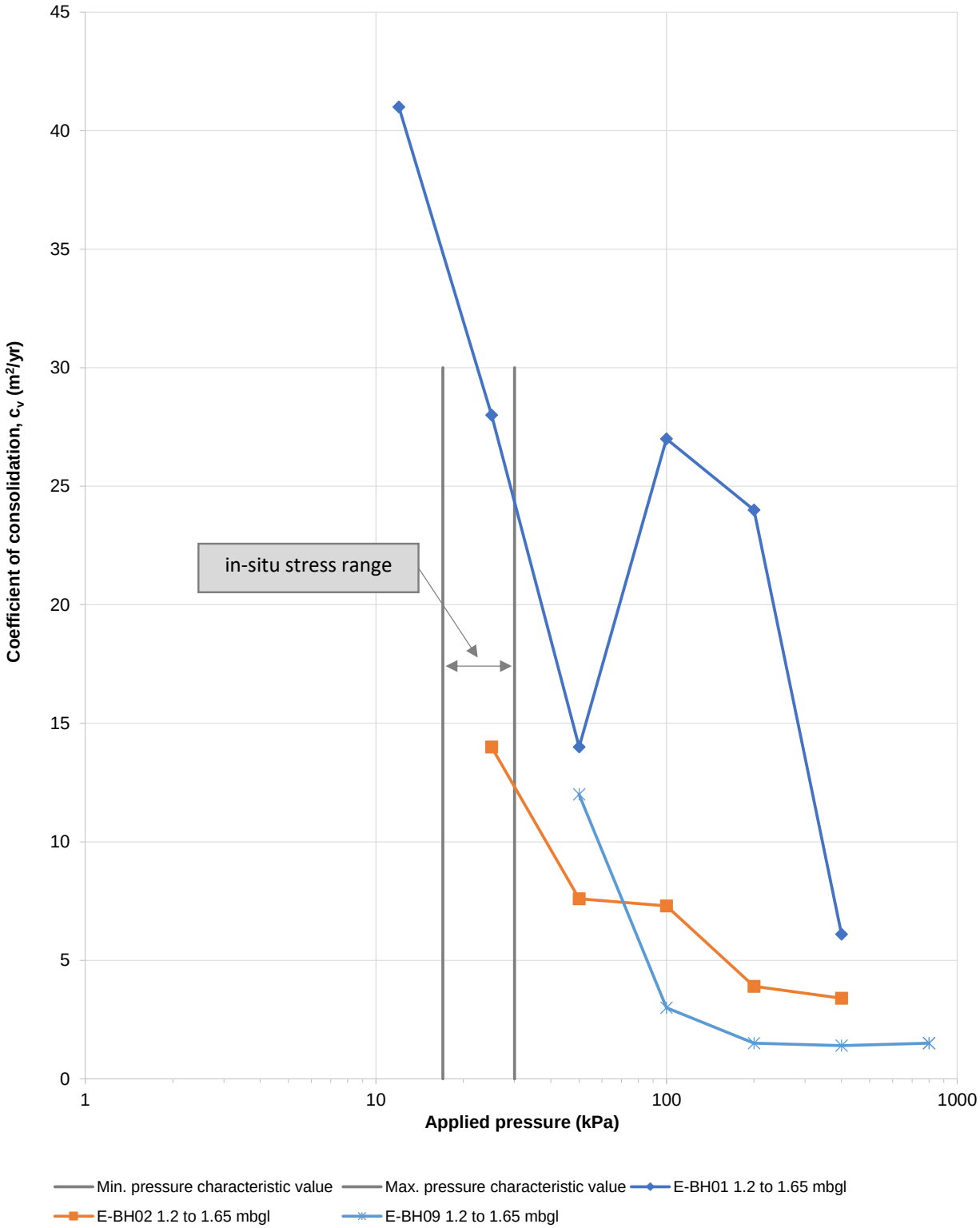

Pressure range (kPa)	
Min. value =	17
Max. value =	30

Title:	East Site Ammonia Storage: Coefficient of consolidation (cv) vs Applied pressure by Sample for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.74
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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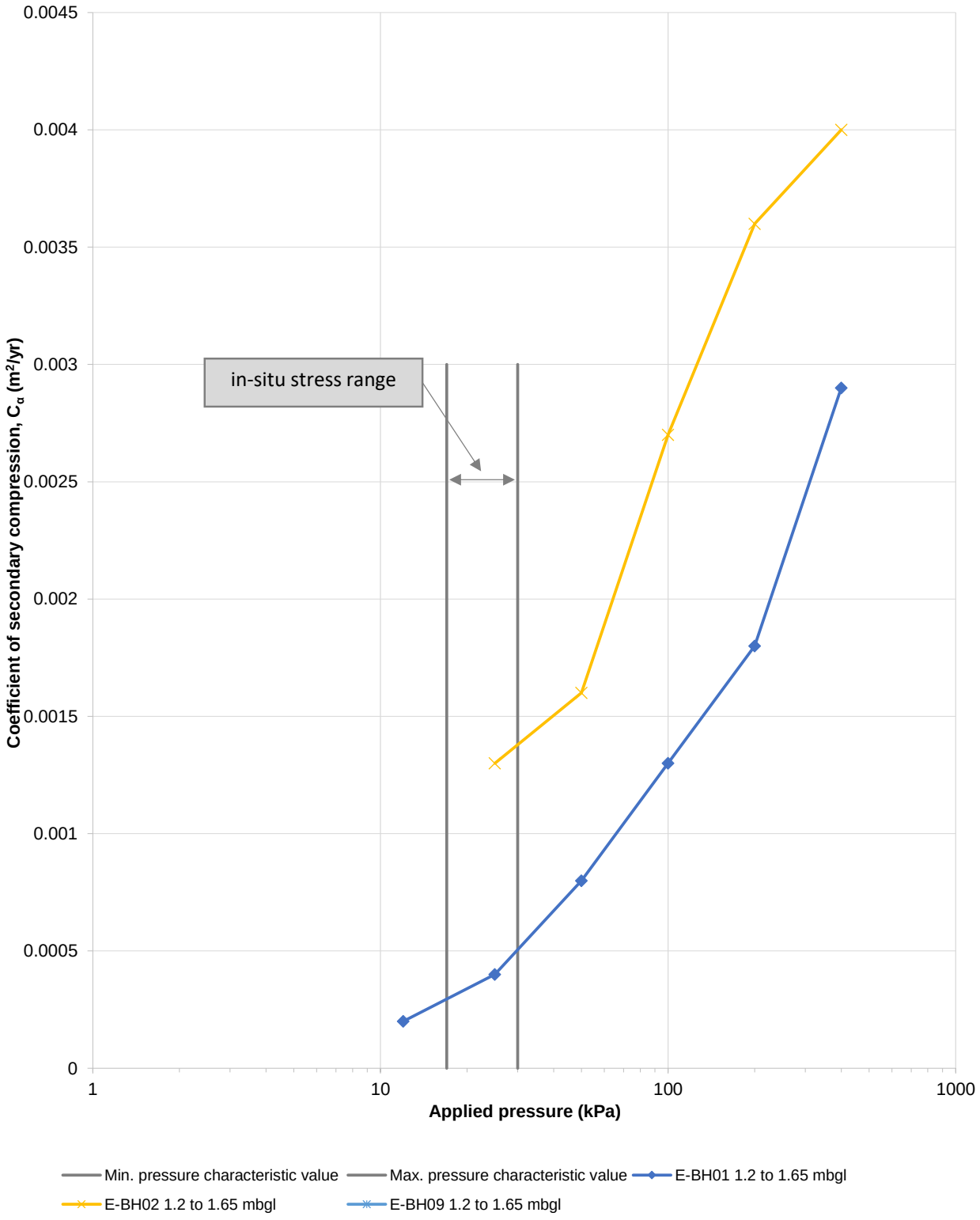

Pressure range (kPa)	
Min. value =	17
Max. value =	30

Title:	East Site Ammonia Storage: Coefficient of secondary compression (Cα) vs Applied pressure by Sample for Tidal Flat Deposits - Firm Upper Layer	**Figure No.:**	D.75
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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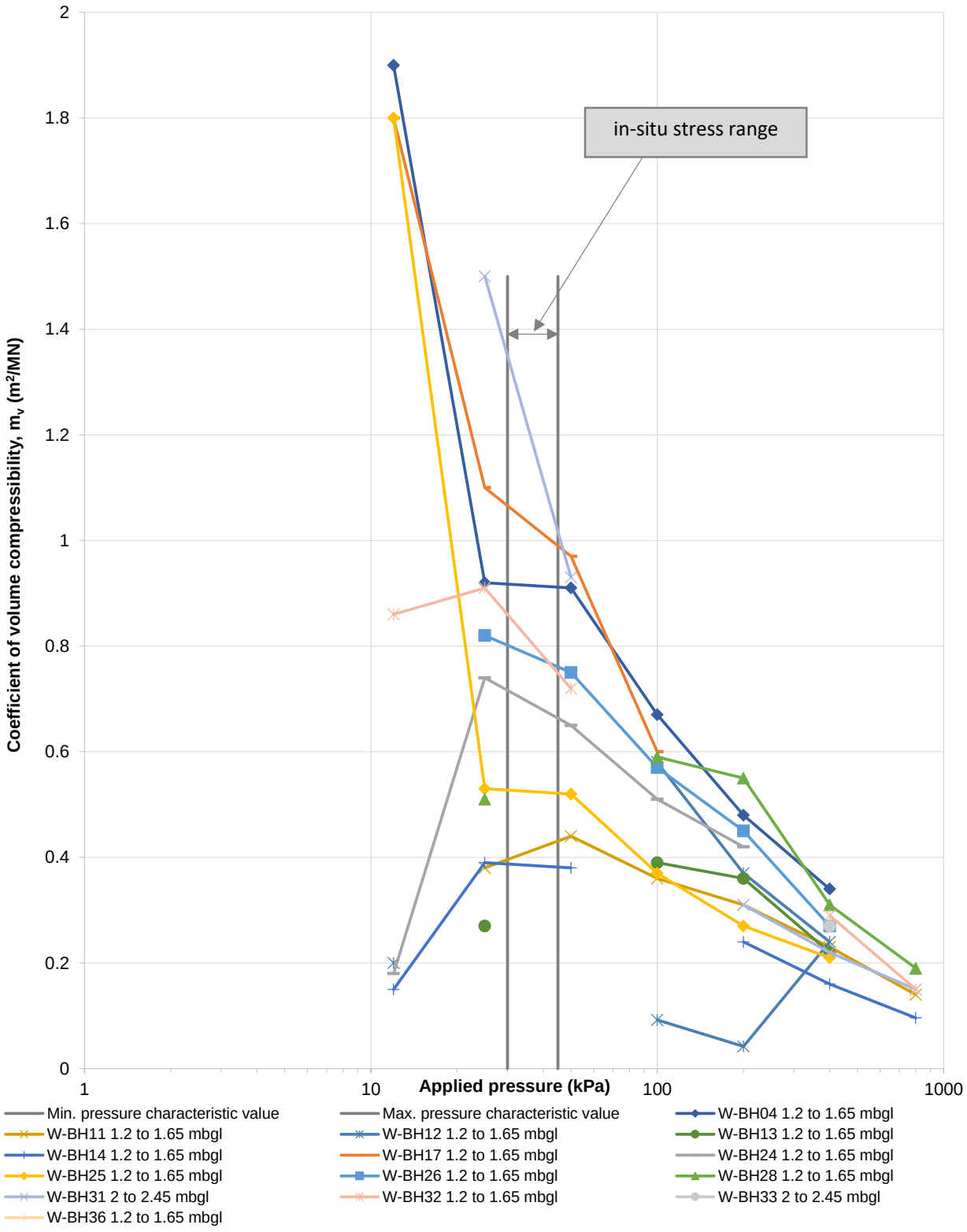

Pressure range (kPa)	
Min. value =	30
Max. value =	45

Title:	West Site: Coefficient of volume compressibility (mv) vs Applied pressure by Sample for Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.76
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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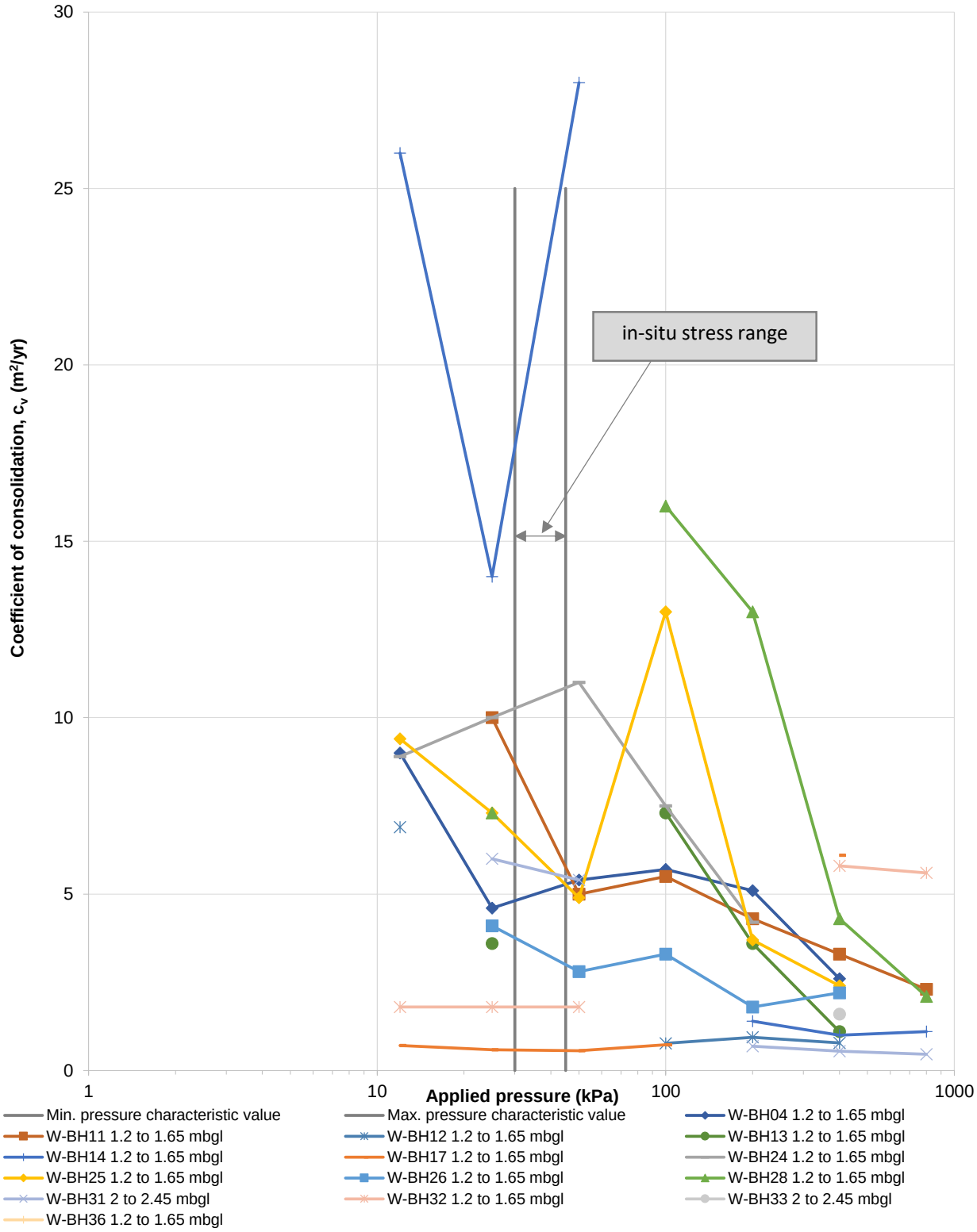

Pressure range (kPa)	
Min. value =	30
Max. value =	45

Title:	West Site: Coefficient of consolidation (cv) vs Applied pressure by Sample for Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.77
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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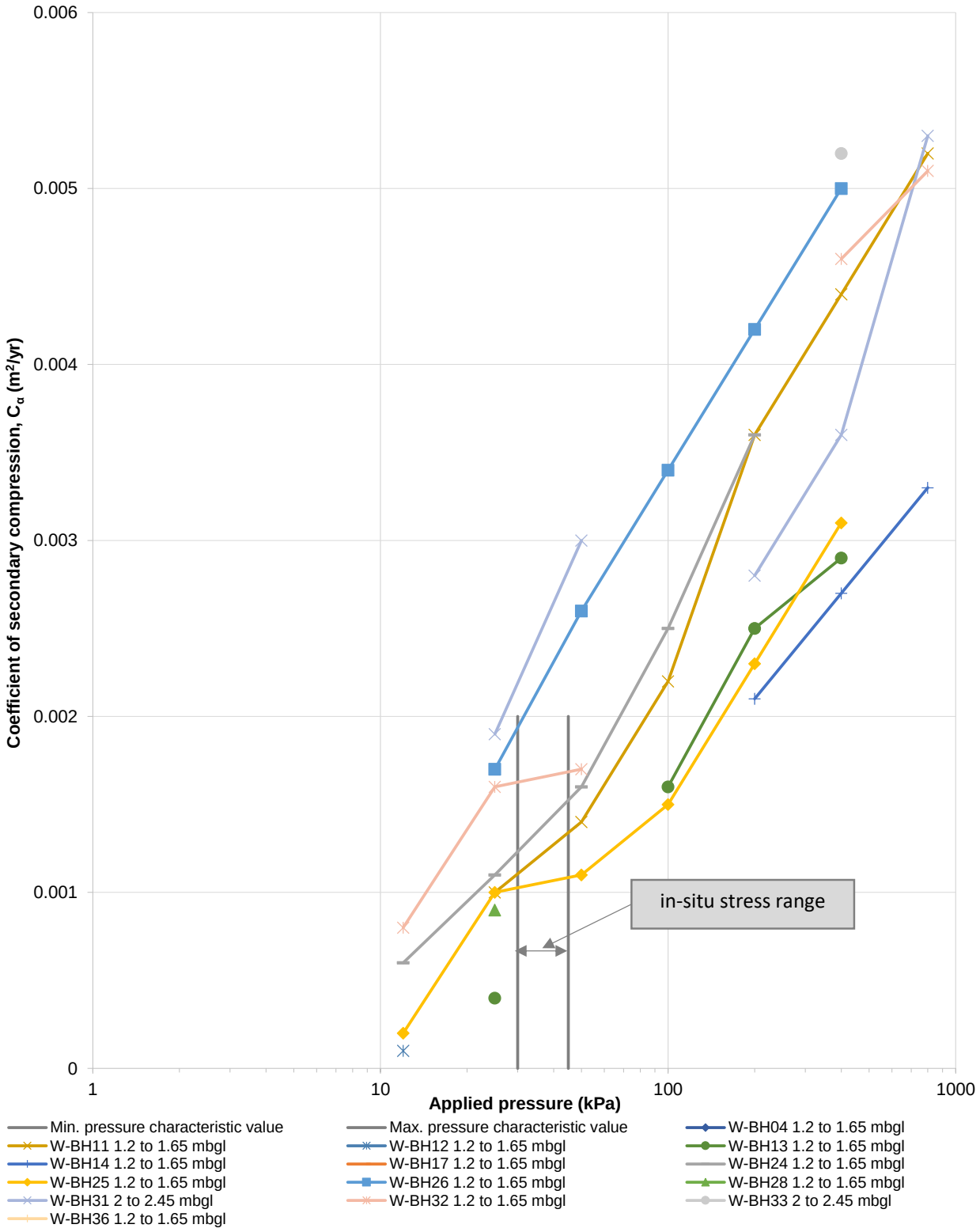

Pressure range (kPa)	
Min. value =	30
Max. value =	45

Title:	West Site: Coefficient of secondary compression (Cα) vs Applied pressure by Sample for Tidal Flat Deposits - Firm Upper Layer	**Fig No.:**	D.78
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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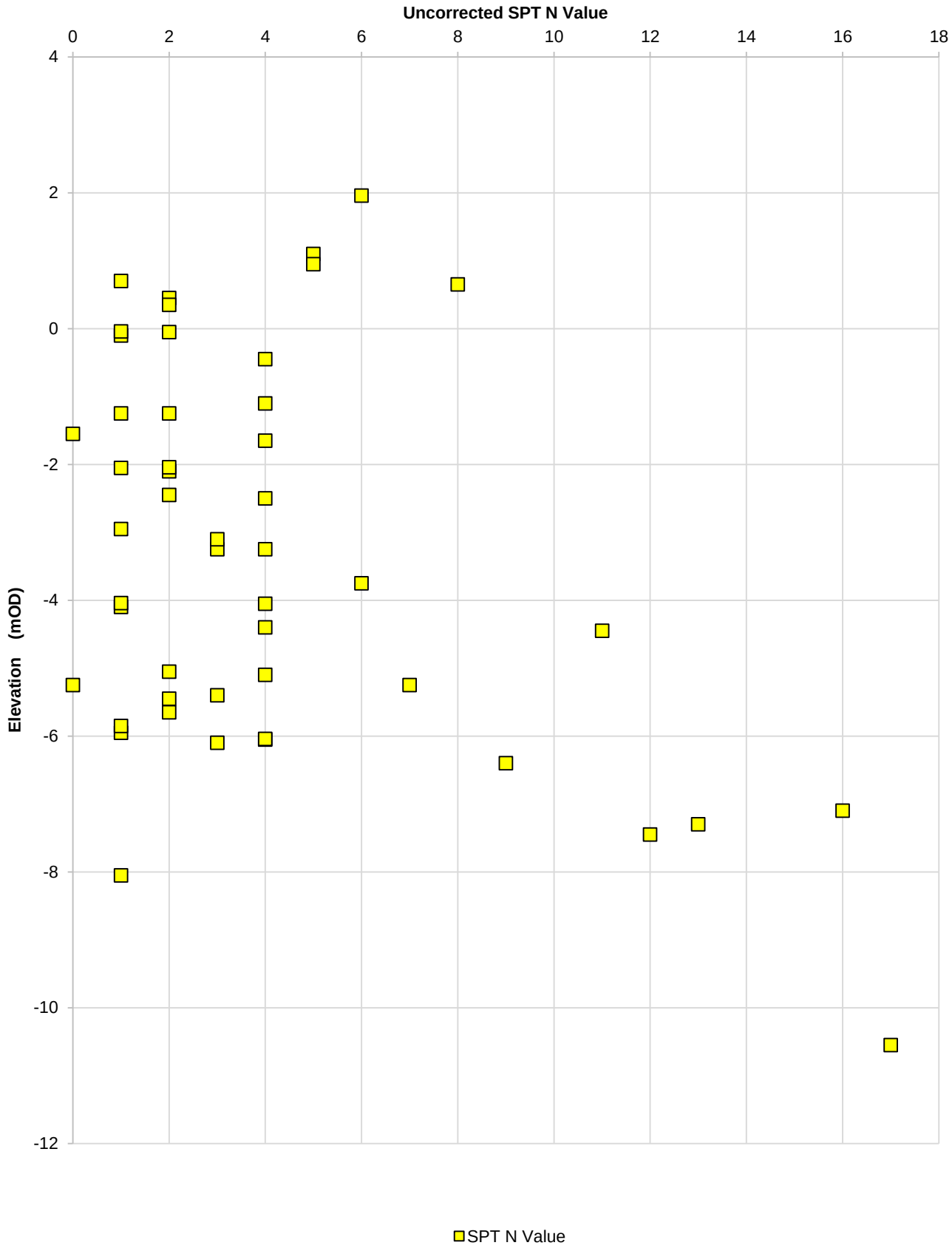

Title:	East Site Hydrogen Production: Uncorrected SPT N Value by Elevation for Tidal Flat Deposits	**Figure No.:**	D.79
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	01/06/2023
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	06/06/2023

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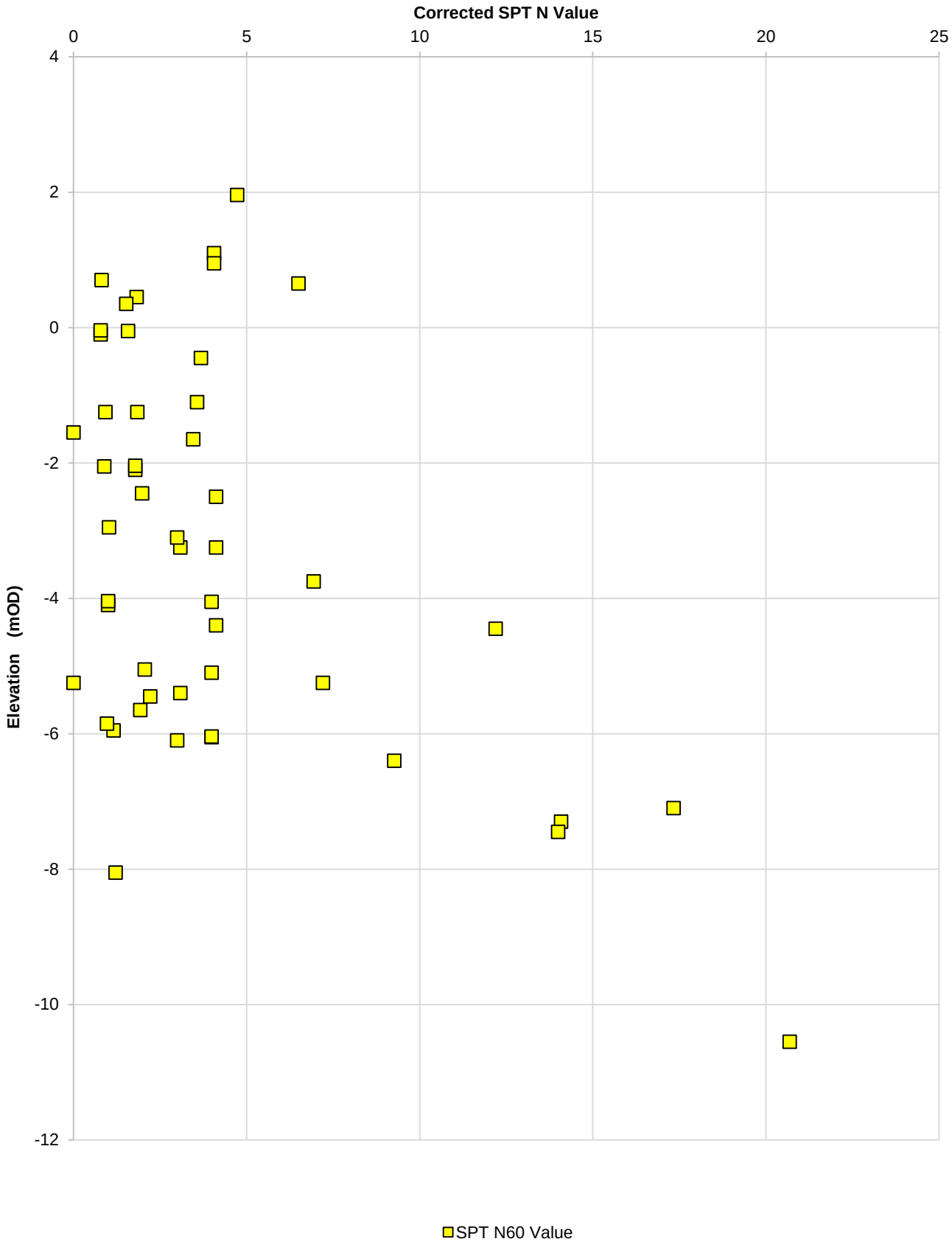

Title:	East Site Hydrogen Production: Corrected SPT N Value by Elevation for Tidal Flat Deposits	**Figure No.:**	D.80
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	01/06/2023
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	06/06/2023

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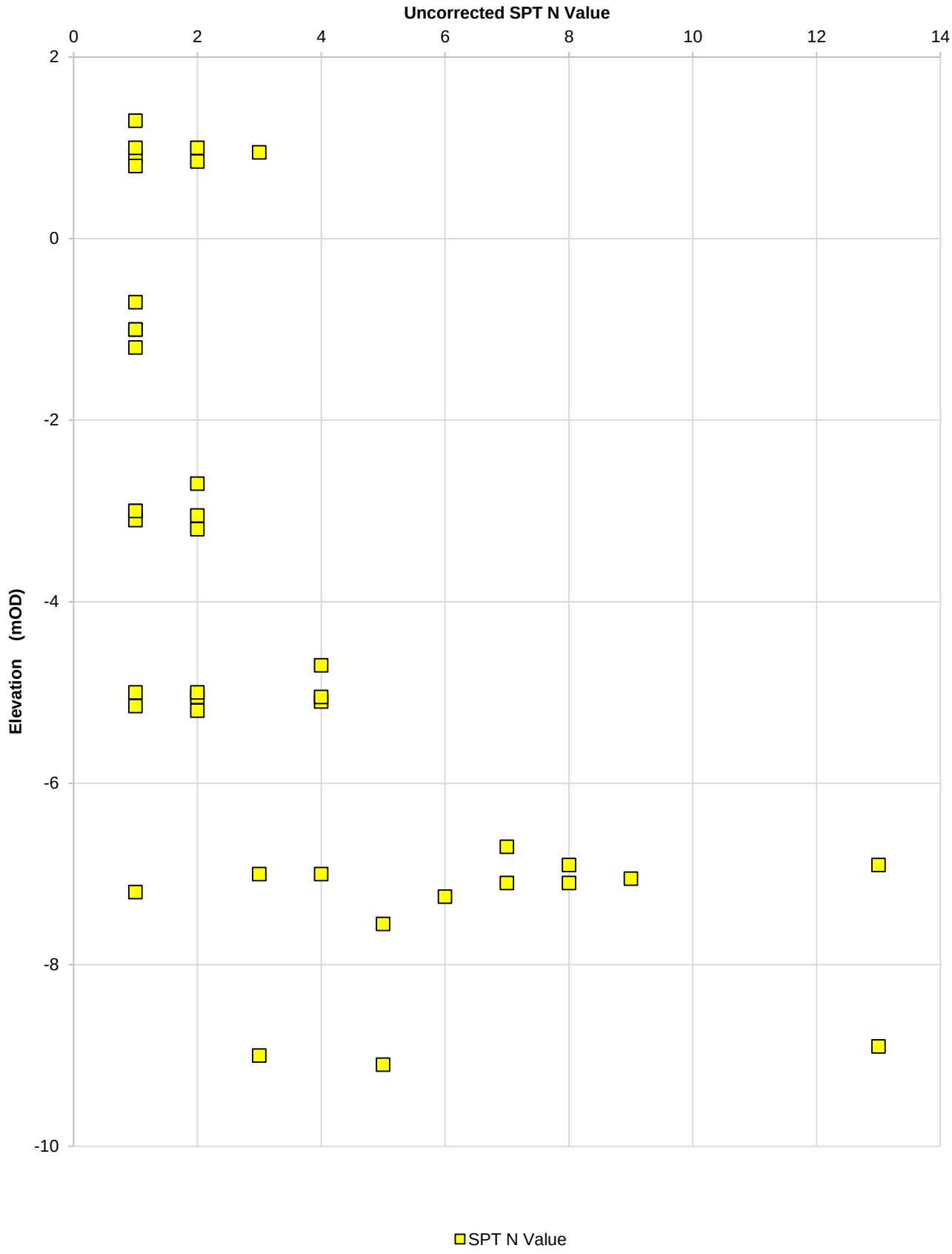

Title:	East Site Ammonia Storage: Uncorrected SPT N Value by Elevation for Tidal Flat Deposits	**Figure No.:**	D.81
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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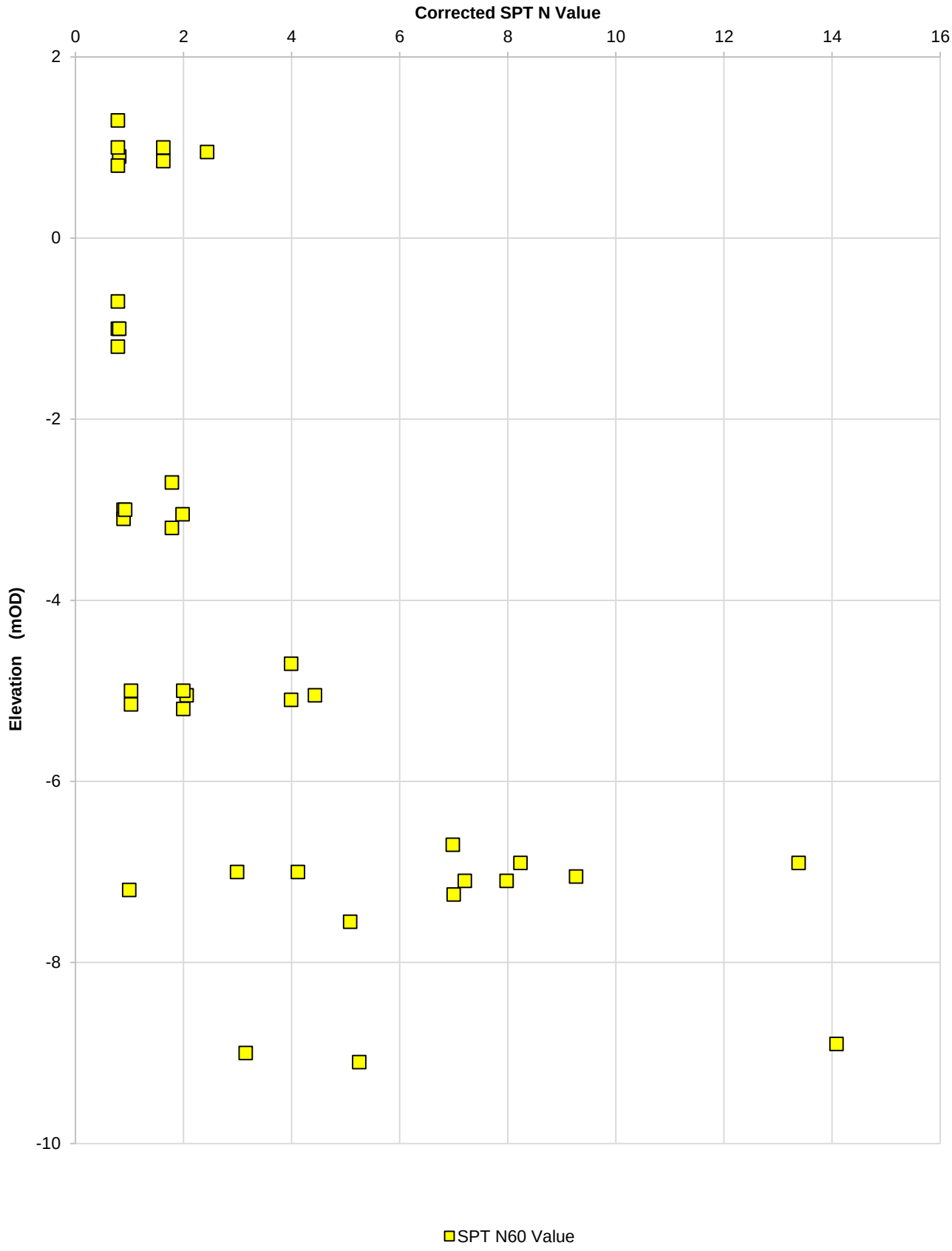

Title:	East Site Ammonia Storage: Corrected SPT N Value by Elevation for Tidal Flat Deposits	**Figure No.:**	D.82
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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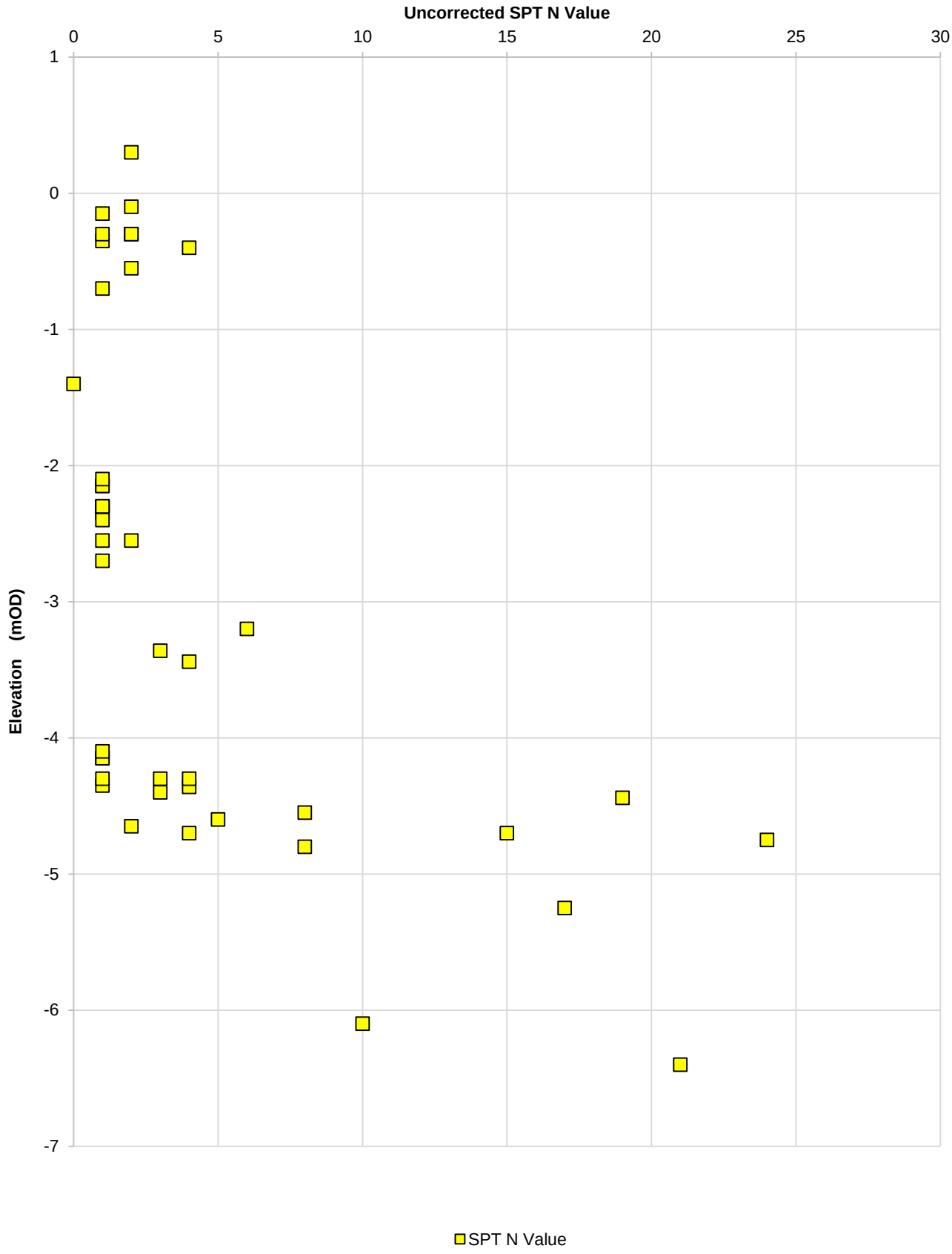

Title:	West Site: Uncorrected SPT N Value by Elevation for Tidal Flat Deposits	**Figure No.:**	D.83
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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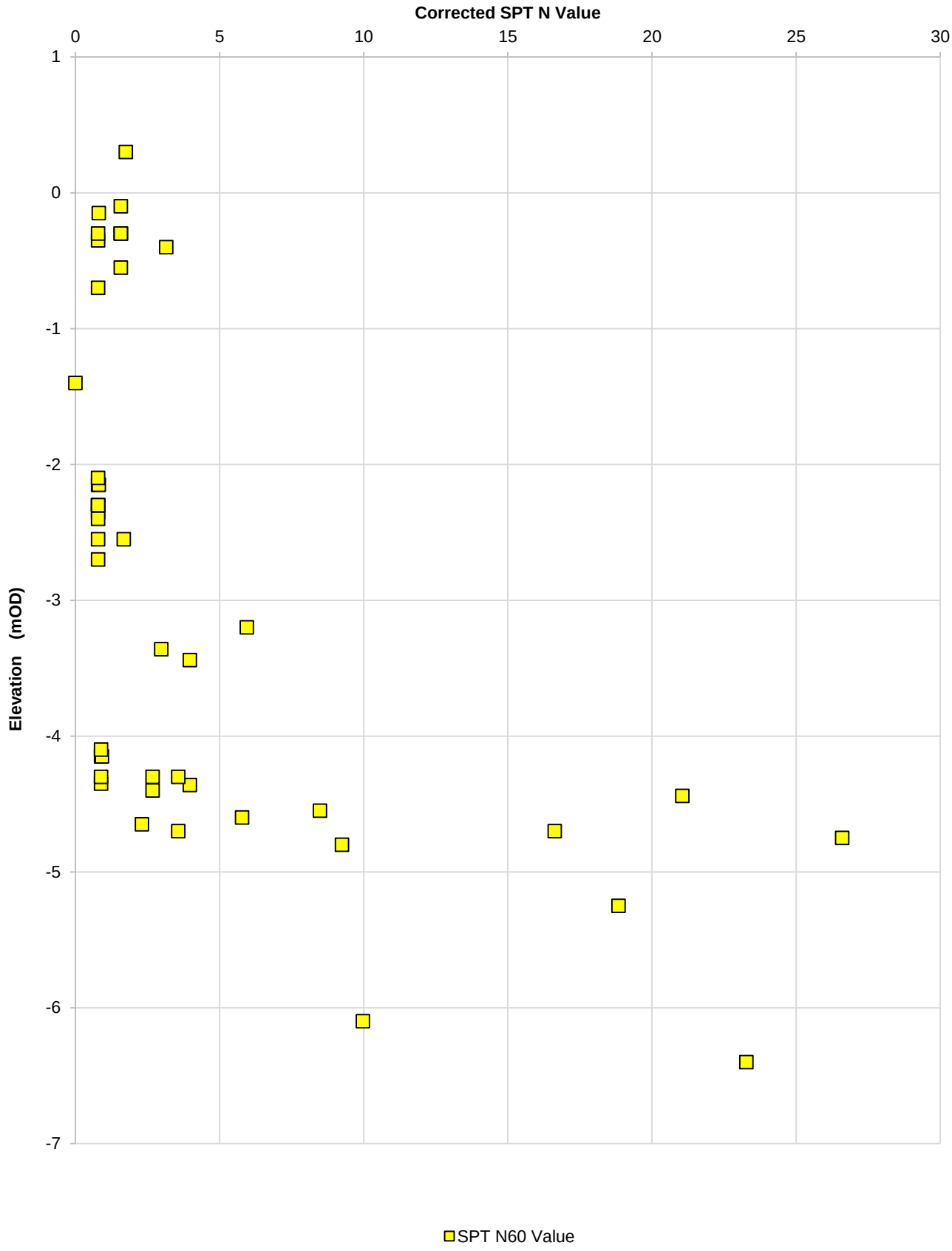
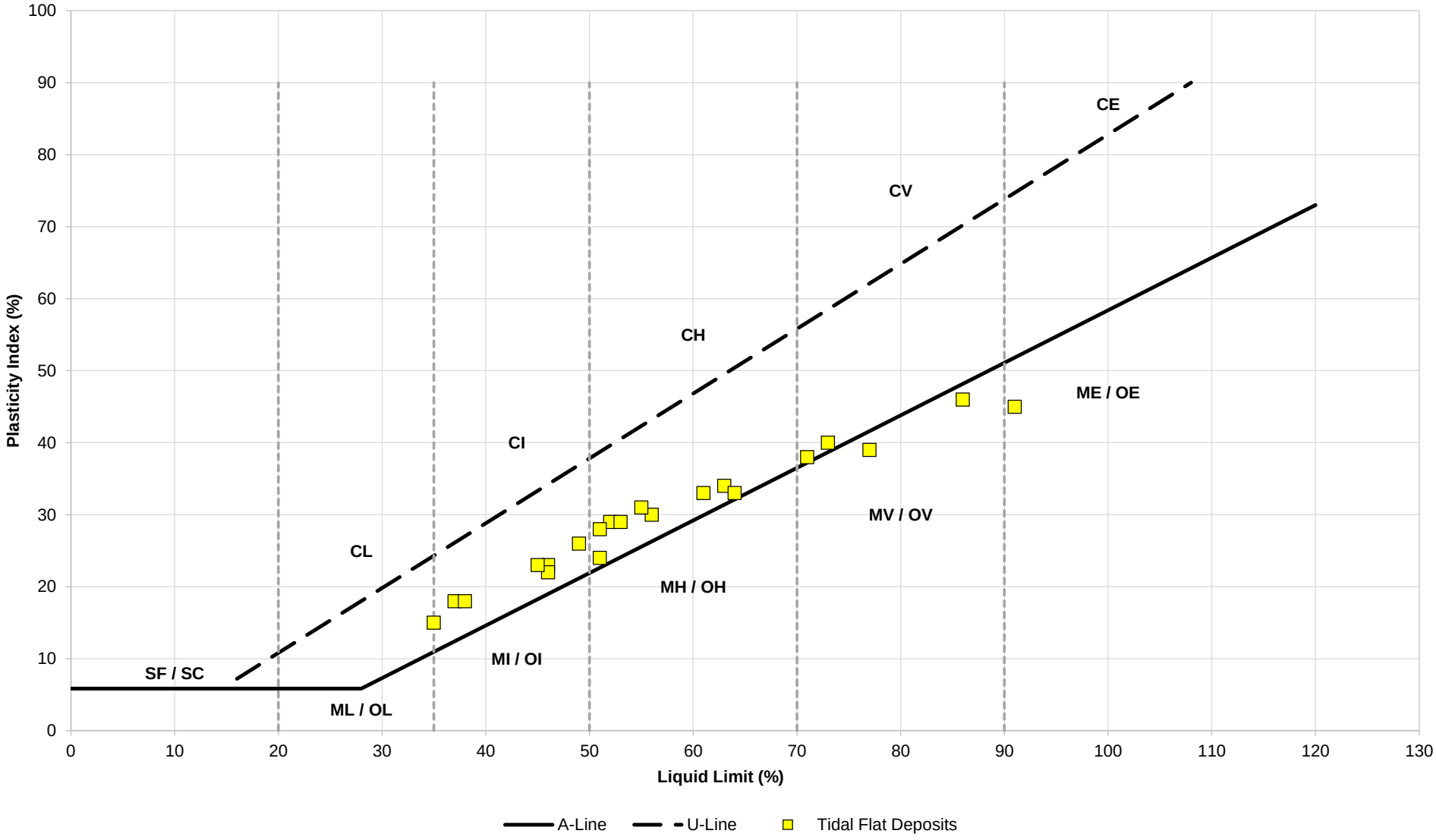


Title:	West Site: Corrected SPT N Value by Elevation for Tidal Flat Deposits	**Figure No.:**	D.84
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

AECOM

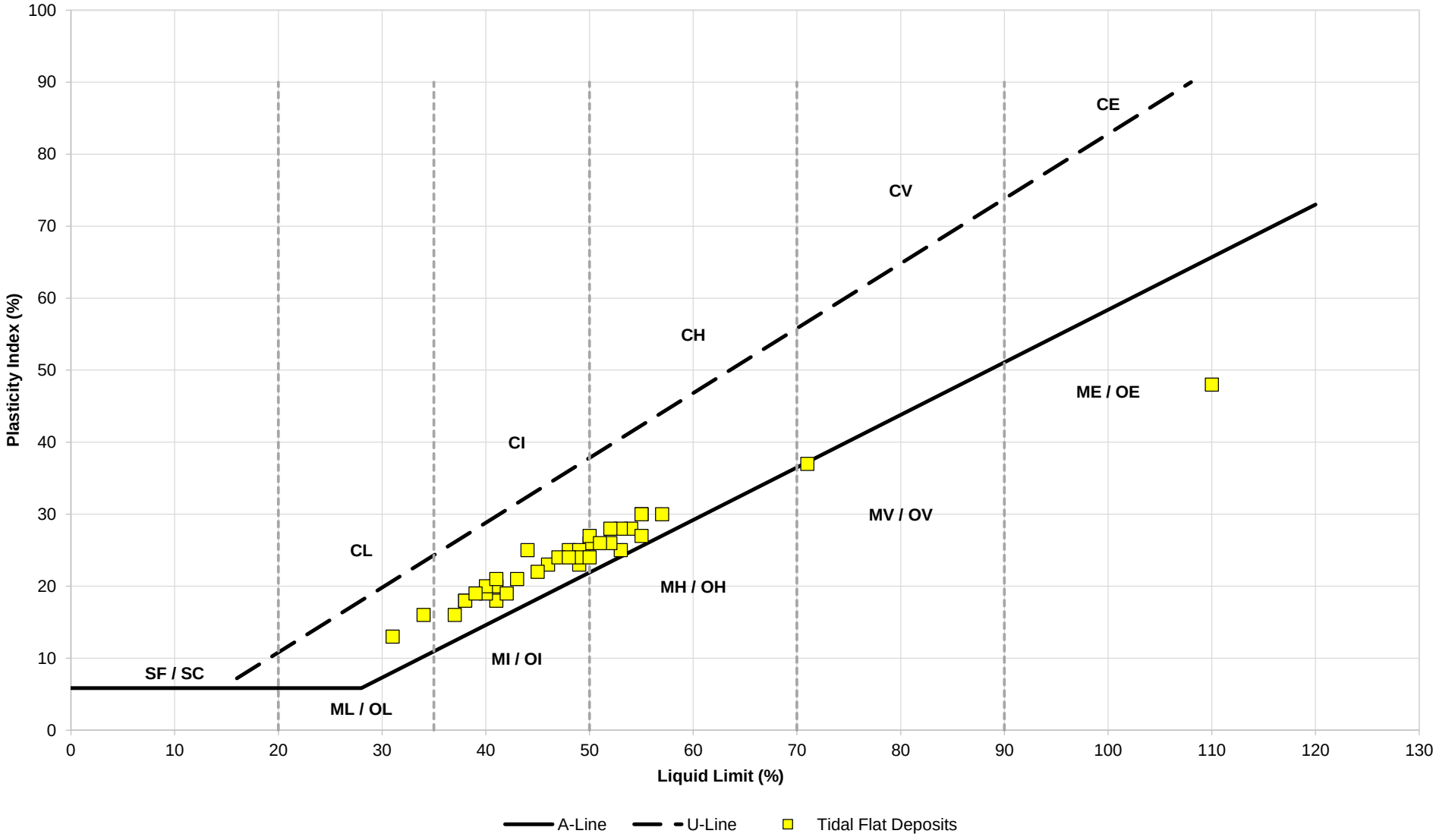
Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



Title:	East Site - Hydrogen Production - Plasticity chart - Tidal Flat Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.85	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

AECOM

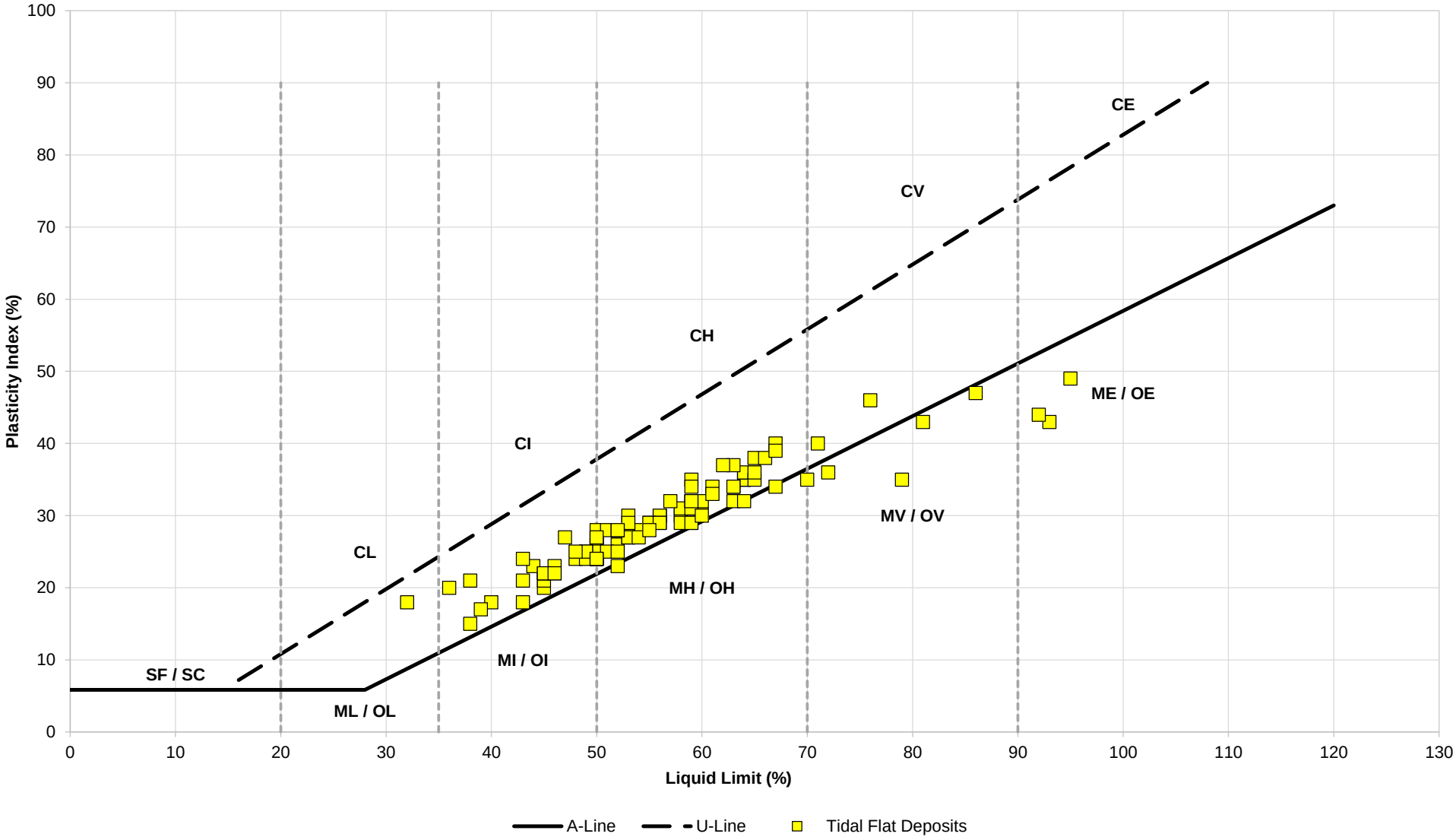
Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



Title:	East Site - Ammonia Storage - Plasticity chart - Tidal Flat Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.86	**Author:**	CC	**Date:**	June-23	**Location:**	Immingham
Revision:	P01	**Checker:**	DW	**Date:**	June-23	**Client:**	Air Products

AECOM

Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



Title:	West Site - Plasticity chart - Tidal Flat Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.87	**Author:**	CC	**Date:**	June-23	**Location:**	Immingham
Revision:	P01	**Checker:**	DW	**Date:**	June-23	**Client:**	Air Products

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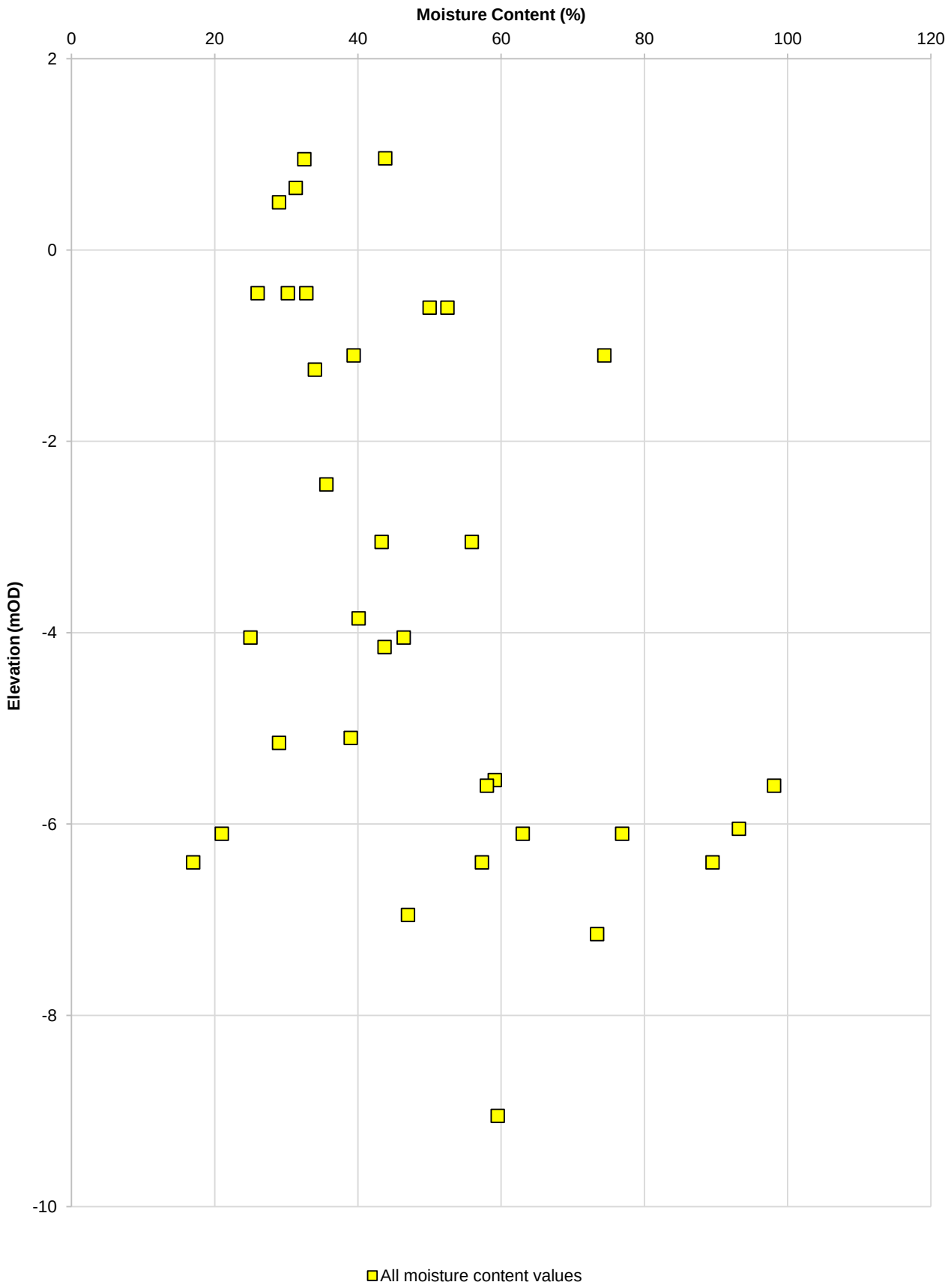

Title:	East Site - Hydrogen Production: Moisture content by Elevation for Tidal Flat Deposits	**Fig No.:**	D.88
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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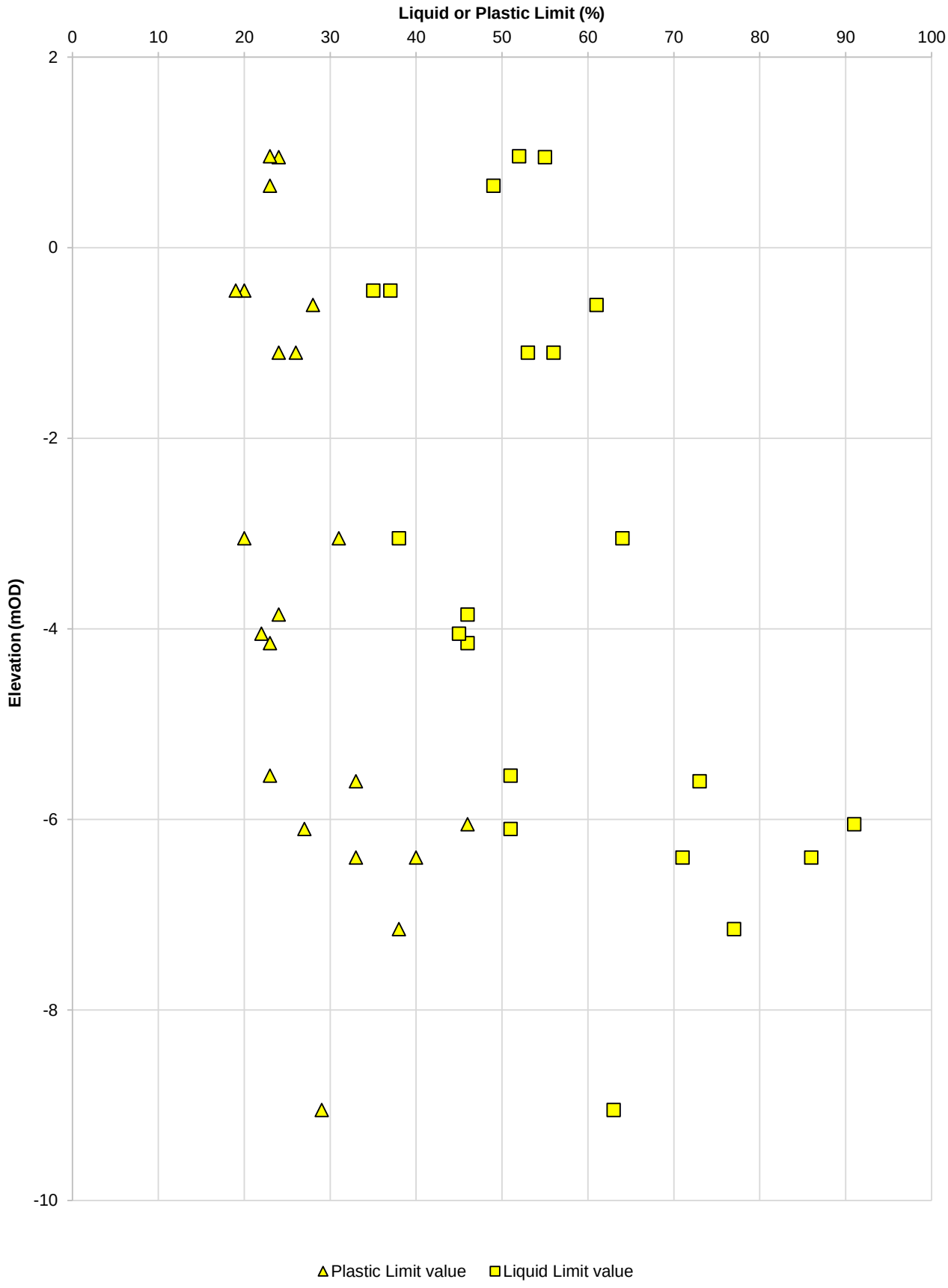

Title:	East Site - Hydrogen Production: Liquid Limit and Plastic Limit by Elevation for Tidal Flat Deposits	**Fig No.:**	D.89
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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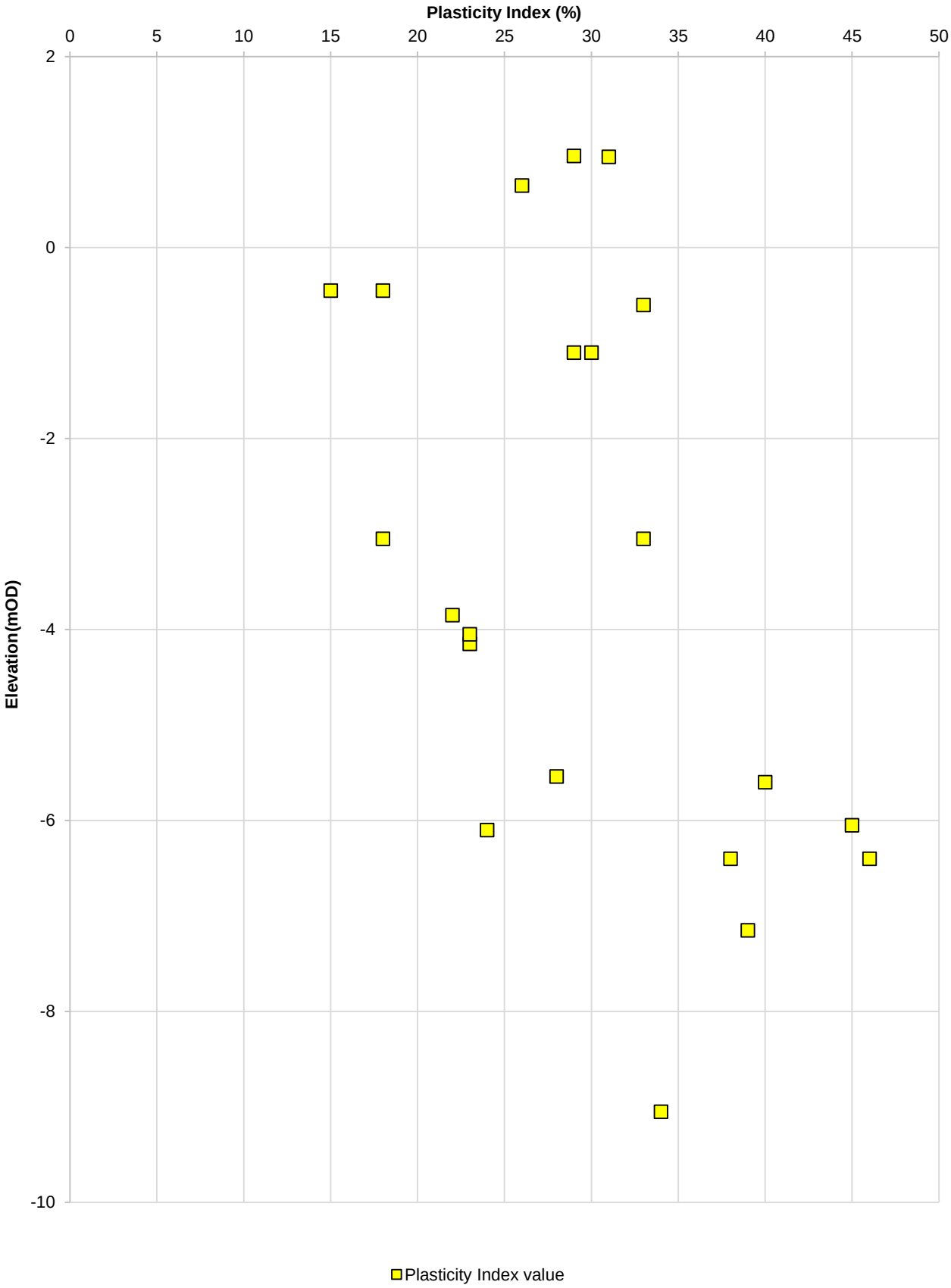

Title:	East Site - Hydrogen Production: Plasticity Index by Elevation for Tidal Flat Deposits	**Fig No.:**	D.90
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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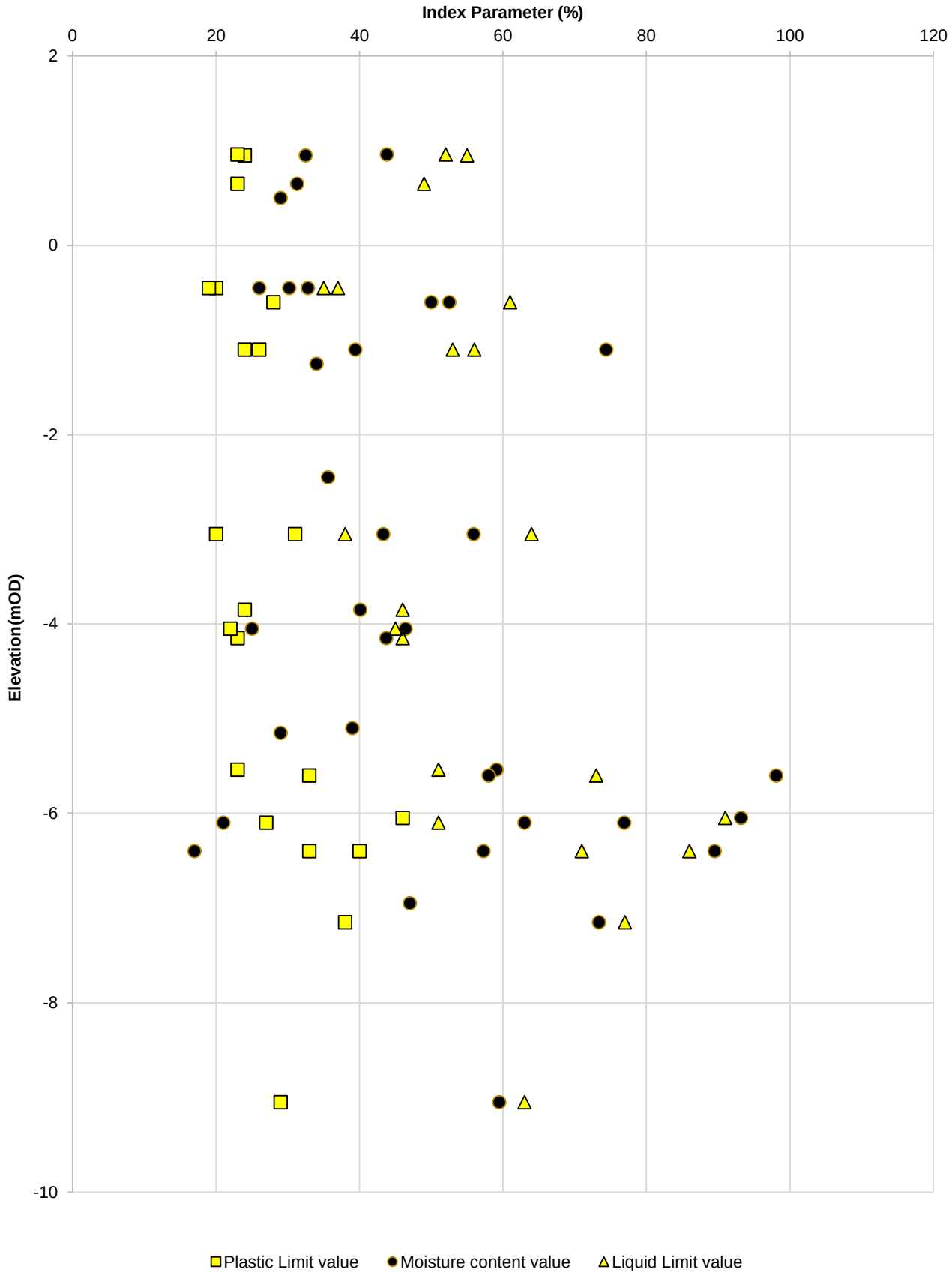

Title:	East Site - Hydrogen Production: Moisture content & Atterberg Limits by Elevation - Tidal Flat Deposits	**Fig No.:**	D.91
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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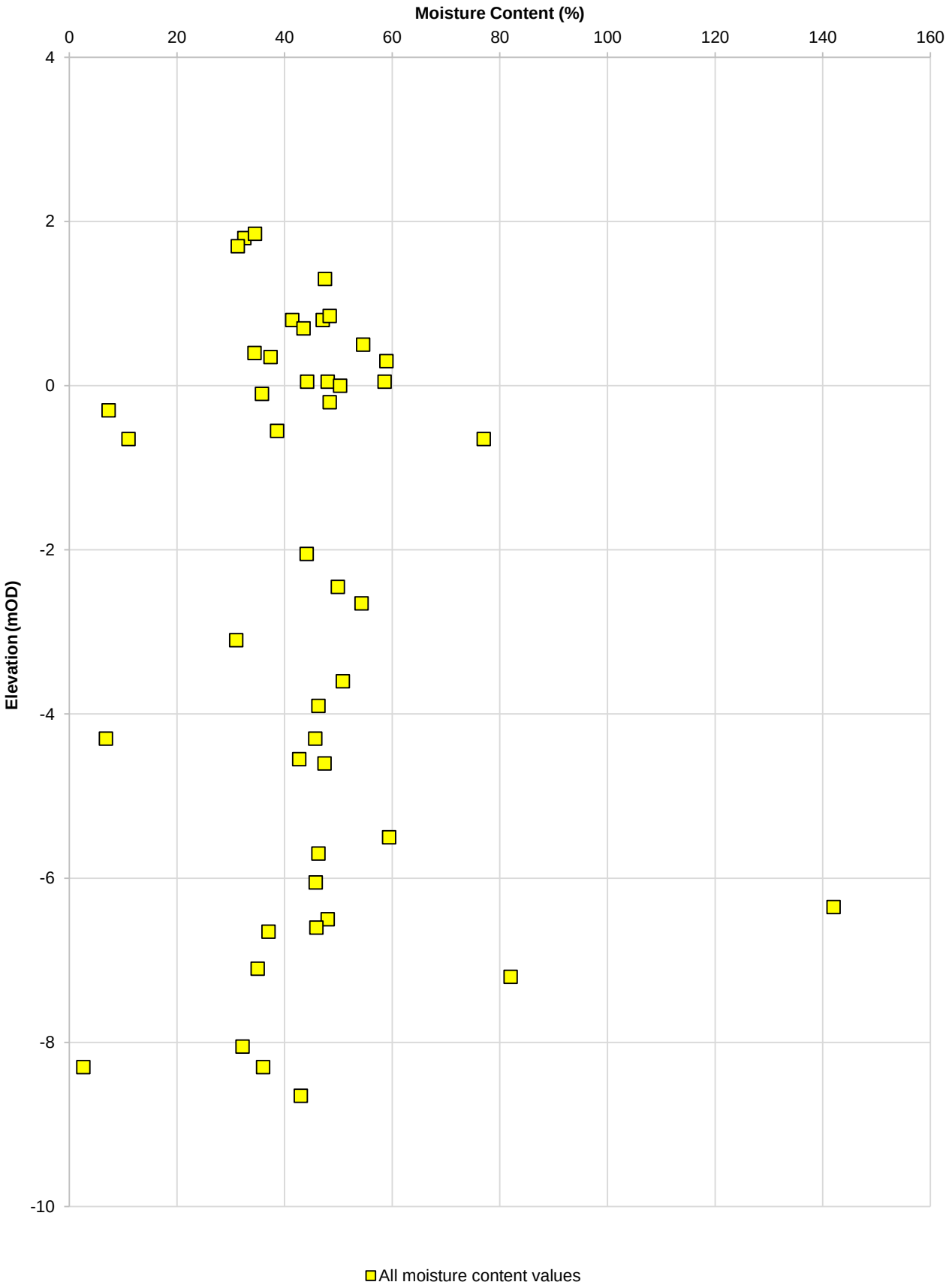

Title:	East Site Ammonia Storage - Moisture content by Elevation for Tidal Flat Deposits	**Figure No.:**	D.92
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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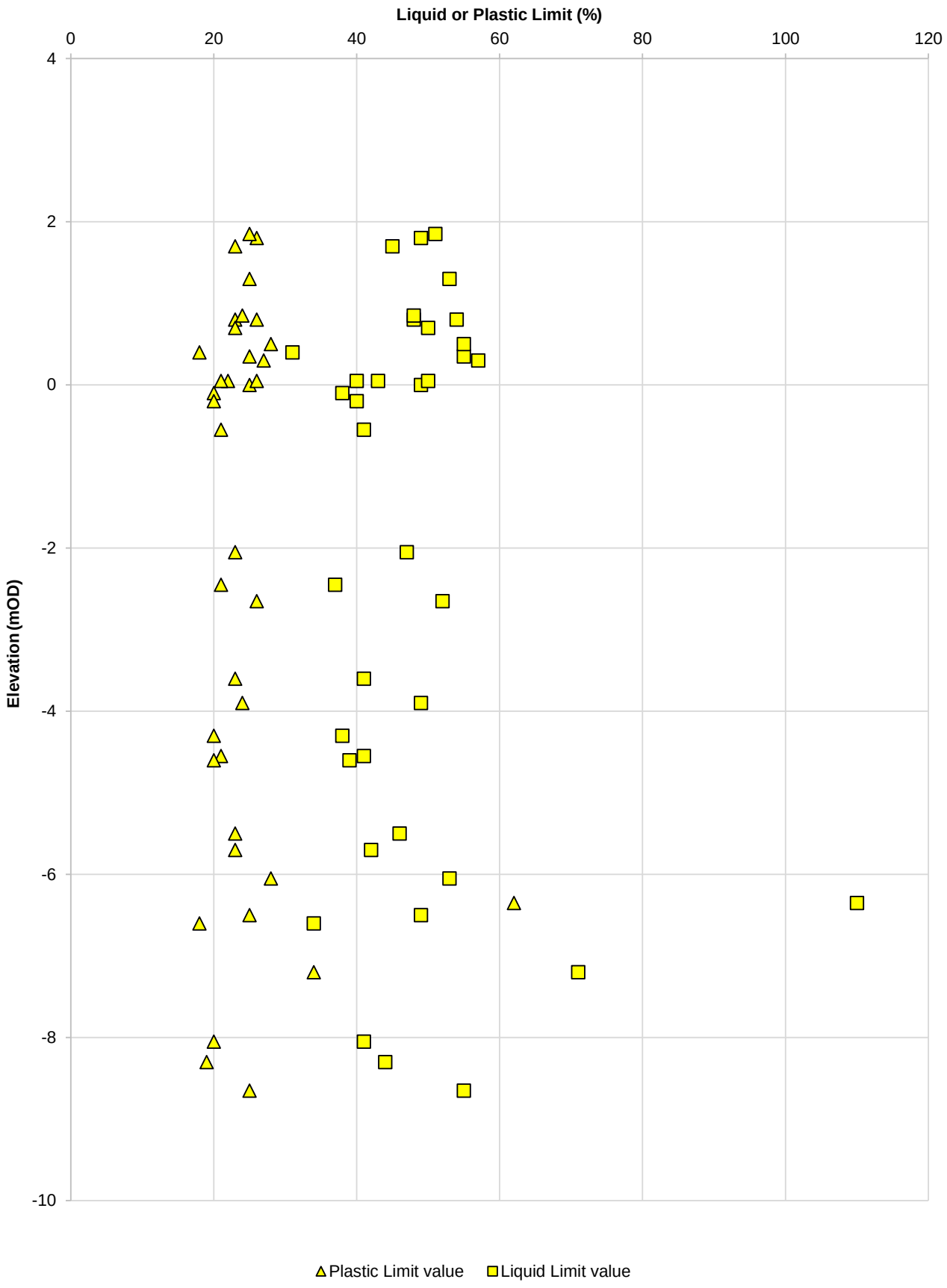

Title:	East Site Ammonia Storage - Liquid Limit and Plastic Limit by Elevation for Tidal Flat Deposits	**Figure No.:**	D.93
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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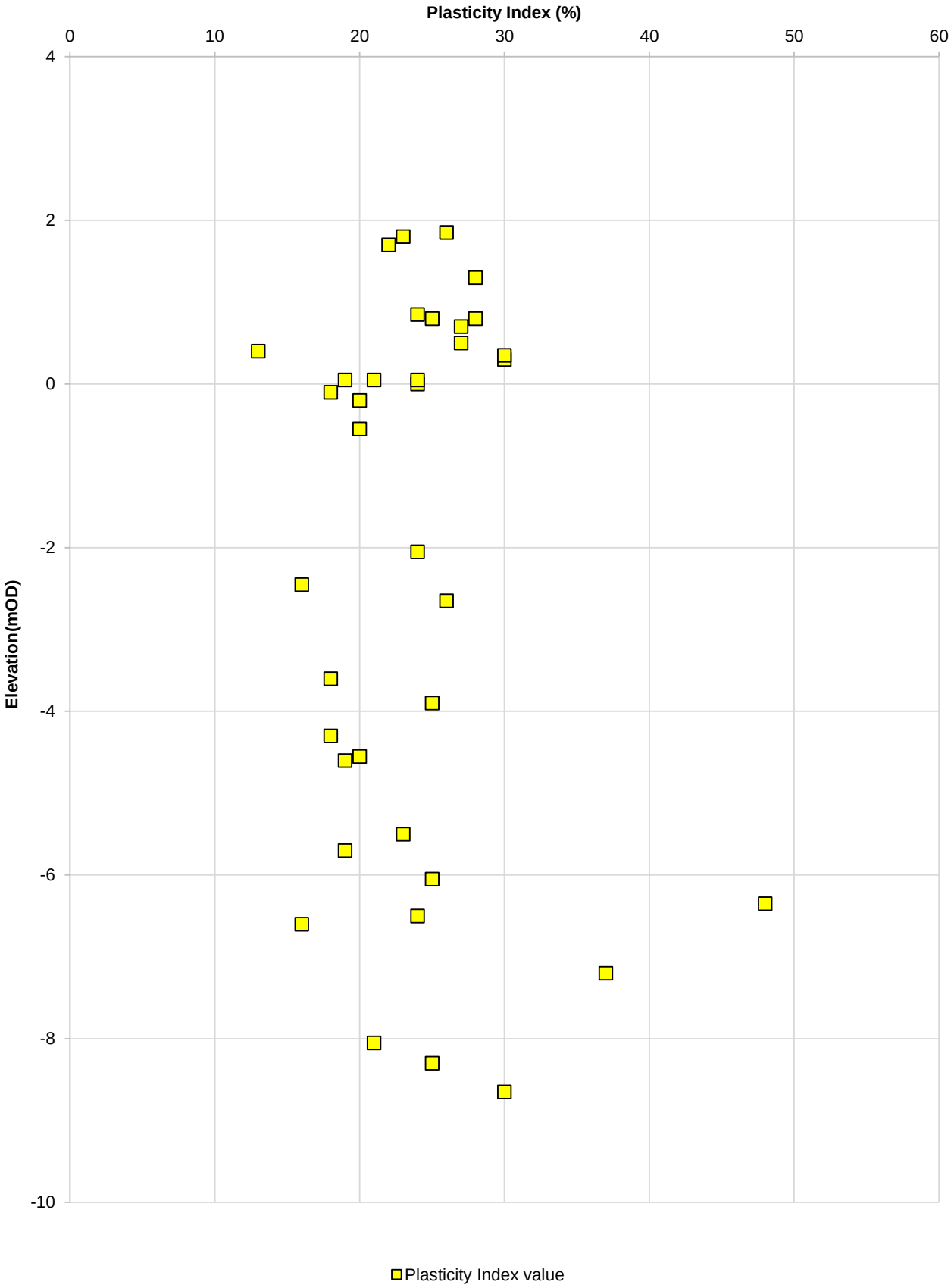

Title:	East Site Ammonia Storage - Plasticity Index by Elevation for Tidal Flat Deposits	**Figure No.:**	D.94
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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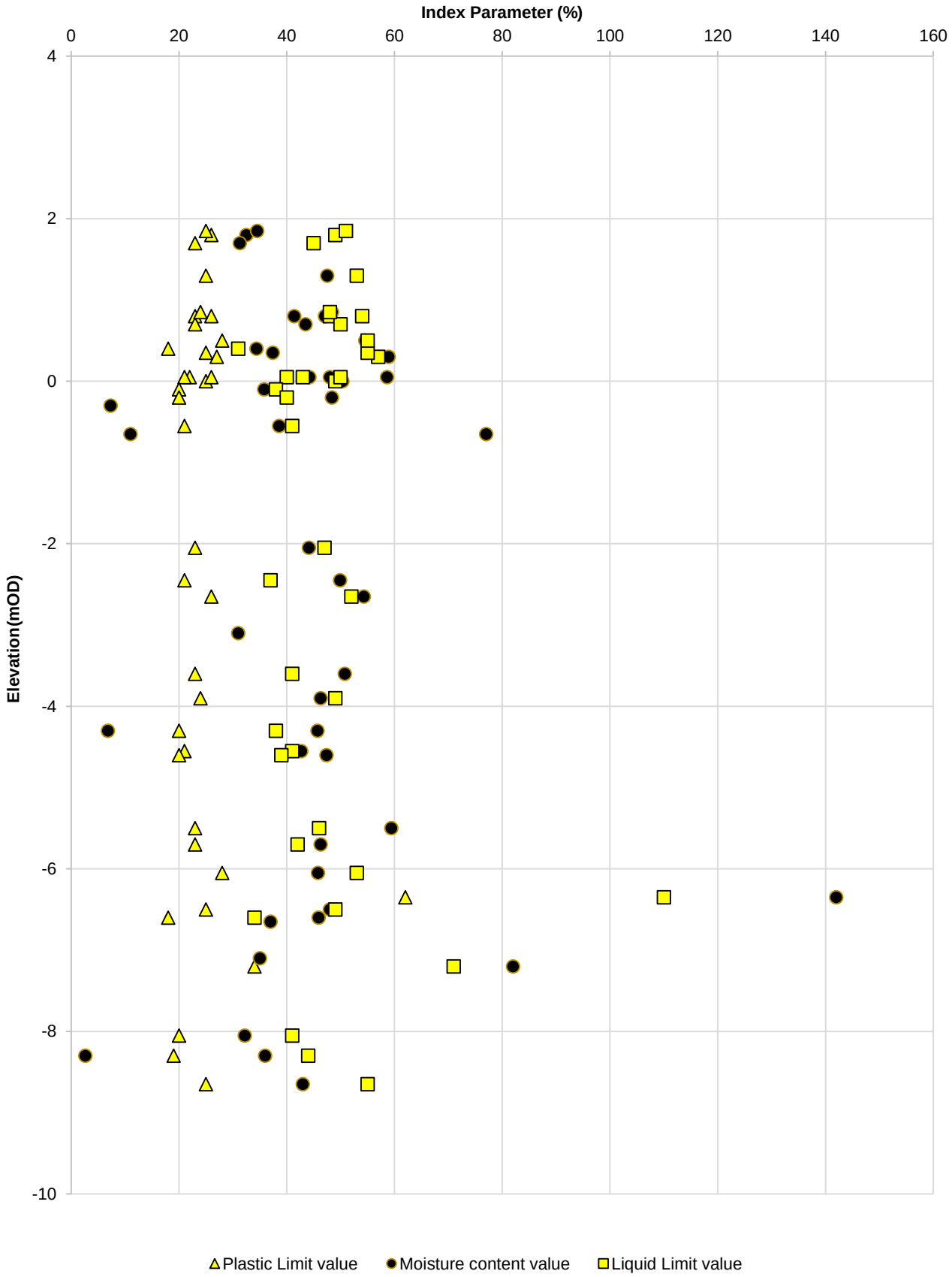

Title:	East Site Ammonia Storage - Moisture content & Atterberg Limits by Elevation - Tidal Flat Deposits	**Figure No.:**	D.95
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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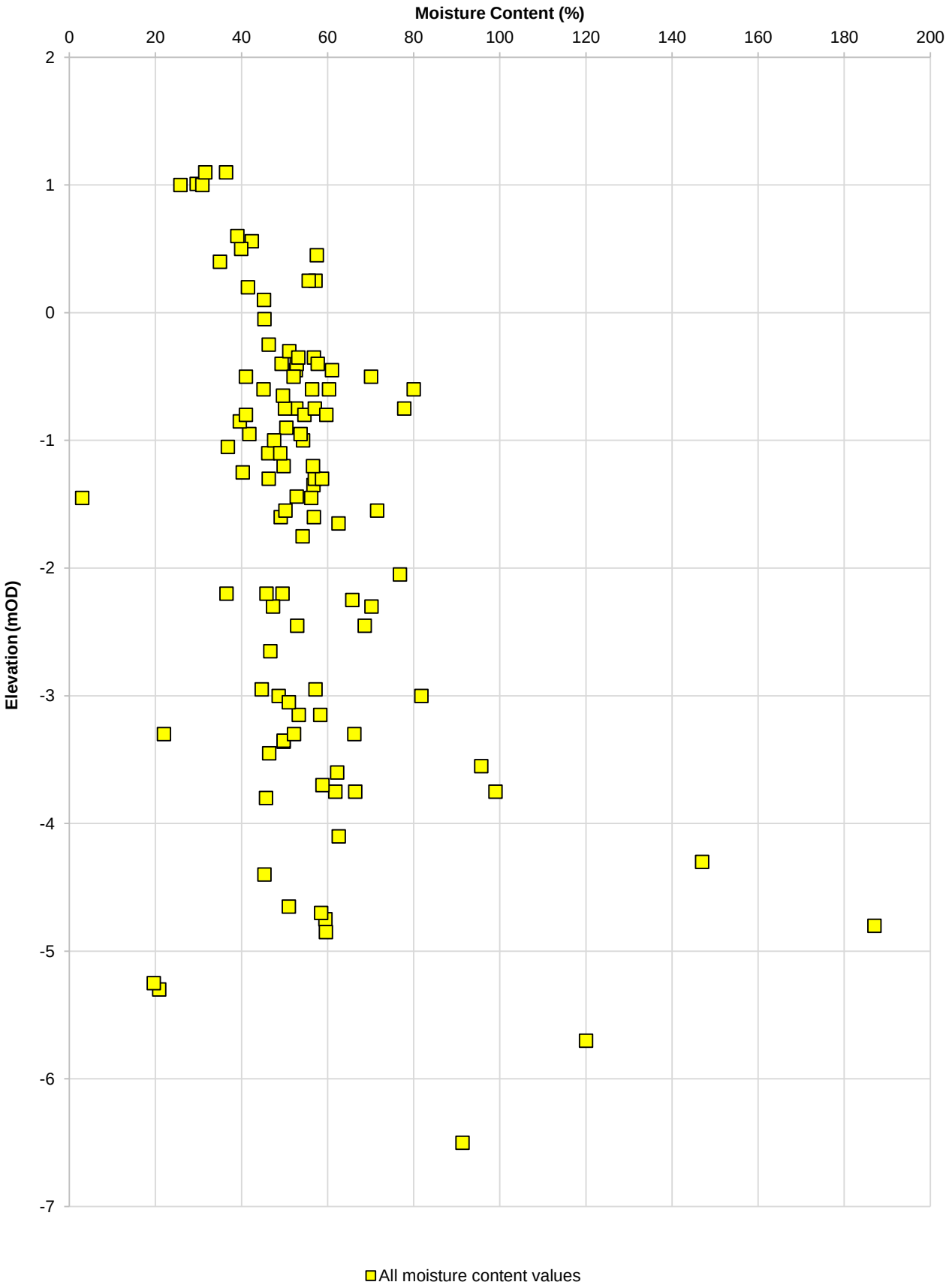

Title:	West Site - Moisture content by Elevation for Tidal Flat Deposits	**Fig No.:**	D.96
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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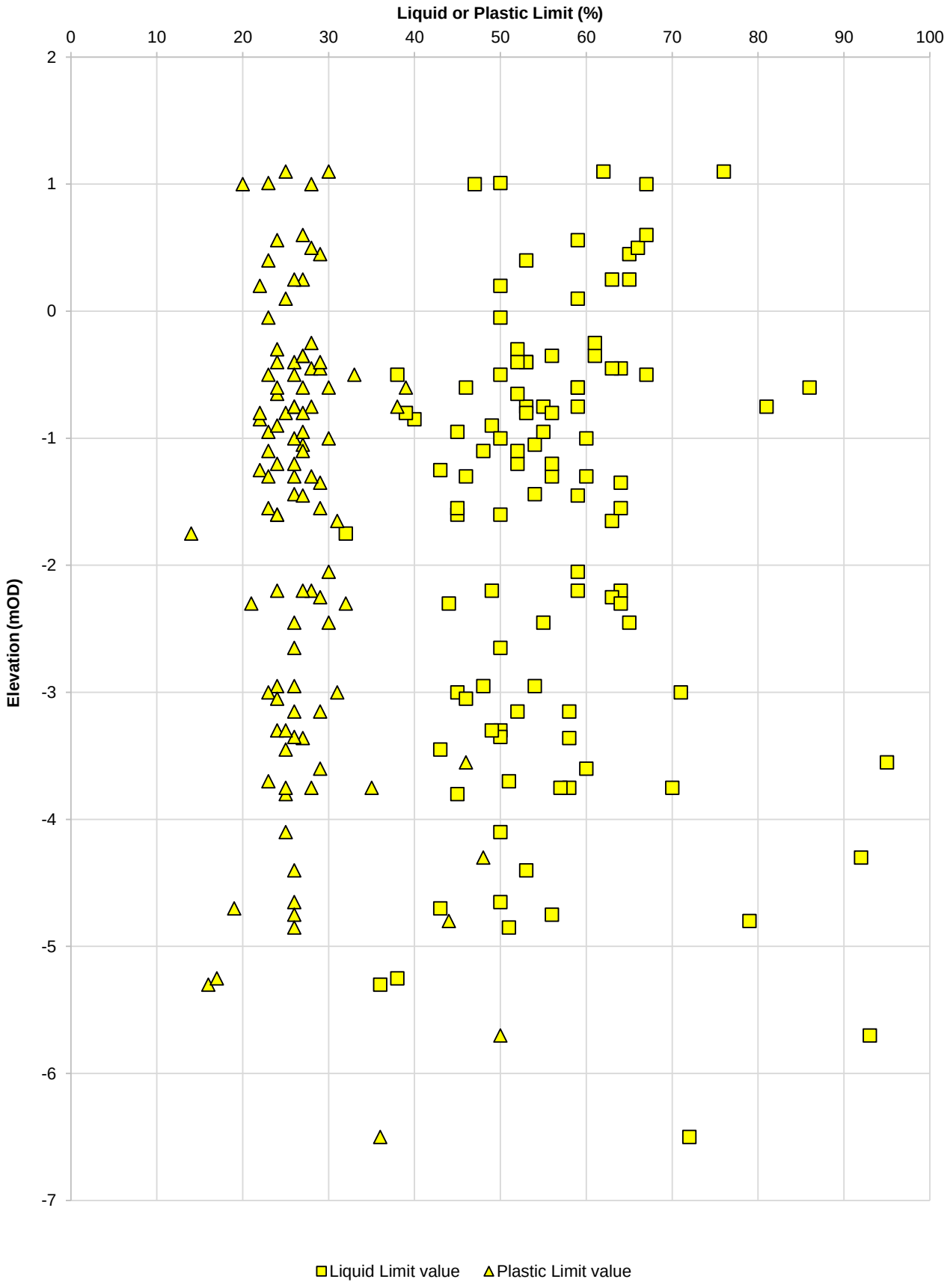

Title:	West Site - Liquid Limit and Plastic Limit by Elevation for Tidal Flat Deposits	**Fig No.:**	D.97
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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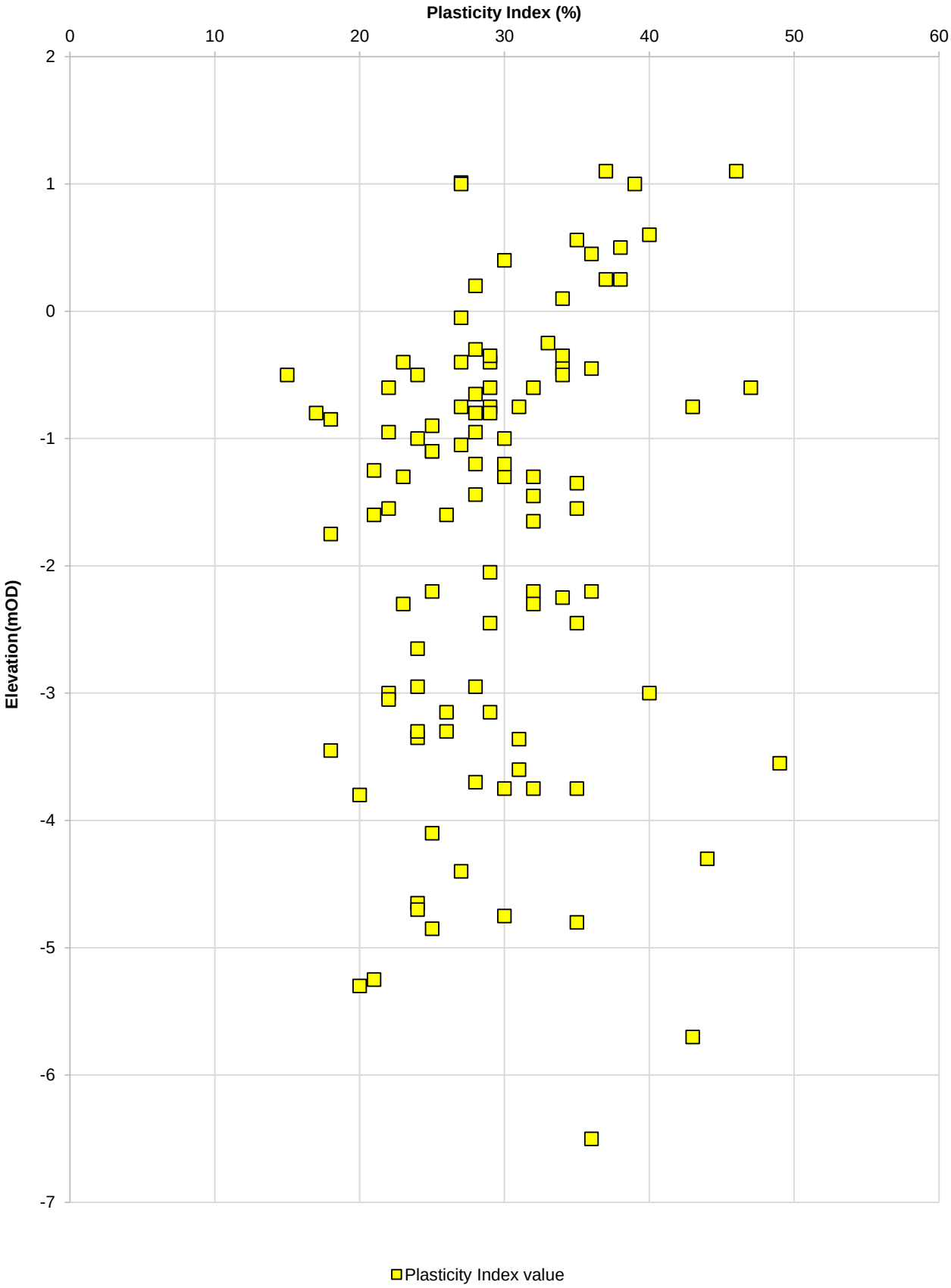

Title:	West Site - Plasticity Index by Elevation for Tidal Flat Deposits	**Fig No.:**	D.98
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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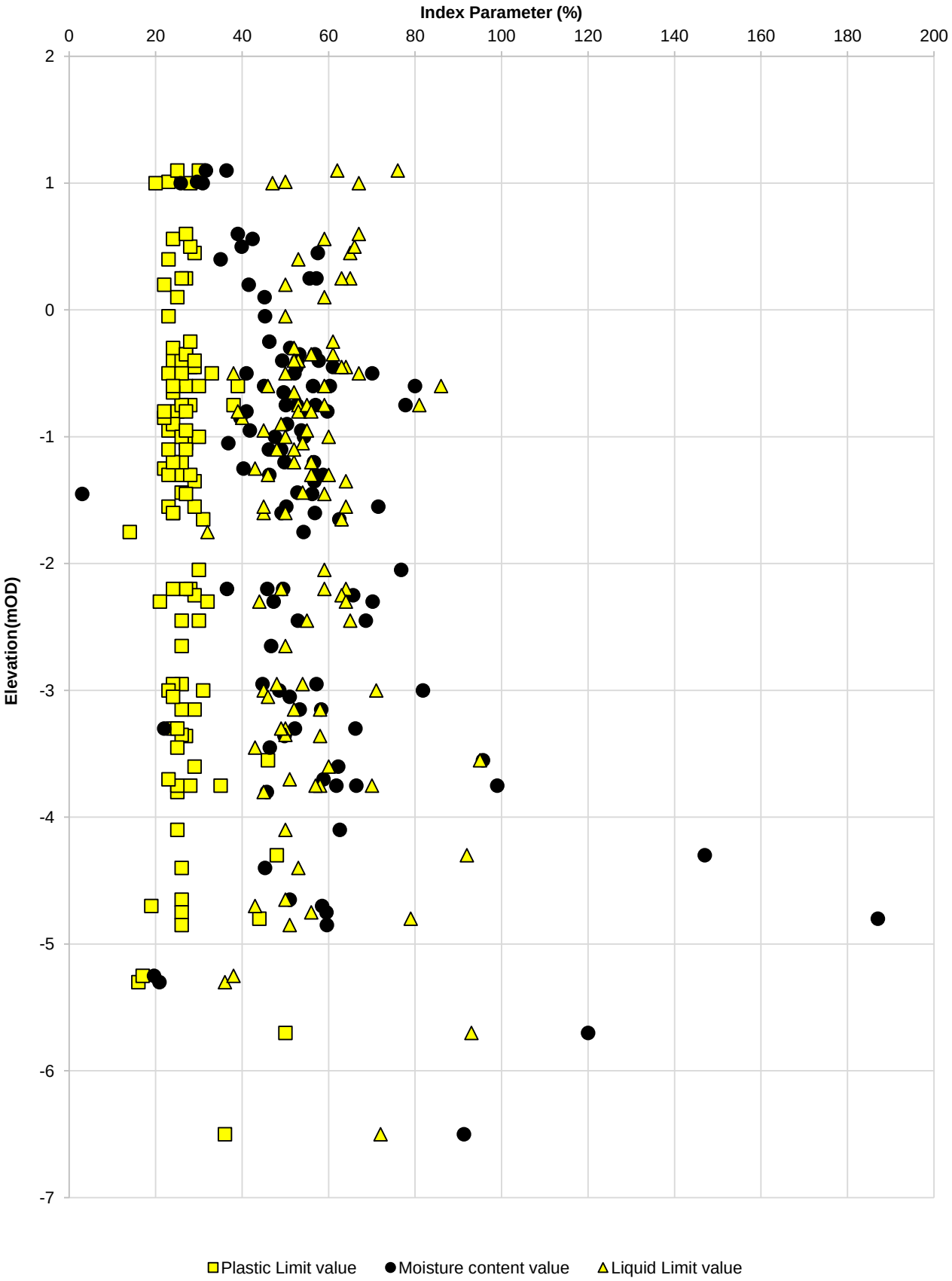

Title:	West Site - Moisture content & Atterberg Limits by Elevation - Tidal Flat Deposits	**Fig No.:**	D.99
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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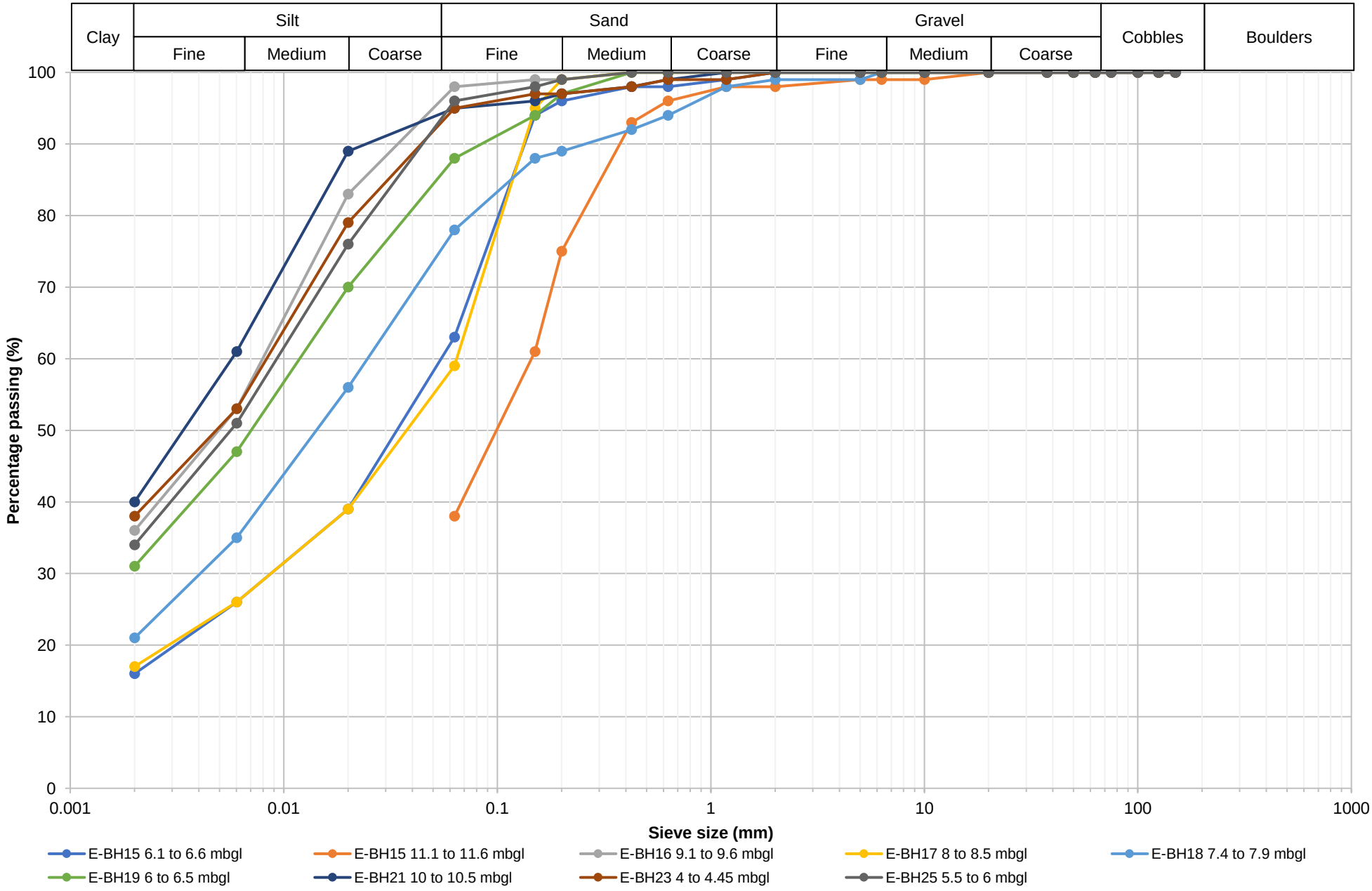

Title:	East Site Hydrogen Production: Plot of Particle size distribution (PSD) by Sample for Tidal Flat Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.100	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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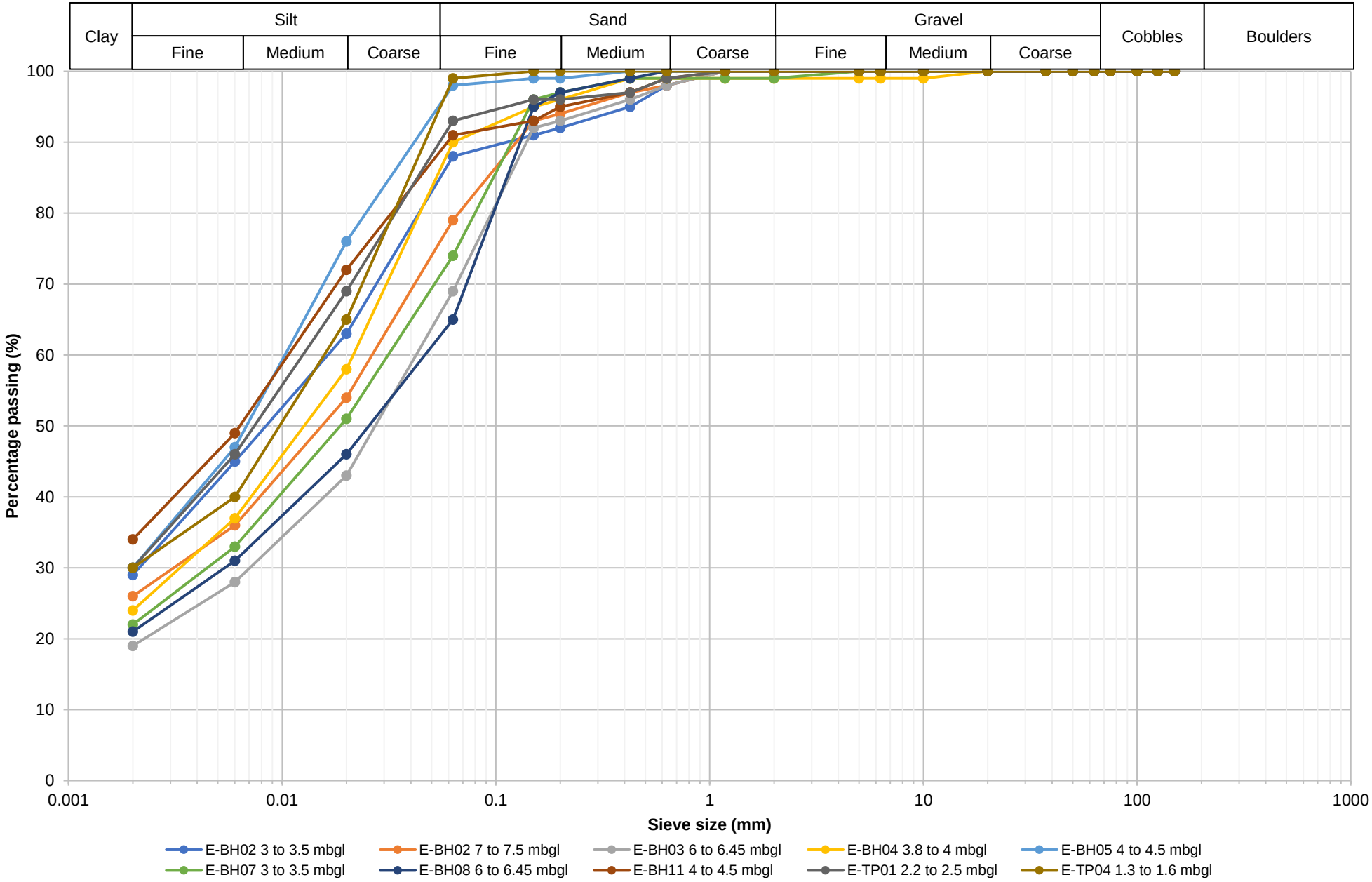

Title:	East Site Ammonia Storage: Plot of Particle size distribution (PSD) by Sample for Tidal Flat Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.101	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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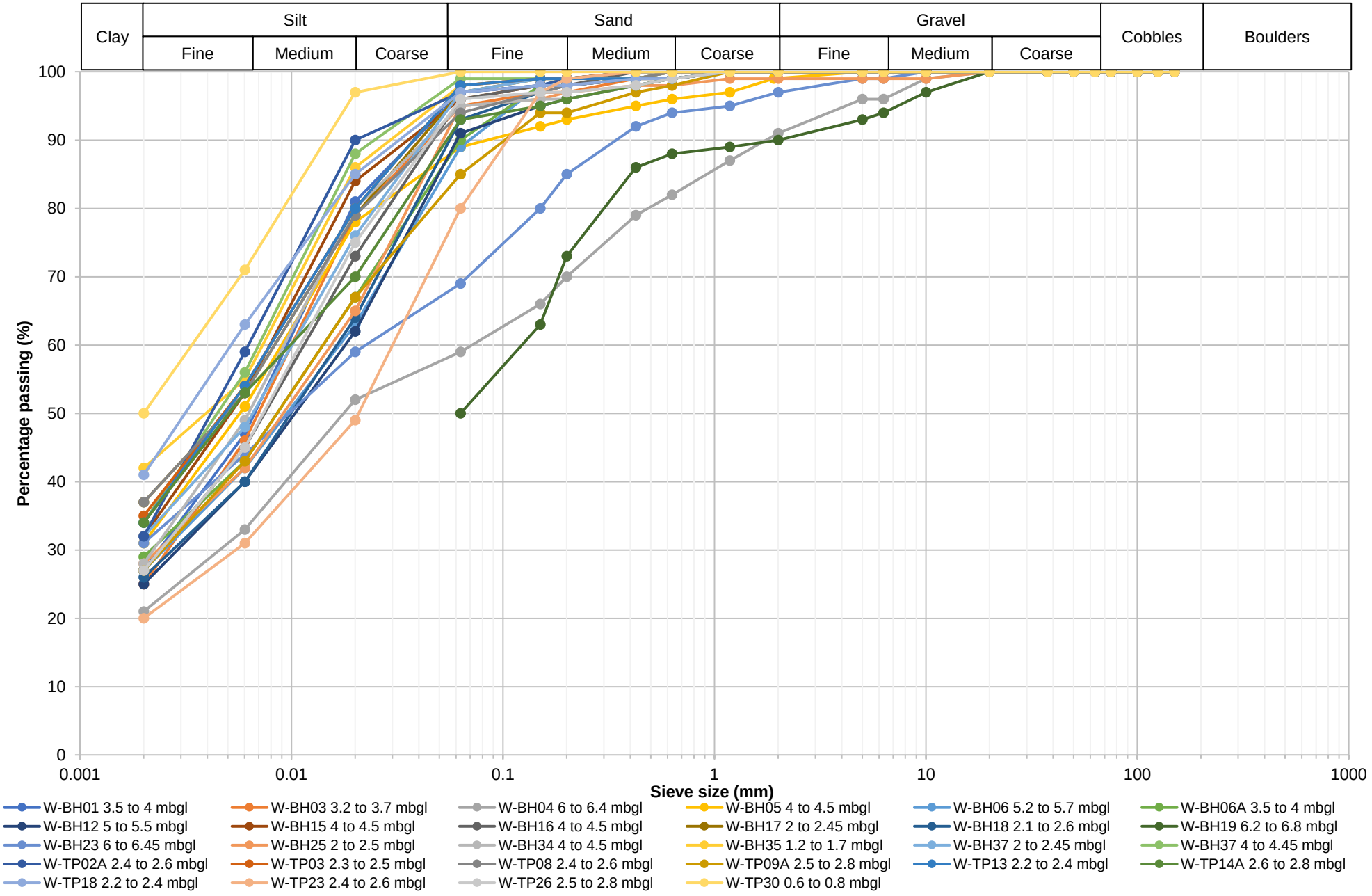

Title:	West Site: Plot of Particle size distribution (PSD) by Sample for Tidal Flat Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.102	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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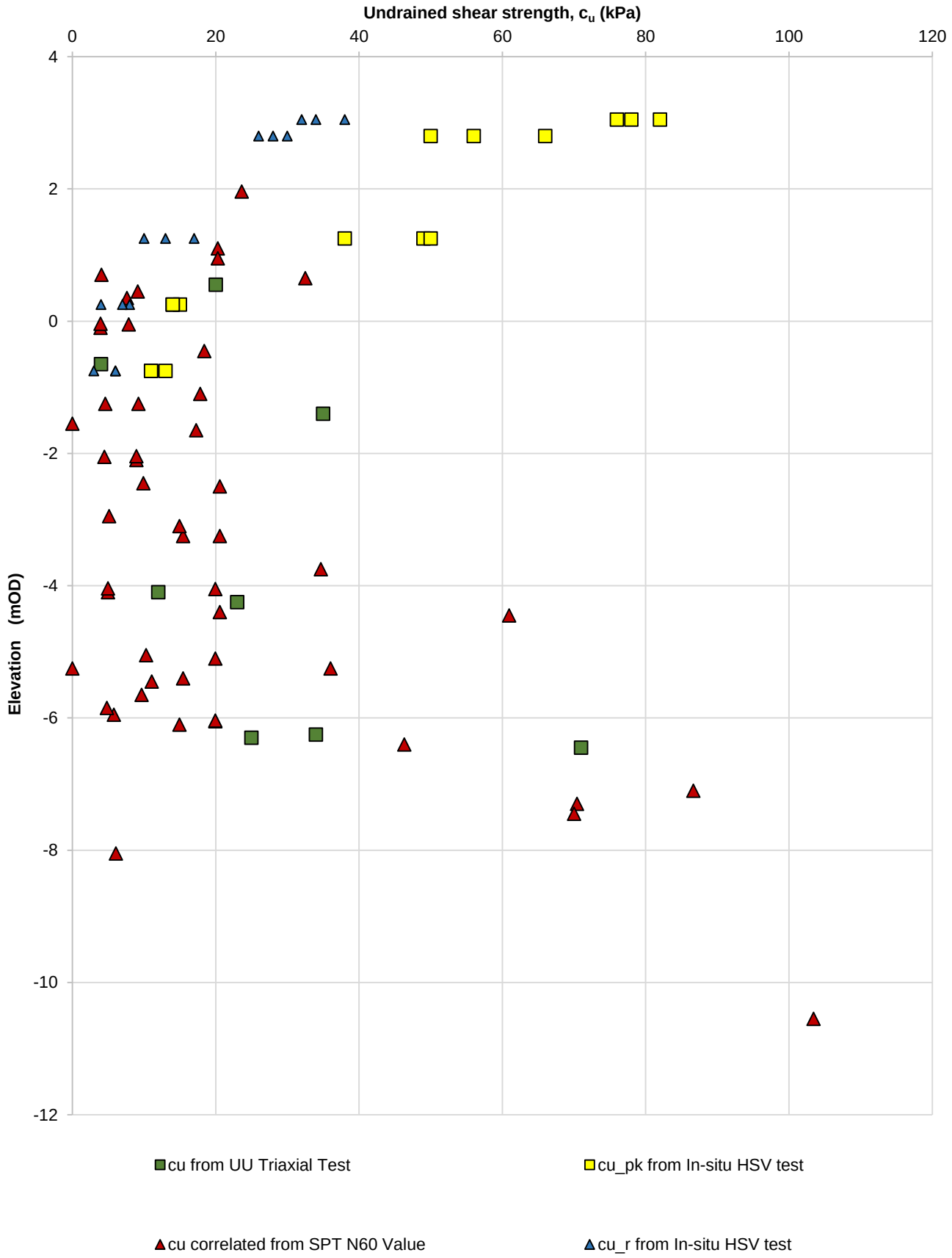

Title:	East Site Hydrogen Production: Undrained Shear Strength by Elevation for Tidal Flat Deposits	**Figure No.:**	D.103
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	01/06/2023
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	06/06/2023

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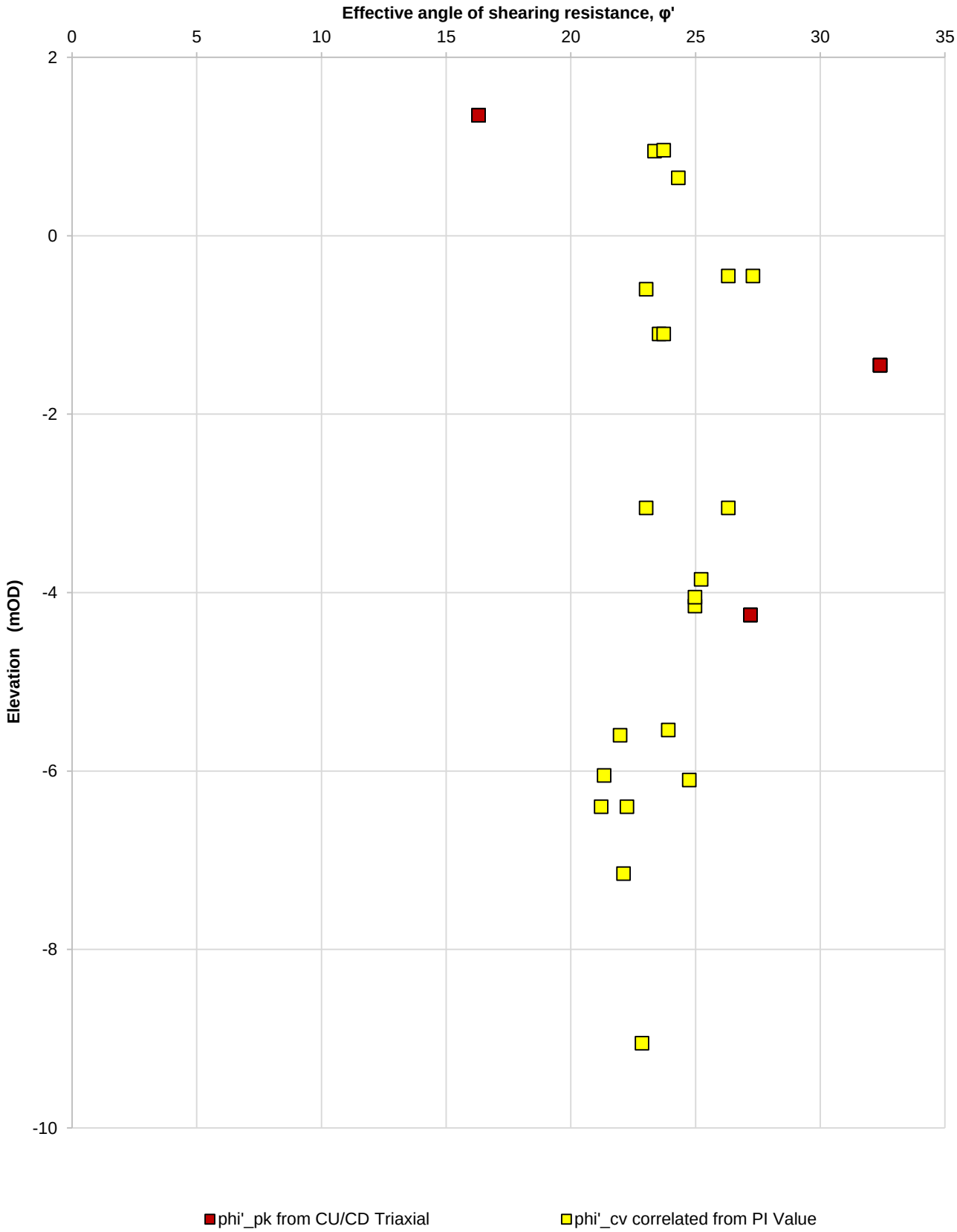

Title:	East Site Hydrogen Production: Effective Angle of Shearing Resistance by Elevation for Tidal Flat Deposits	**Figure No.:**	D.104
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	01/06/2023
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	06/06/2023

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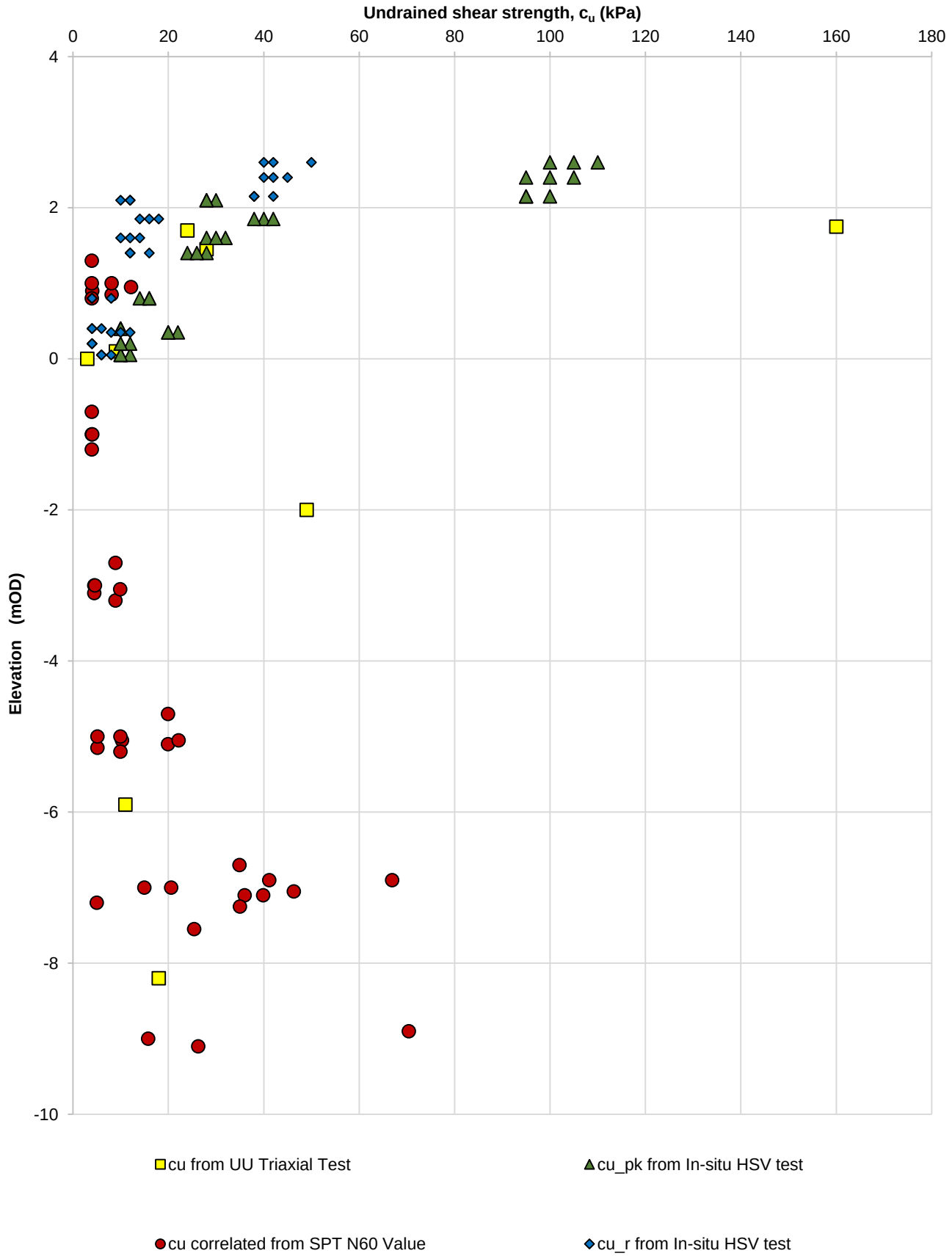

Title:	East Site Ammonia Storage: Undrained Shear Strength by Elevation for Tidal Flat Deposits	**Figure No.:**	D.105
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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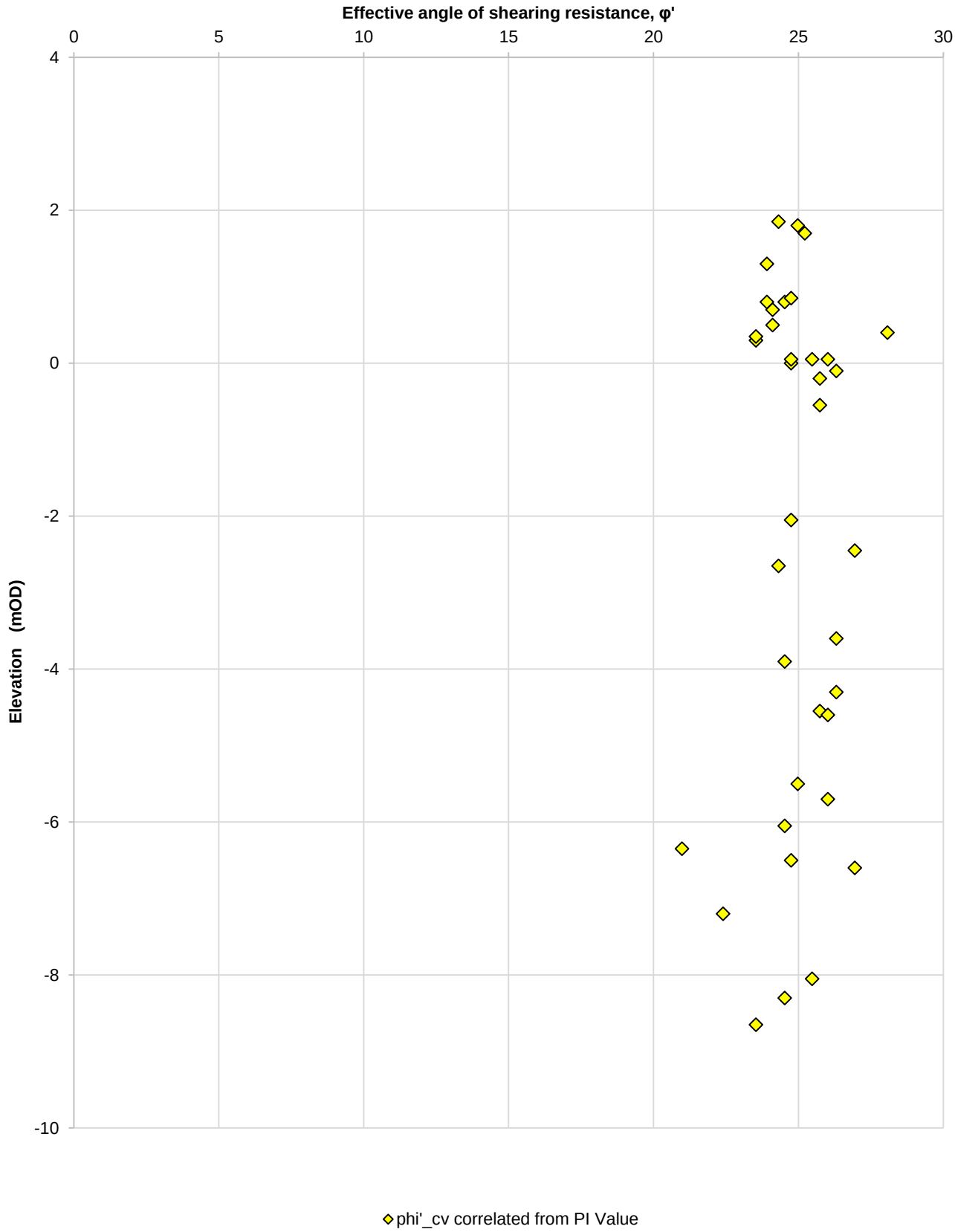
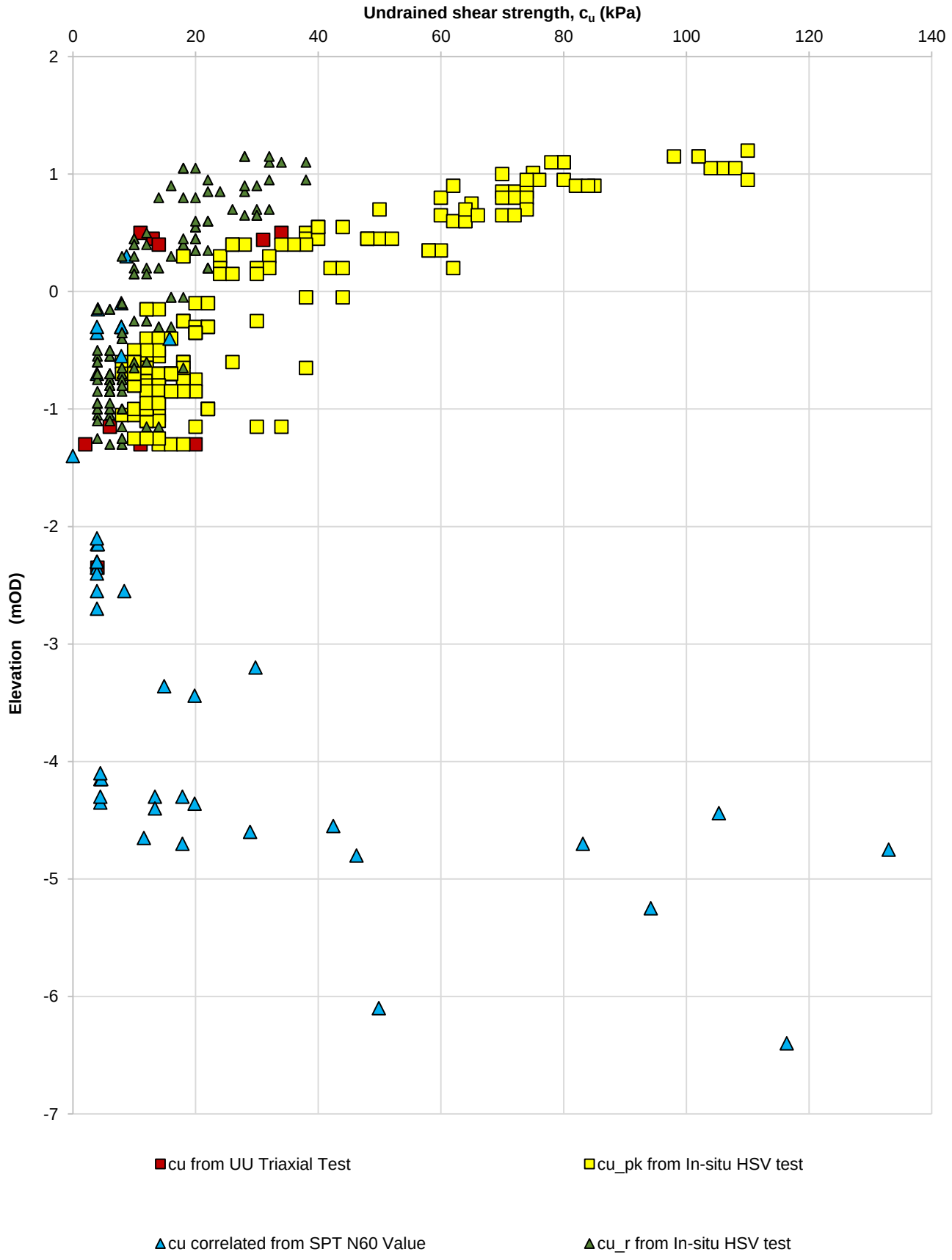


Title:	East Site Ammonia Storage: Effective Angle of Shearing Resistance by Elevation for Tidal Flat Deposits	**Figure No.:**	D.106
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

AECOM



Title:	West Site: Undrained Shear Strength by Elevation for Tidal Flat Deposits	**Figure No.:**	D.107
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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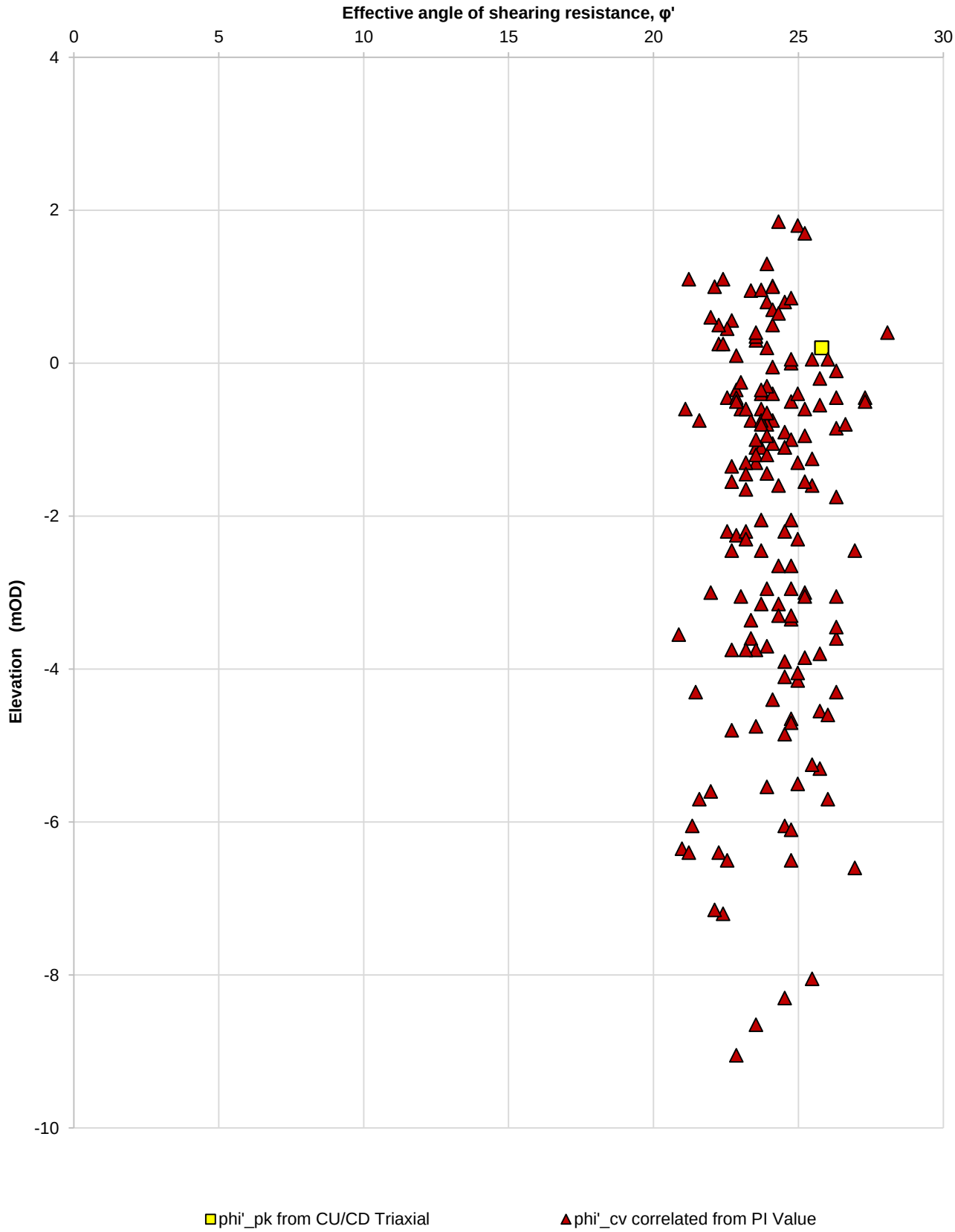

Title:	West Site: Effective Angle of Shearing Resistance by Elevation for Tidal Flat Deposits	**Figure No.:**	D.108
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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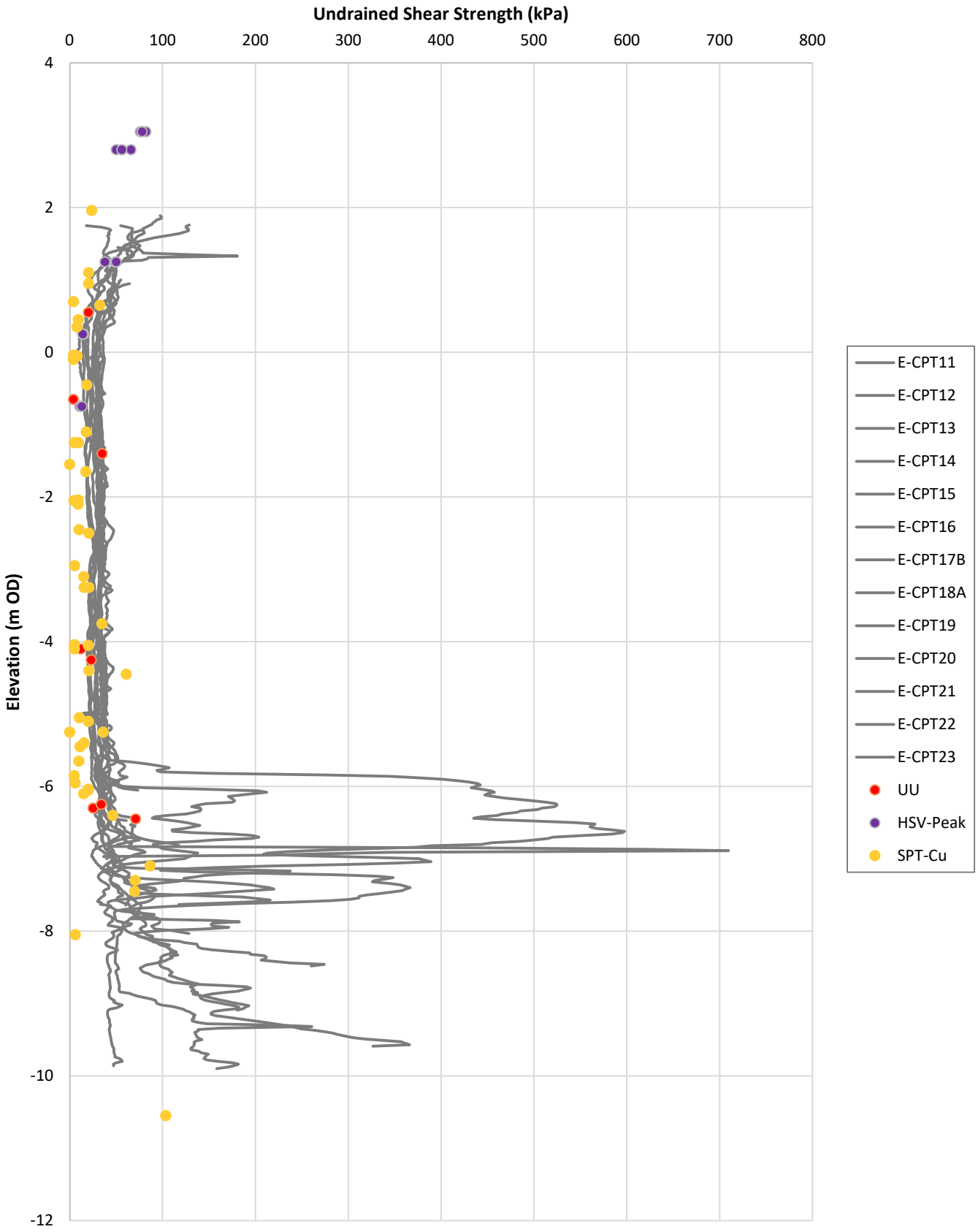

Title	East Site - Hydrogen Production - TFD - Undrained Shear Strength (CPT, HSV, SPT, UU) vs Elevation	**Figure No.:** D.109	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

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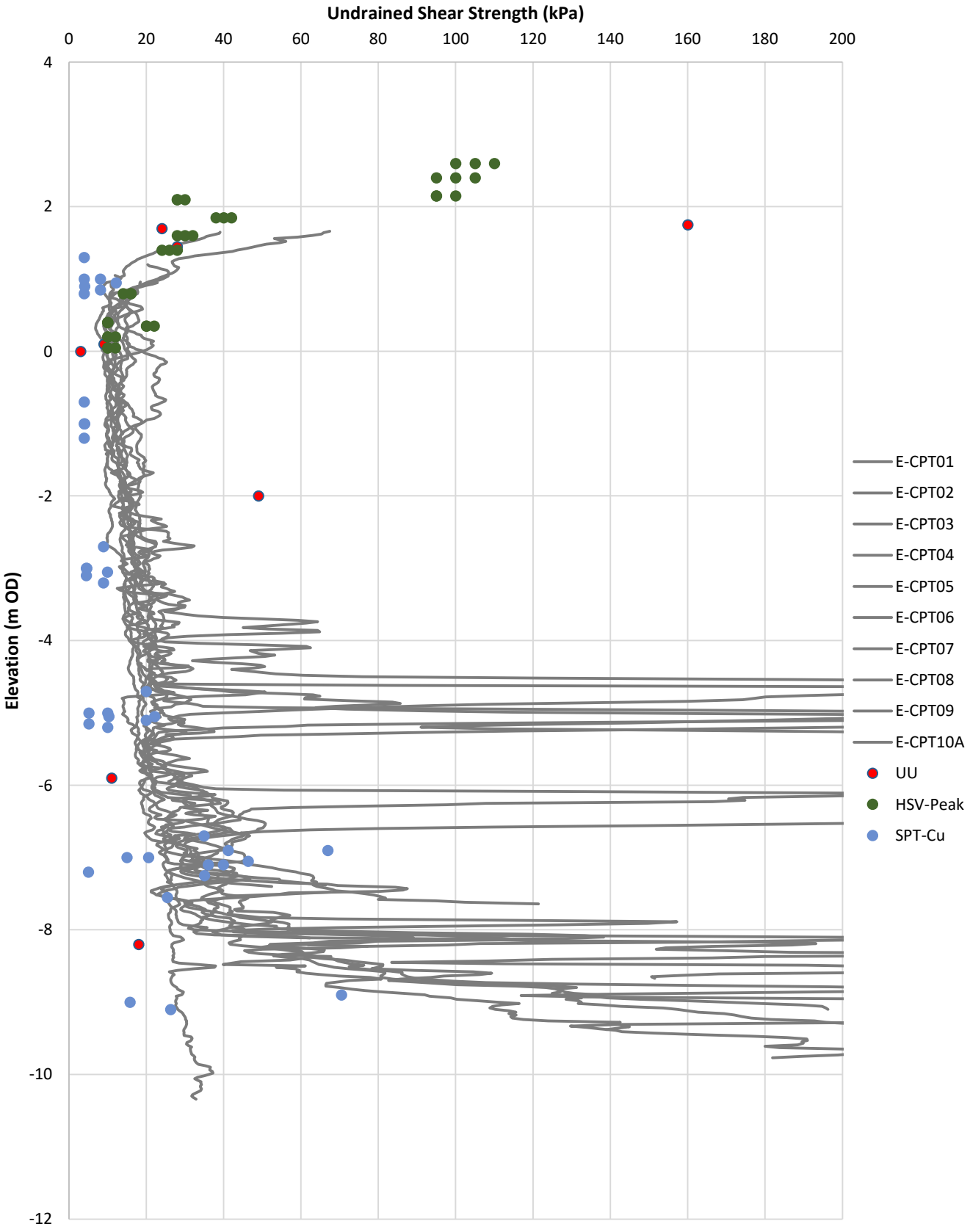
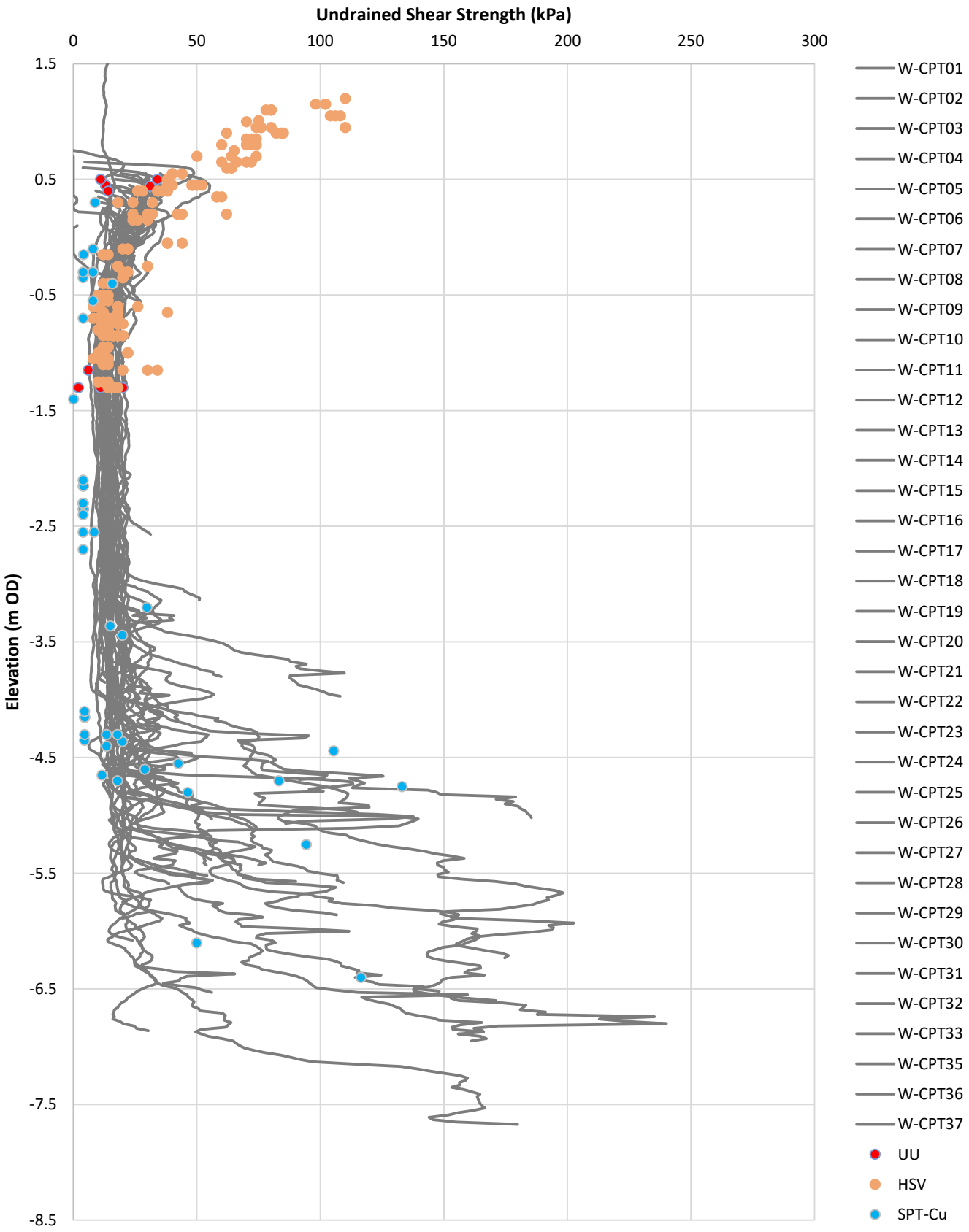


Title	East Site - Ammonia Storage - TFD - Undrained Shear Strength (CPT, HSV, SPT, UU) vs Elevation	**Figure No.:** D.110	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author**	AL
Proj. No	60687114	**Date**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

AECOM



Title	West Site - TFD - Undrained Shear Strength (CPT, HSV, SPT, UU) vs Elevation	**Figure No.:** D.111	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

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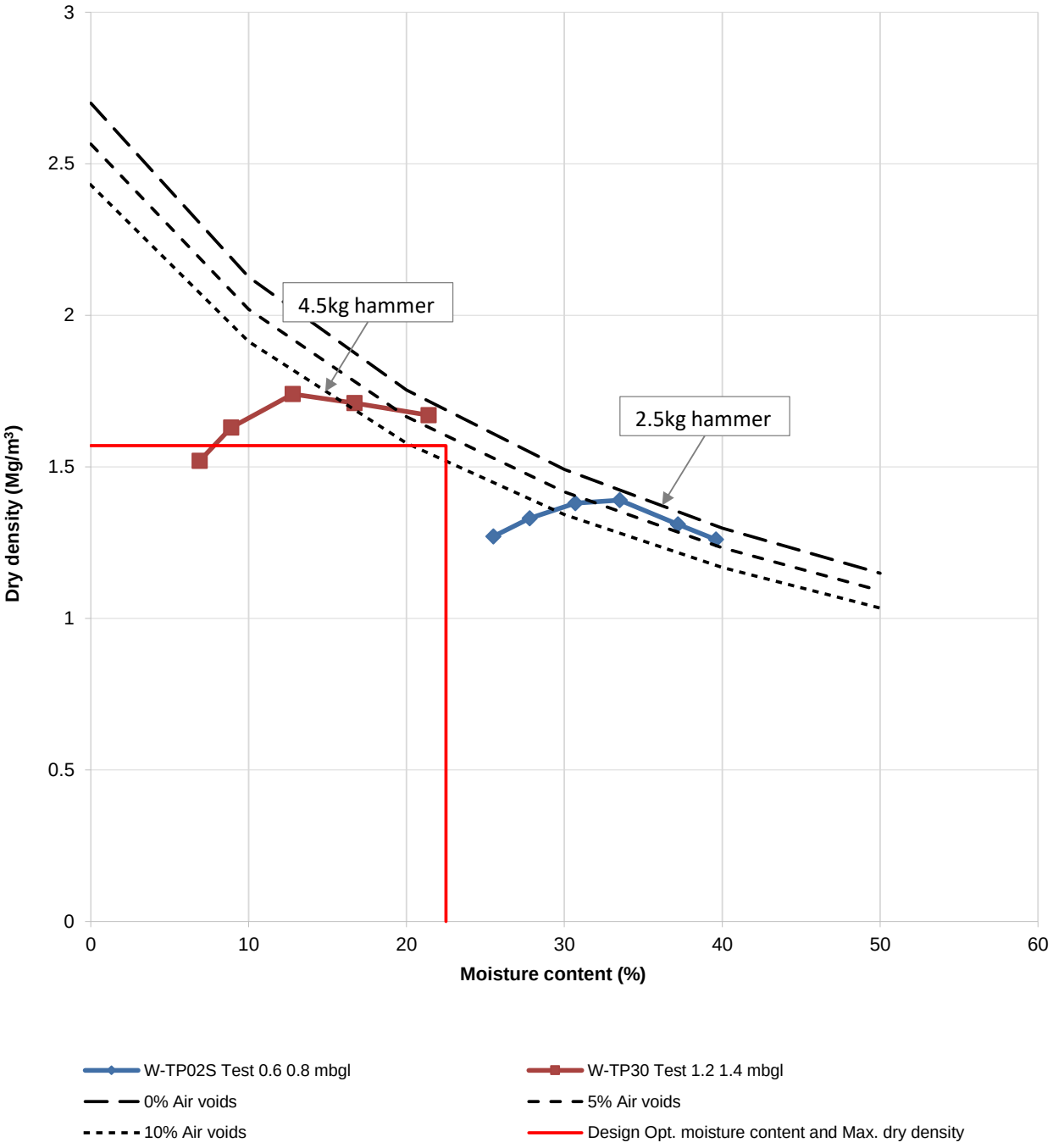

Test methods		Compaction types: 2.5KG, 4.5KG Moulds: 1L mould			
Mean proportion retained (%)		On 20mm sieve =	#N/A	On 37.5mm sieve =	#N/A
Values	**Optimum moisture content (%)**	Mean =	22.50	**Maximum dry density (Mg/m³)** Mean =	1.57
		Design =	22.5	Design =	1.57
Remarks	Symbols denote particle densities are: * measured values, # assumed values, ^ assumed and measured values				

Title:	West Site: Dry density vs Moisture content relationship by Sample for TFD	**Figure No.:**	D.112
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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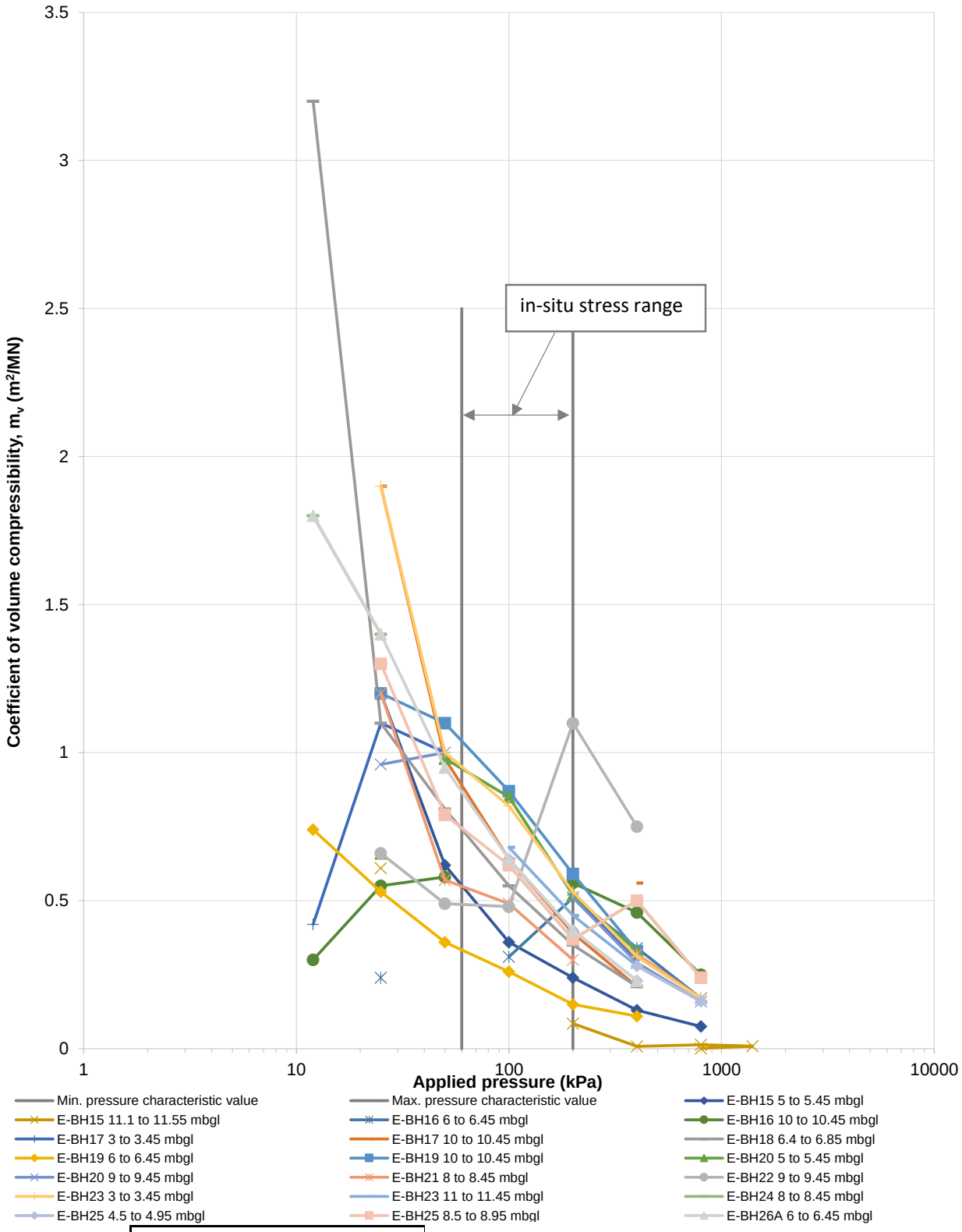

Pressure range (kPa)	
Min. value =	60
Max. value =	200

Title:	East Site Hydrogen Production: Coefficient of volume compressibility (mv) vs Applied pressure by Sample for Tidal Flat Deposits	**Fig No.:**	D.113
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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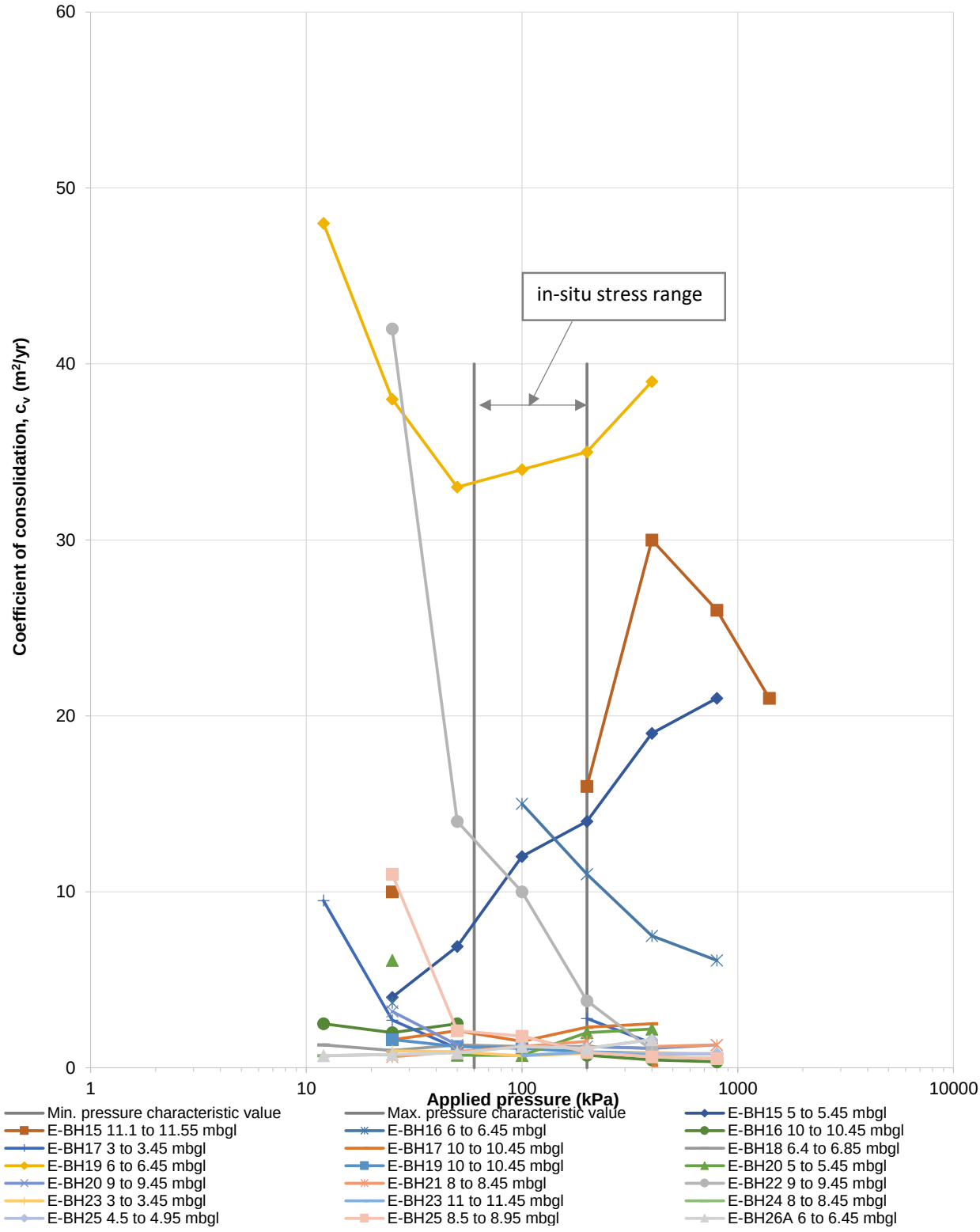

Pressure range (kPa)	
Min. value =	60
Max. value =	200

Title:	East Site Hydrogen Production: Coefficient of consolidation (cv) vs Applied pressure by Sample for Tidal Flat Deposits	**Fig No.:**	D.114
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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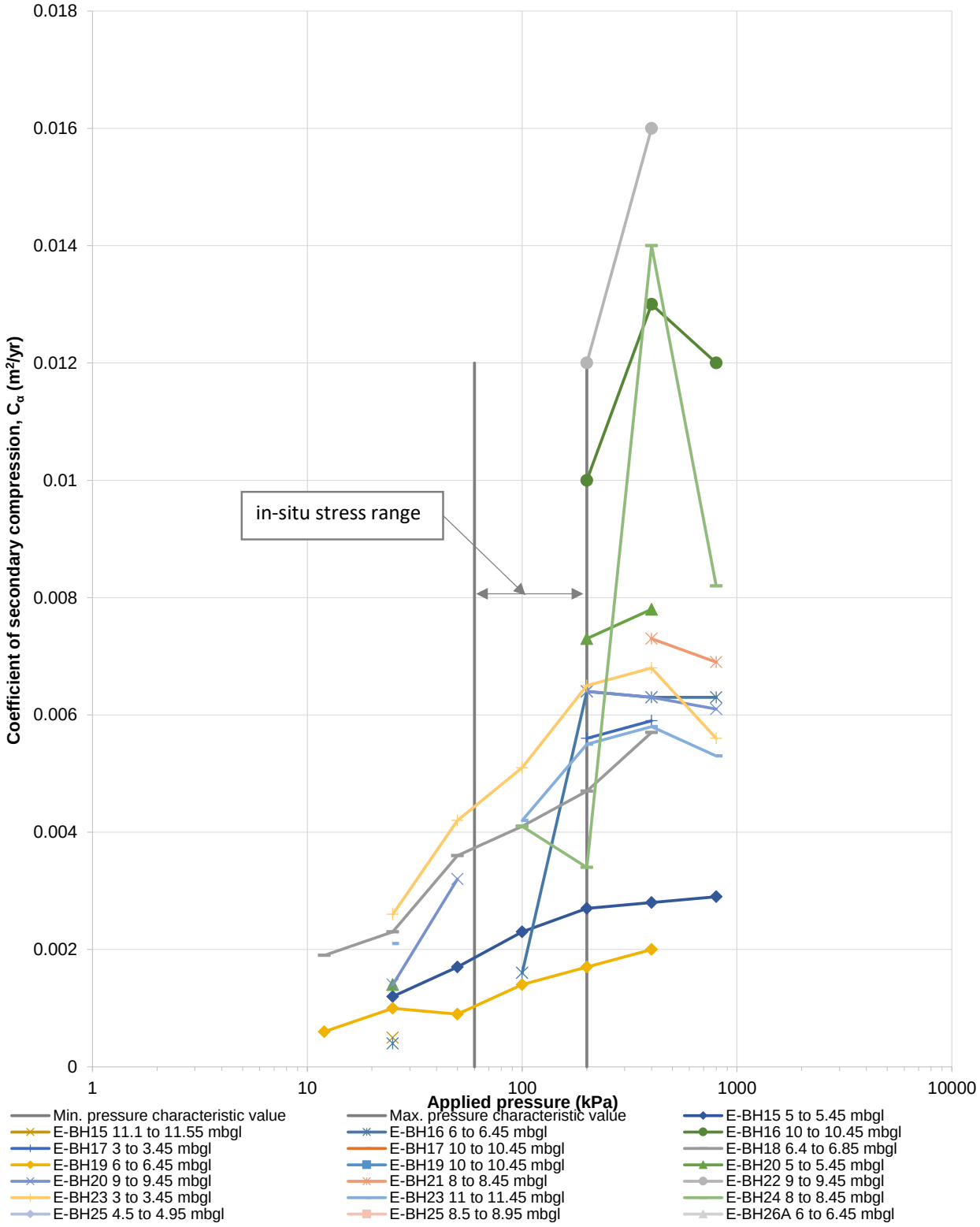

Pressure range (kPa)	
Min. value =	60
Max. value =	200

Title:	East Site Hydrogen Production: Coefficient of secondary compression (Cα) vs Applied pressure by Sample for Tidal Flat Deposits	**Fig No.:**	D.115
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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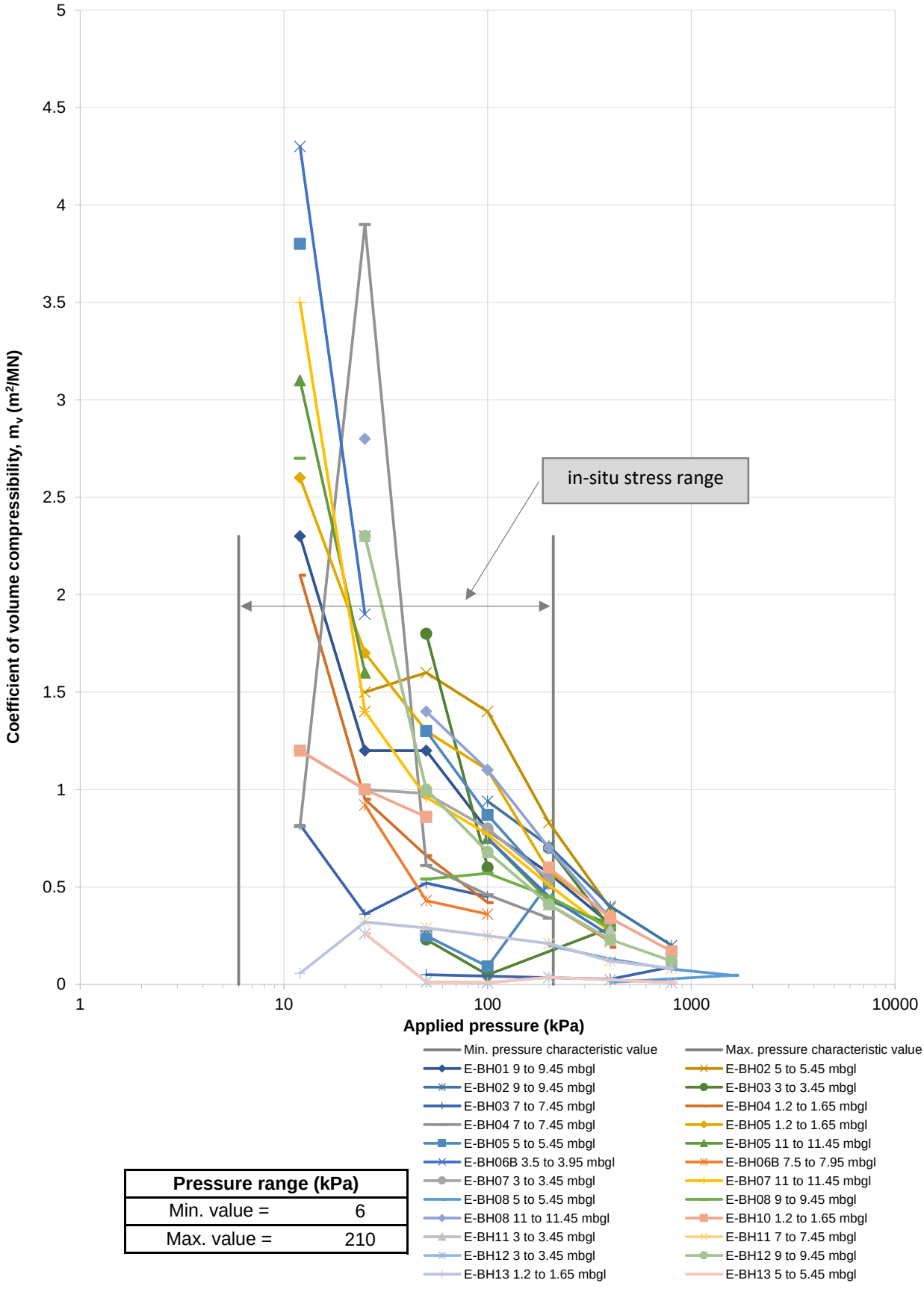

Pressure range (kPa)	
Min. value =	6
Max. value =	210

Title:	East Site Ammonia Storage: Coefficient of volume compressibility (mv) vs Applied pressure by Sample for Tidal Flat Deposits	**Fig No.:**	D.116
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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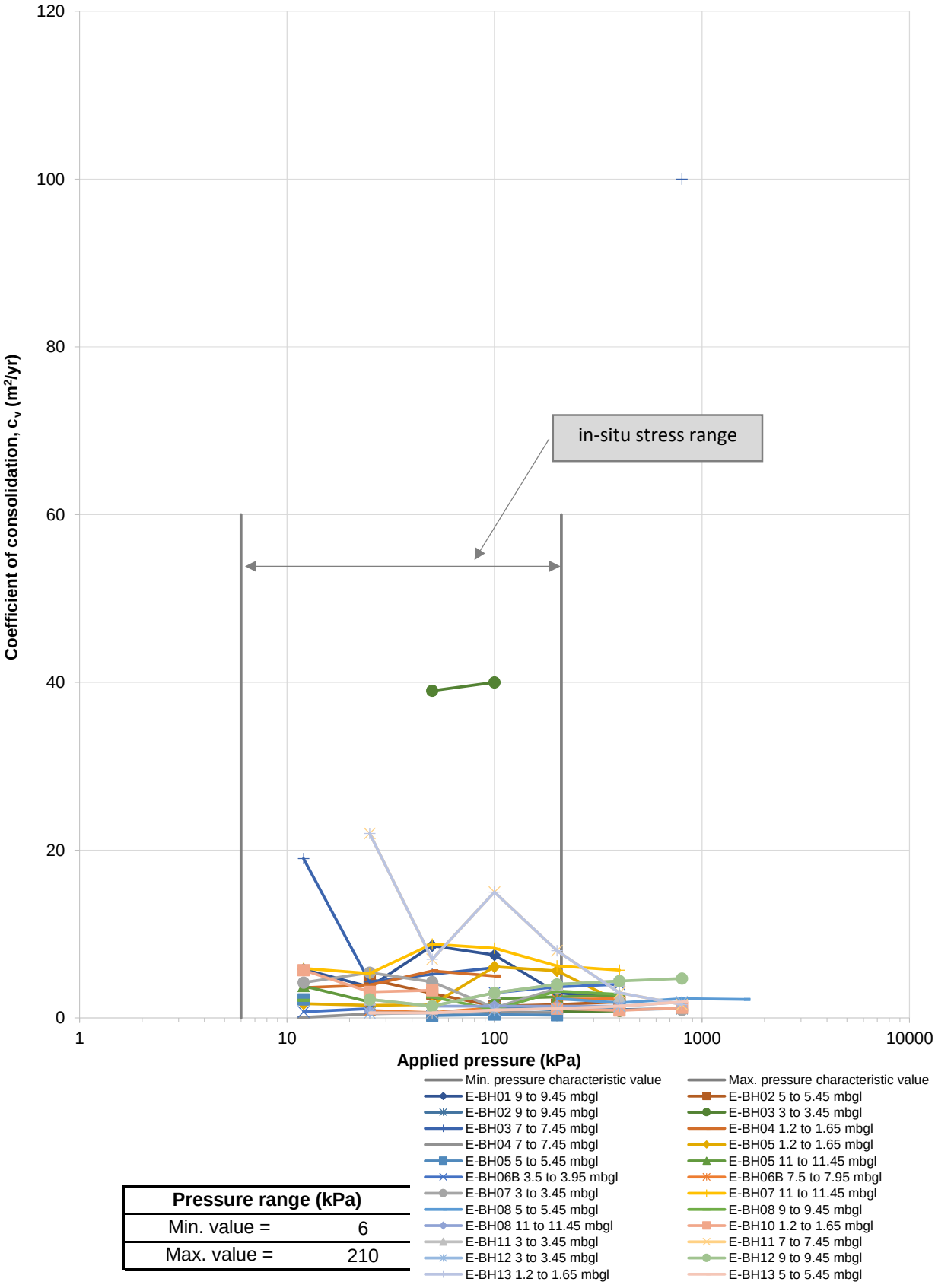

Pressure range (kPa)	
Min. value =	6
Max. value =	210

Title:	East Site Ammonia Storage: Coefficient of consolidation (cv) vs Applied pressure by Sample for Tidal Flat Deposits	**Fig No.:**	D.117
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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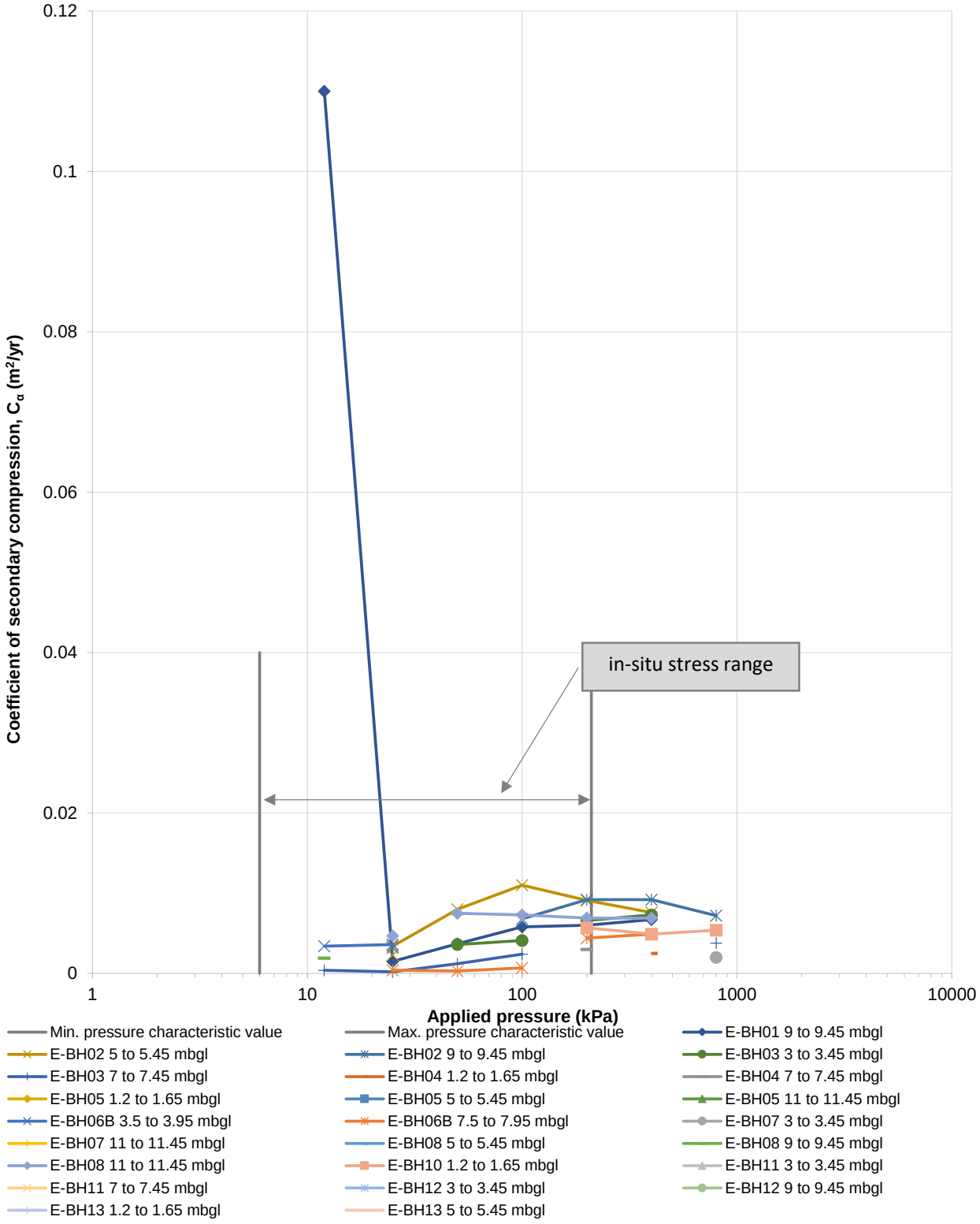

Pressure range (kPa)	
Min. value =	6
Max. value =	210

Title:	East Site Ammonia Storage: Coefficient of secondary compression (Cα) vs Applied pressure by Sample for Tidal Flat Deposits	**Fig No.:**	D.118
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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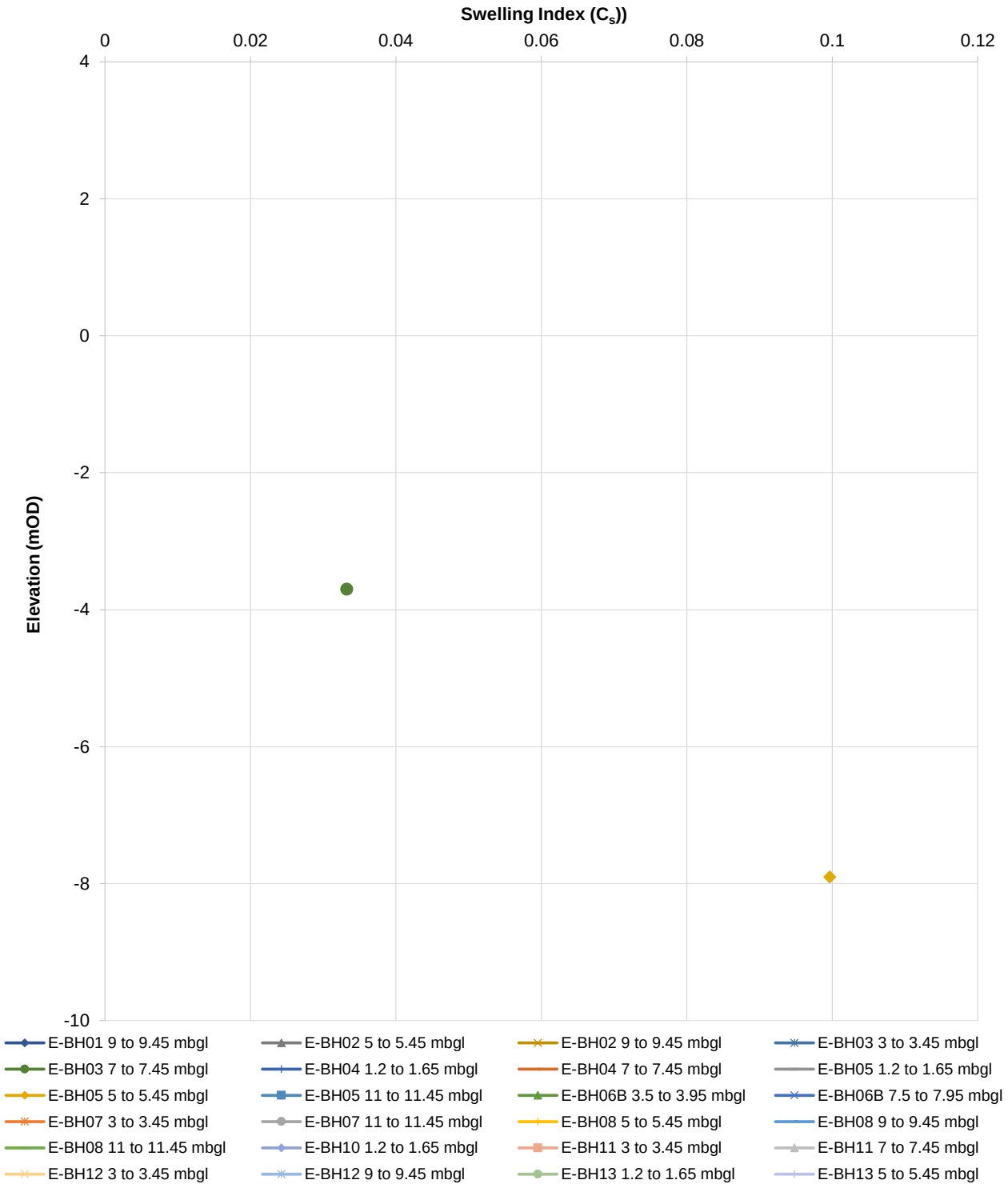

Elevation range (mOD)
3.3
-6.6

Title:	East Site Ammonia Storage: Swelling Index (Cs) vs Elevation by Sample for Tidal Flat Deposits	**Fig No.:**	D.119
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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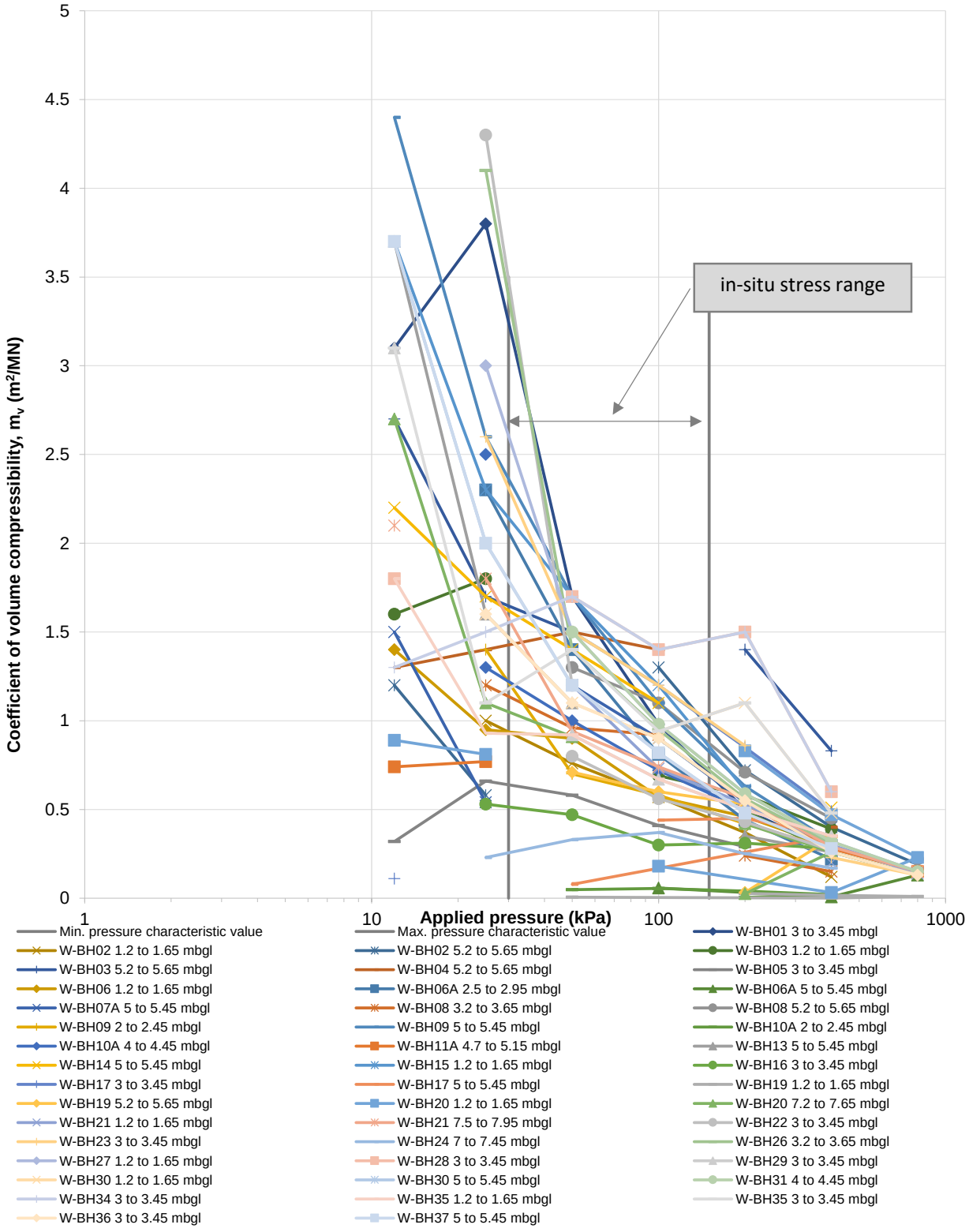

Pressure range (kPa)	
Min. value =	30
Max. value =	150

Title:	West Site: Coefficient of volume compressibility (mv) vs Applied pressure by Sample for Tidal Flat Deposits	**Fig No.:**	D.120
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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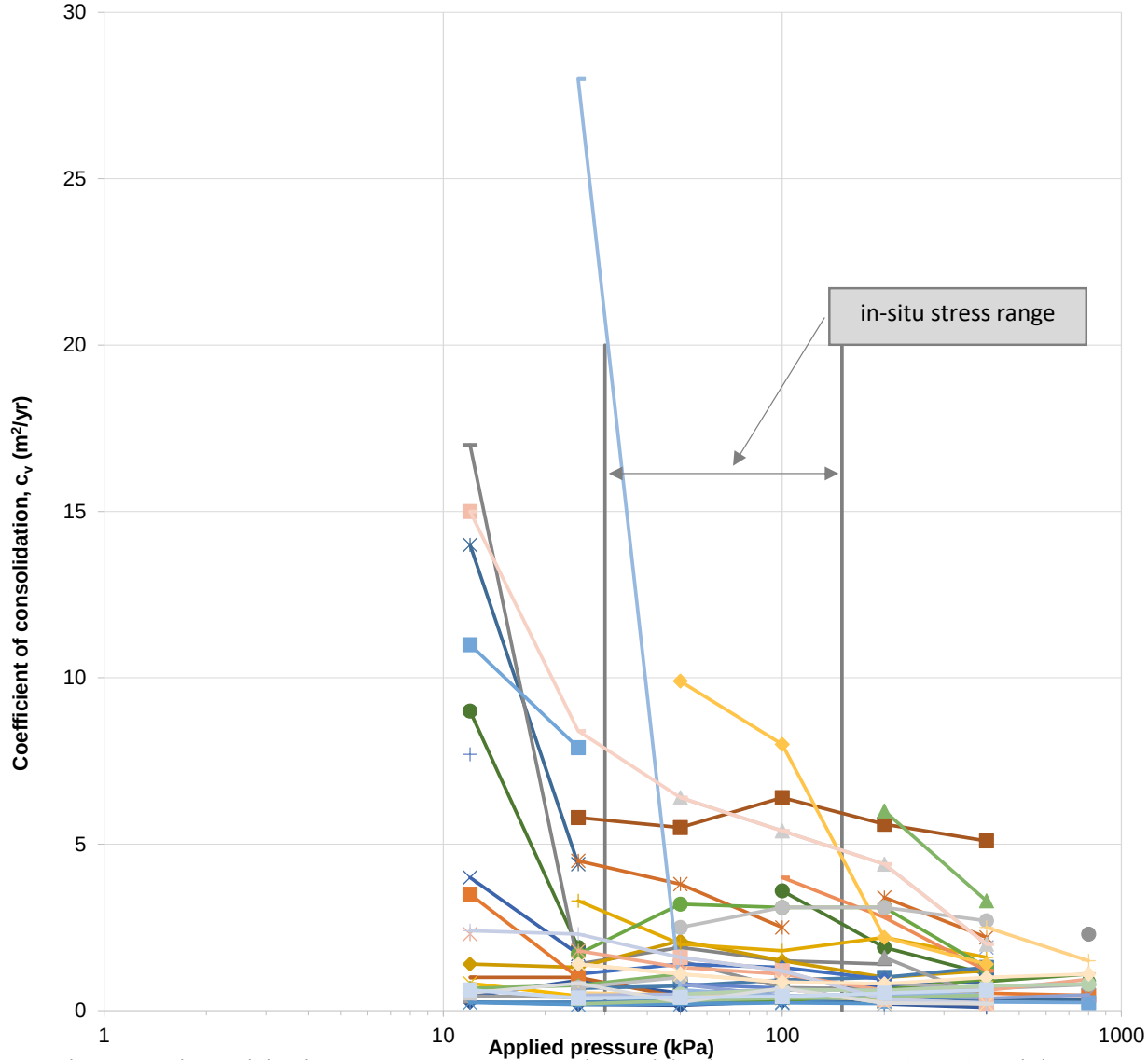

Pressure range (kPa)	
Min. value =	30
Max. value =	150

Title:	West Site: Coefficient of consolidation (cv) vs Applied pressure by Sample for Tidal Flat Deposits	**Fig No.:**	D.121
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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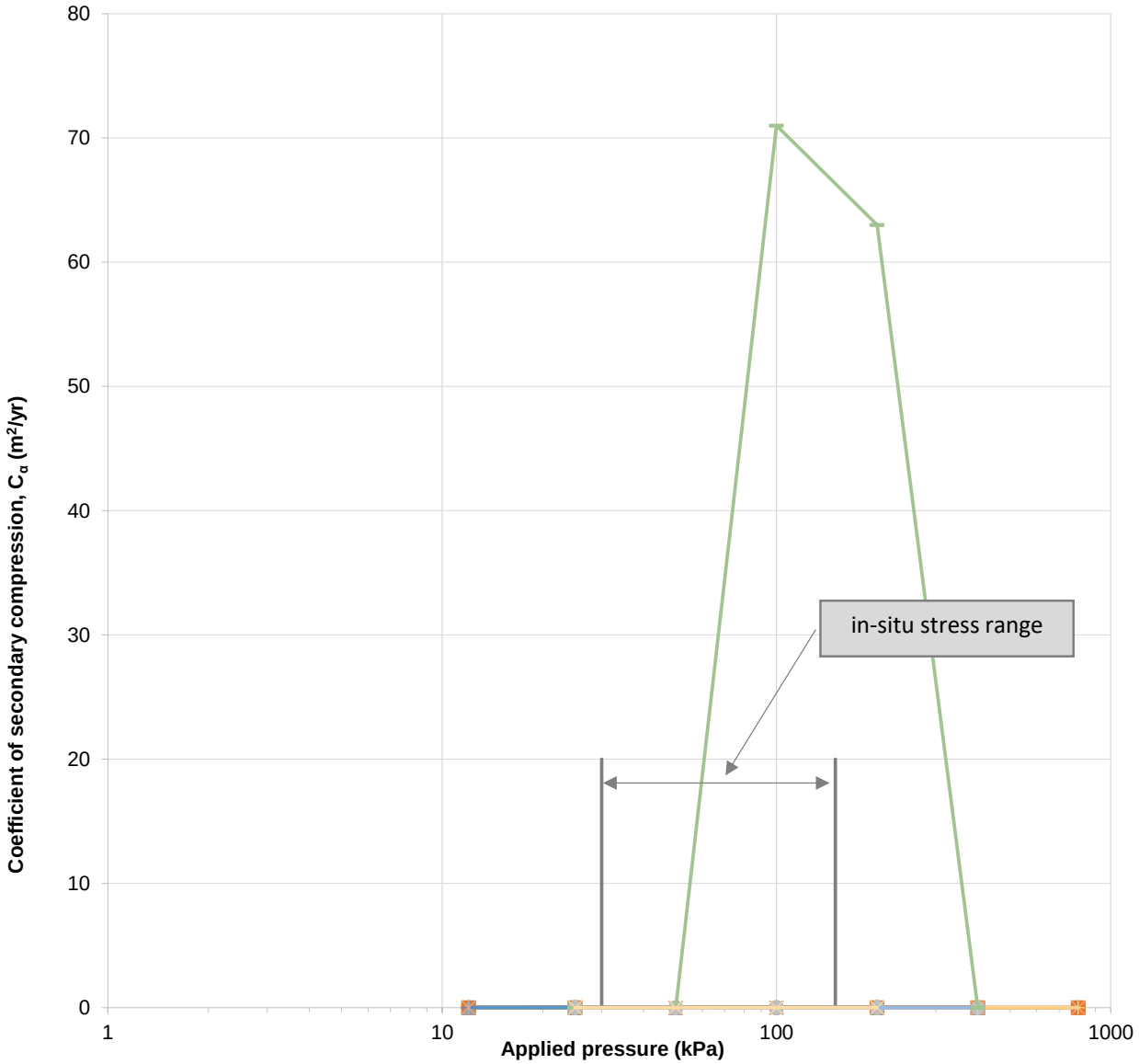

Min. pressure characteristic value
Max. pressure characteristic value
W-BH01 3 to 3.45 mbgl
W-BH02 1.2 to 1.65 mbgl
W-BH02 5.2 to 5.65 mbgl
W-BH03 1.2 to 1.65 mbgl
W-BH03 5.2 to 5.65 mbgl
W-BH04 5.2 to 5.65 mbgl
W-BH05 3 to 3.45 mbgl
W-BH06 1.2 to 1.65 mbgl
W-BH06A 2.5 to 2.95 mbgl
W-BH06A 5 to 5.45 mbgl
W-BH07A 5 to 5.45 mbgl
W-BH08 3.2 to 3.65 mbgl
W-BH08 5.2 to 5.65 mbgl
W-BH09 2 to 2.45 mbgl
W-BH09 5 to 5.45 mbgl
W-BH10A 2 to 2.45 mbgl
W-BH10A 4 to 4.45 mbgl
W-BH11A 4.7 to 5.15 mbgl
W-BH13 5 to 5.45 mbgl
W-BH14 5 to 5.45 mbgl
W-BH15 1.2 to 1.65 mbgl
W-BH16 3 to 3.45 mbgl
W-BH17 3 to 3.45 mbgl
W-BH17 5 to 5.45 mbgl
W-BH19 1.2 to 1.65 mbgl
W-BH19 5.2 to 5.65 mbgl
W-BH20 1.2 to 1.65 mbgl
W-BH20 7.2 to 7.65 mbgl
W-BH21 1.2 to 1.65 mbgl
W-BH21 7.5 to 7.95 mbgl
W-BH22 3 to 3.45 mbgl
W-BH23 3 to 3.45 mbgl
W-BH24 7 to 7.45 mbgl
W-BH26 3.2 to 3.65 mbgl
W-BH27 1.2 to 1.65 mbgl
W-BH28 3 to 3.45 mbgl
W-BH29 3 to 3.45 mbgl
W-BH30 1.2 to 1.65 mbgl
W-BH30 5 to 5.45 mbgl
W-BH31 4 to 4.45 mbgl
W-BH34 3 to 3.45 mbgl
W-BH35 1.2 to 1.65 mbgl
W-BH35 3 to 3.45 mbgl
W-BH36 3 to 3.45 mbgl
W-BH37 5 to 5.45 mbgl

Pressure range (kPa)	
Min. value =	30
Max. value =	150

Title:	West Site: Coefficient of secondary compression (Cα) vs Applied pressure by Sample for Tidal Flat Deposits	**Fig No.:**	D.122
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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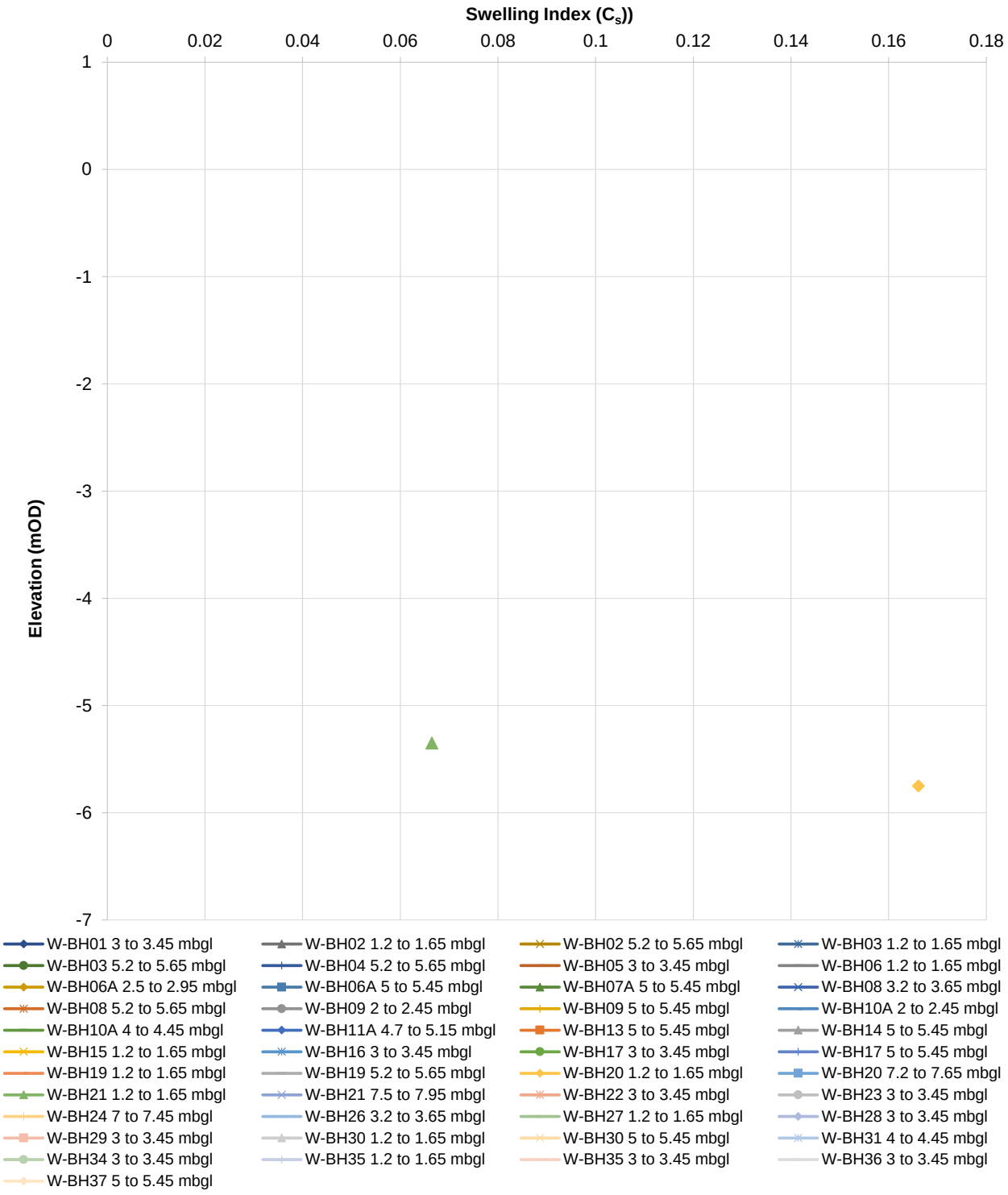

Elevation range (mOD)
1.45
-4.2

Title:	West Site: Swelling Index (Cs) vs Elevation by Sample for Tidal Flat Deposits	**Fig No.:**	D.123
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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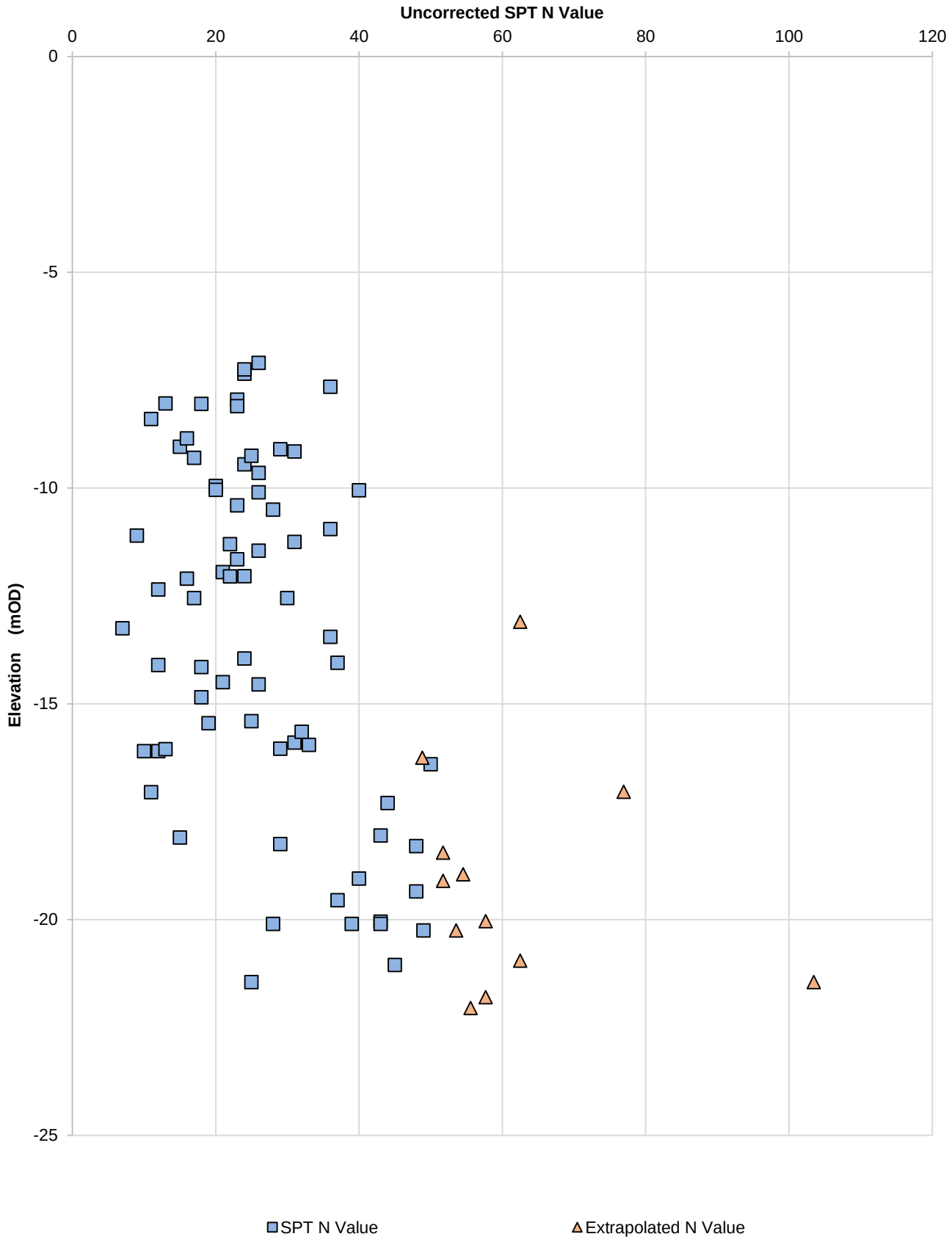

Title:	East Site Hydrogen Production: Uncorrected SPT N Value by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.124
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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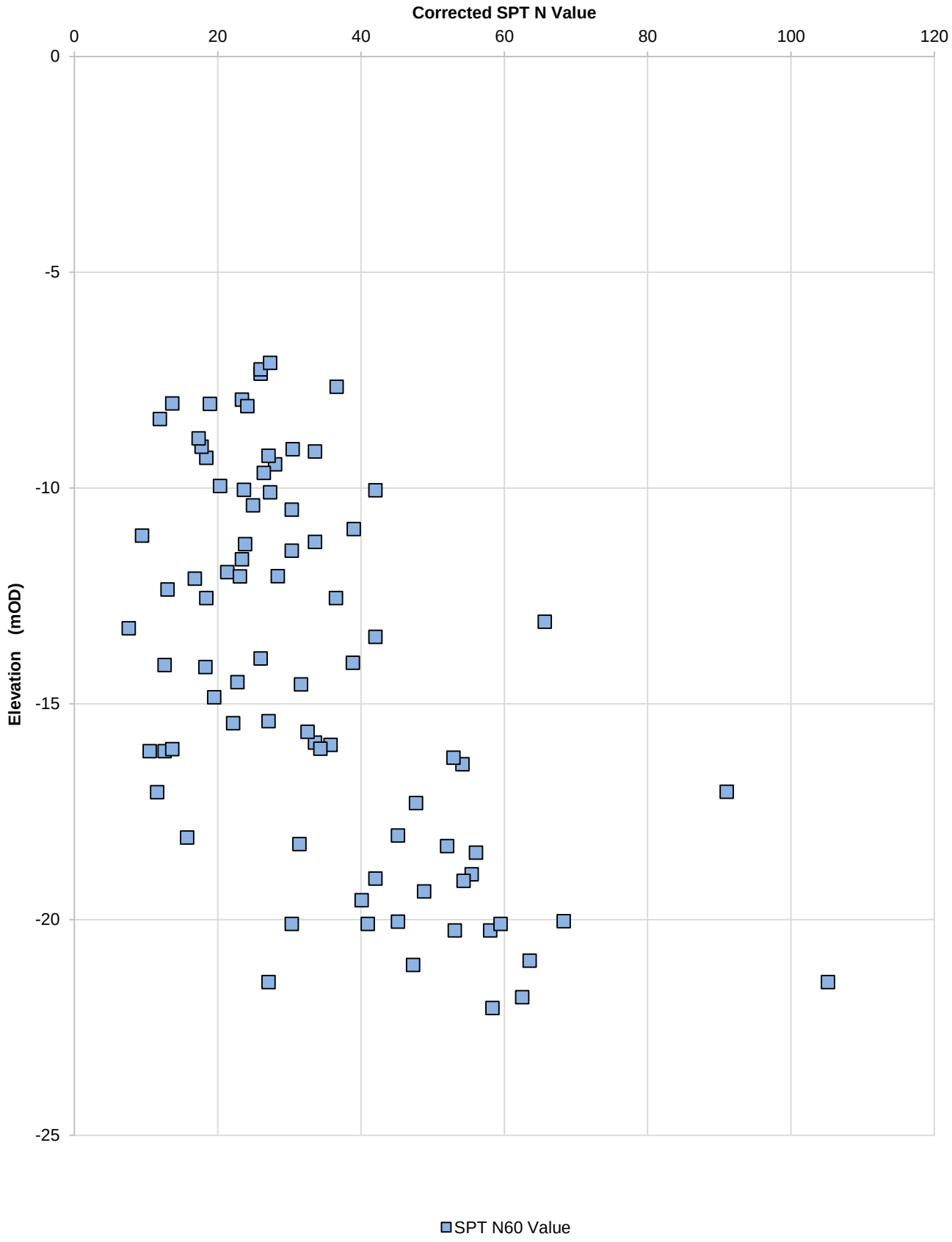

Title:	East Site Hydrogen Production: Corrected SPT N Value by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.125
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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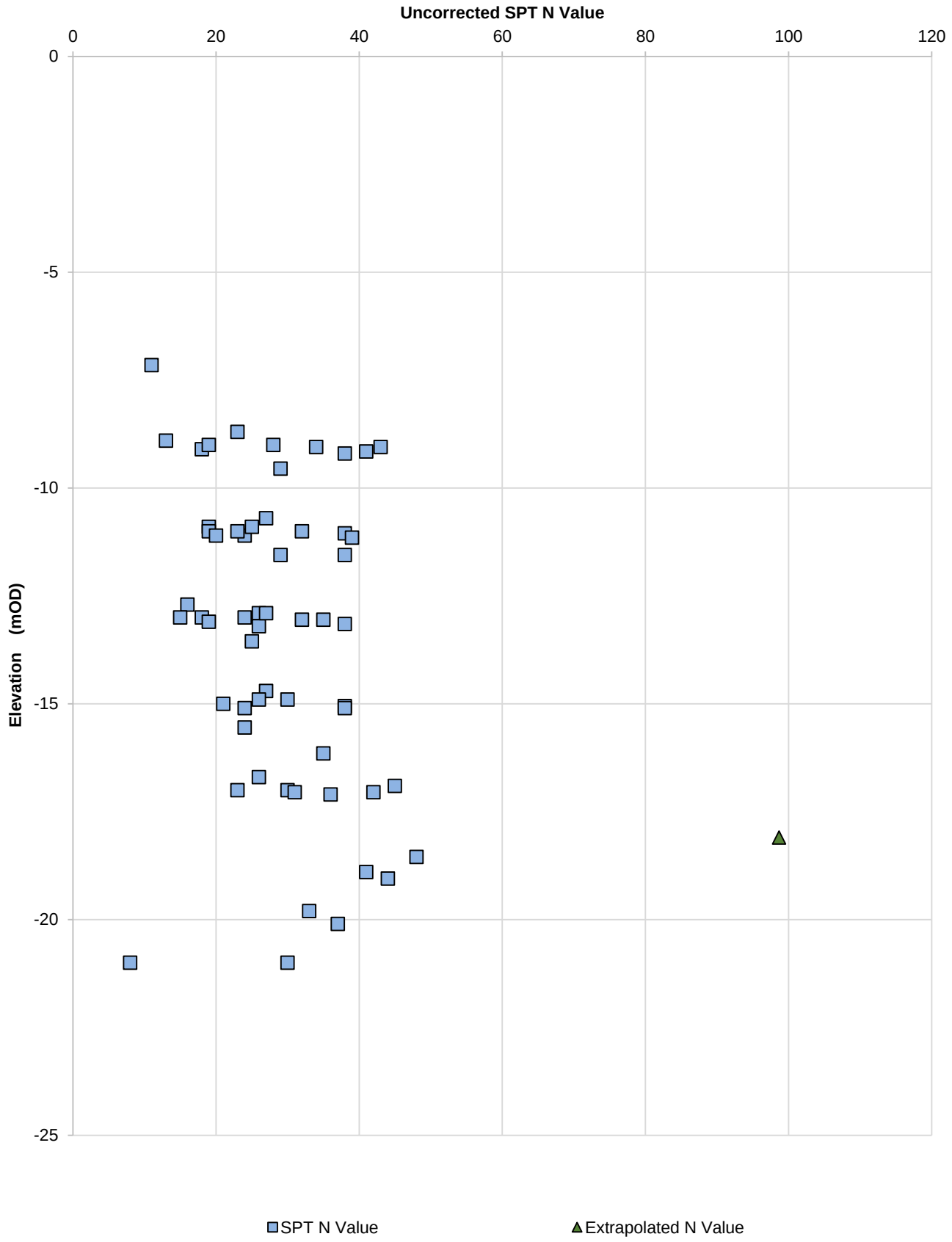

Title:	East Site Ammonia Storage: Uncorrected SPT N Value by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.126
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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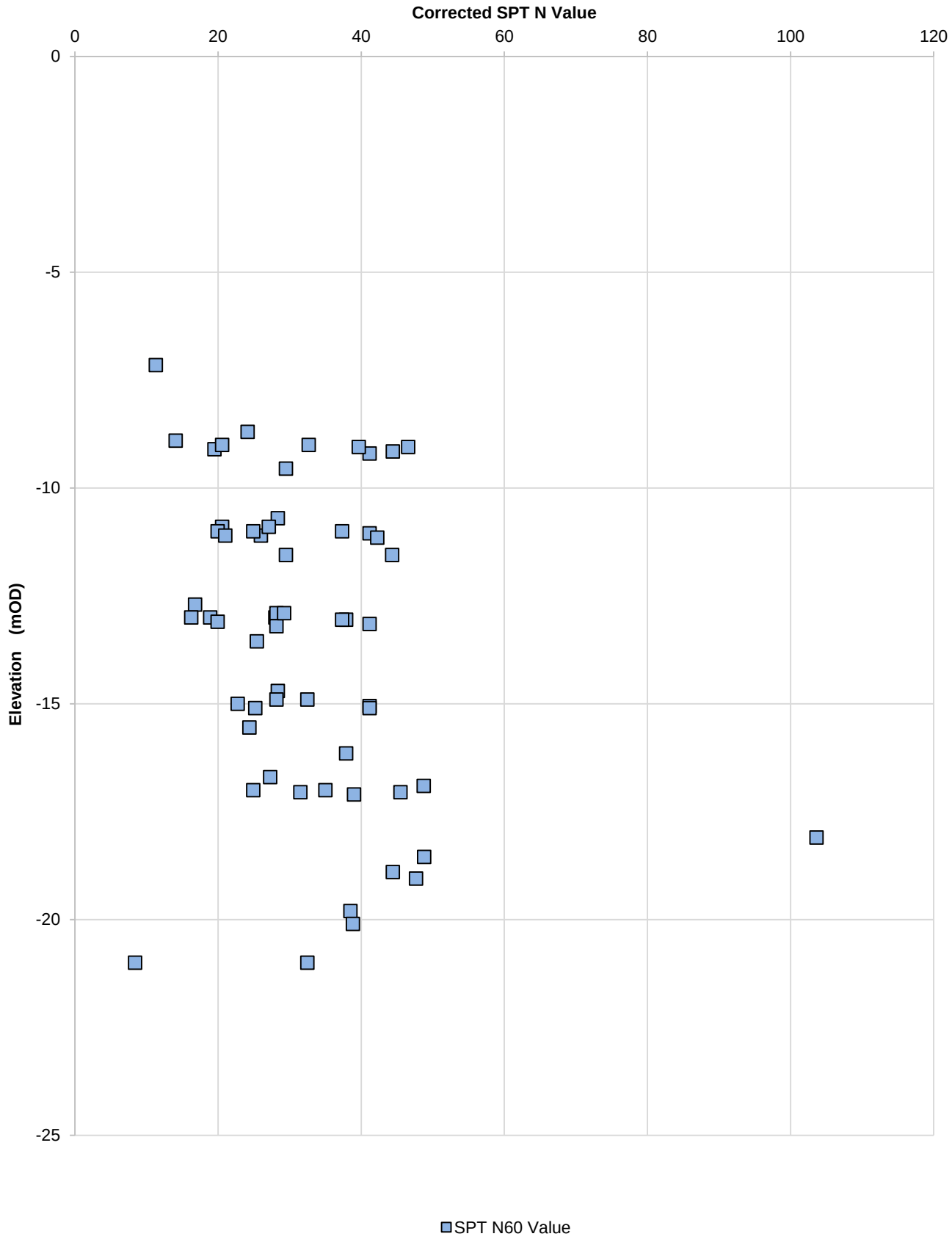

Title:	East Site Ammonia Storage: Corrected SPT N Value by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.127
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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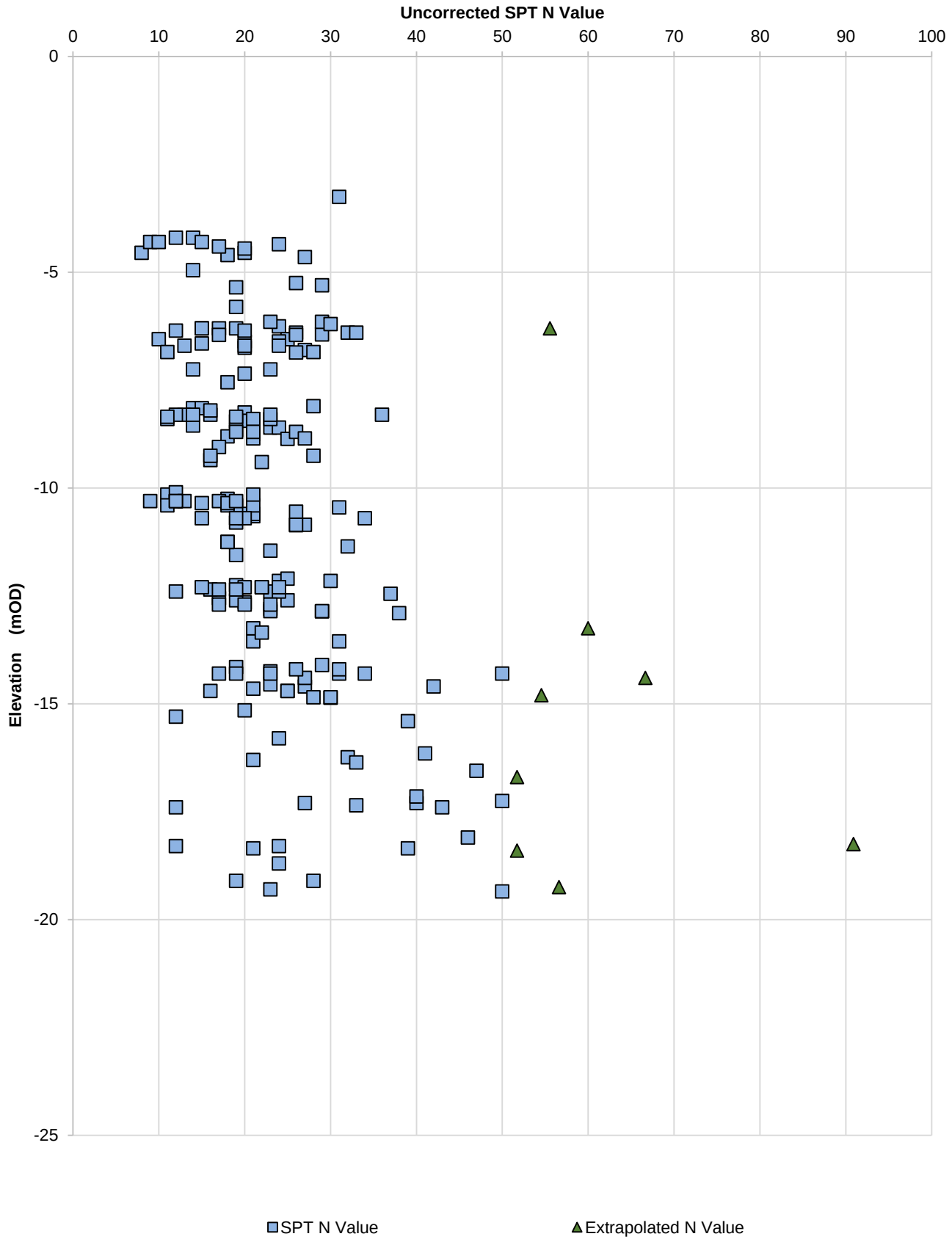

Title:	West Site: Uncorrected SPT N Value by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.128
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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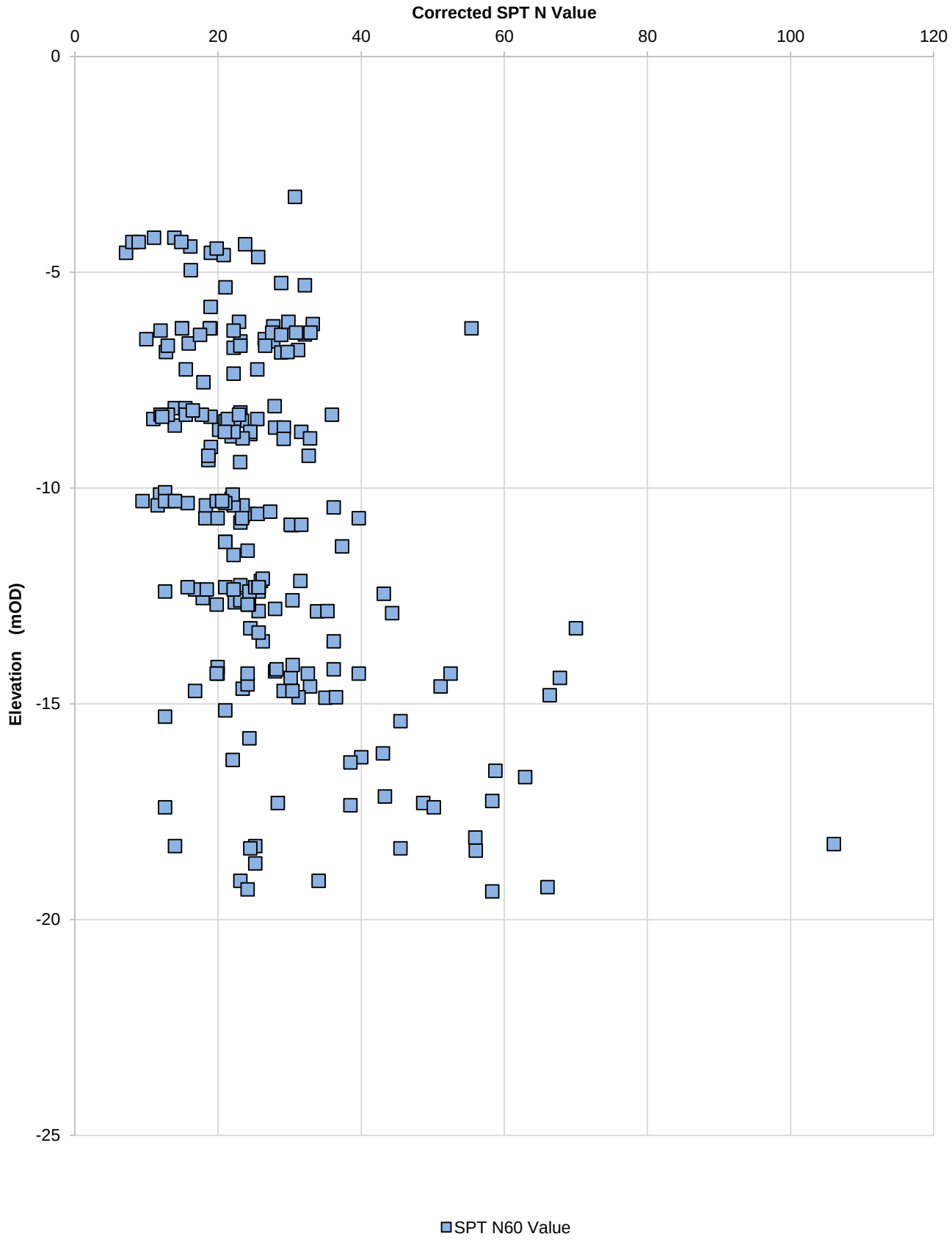
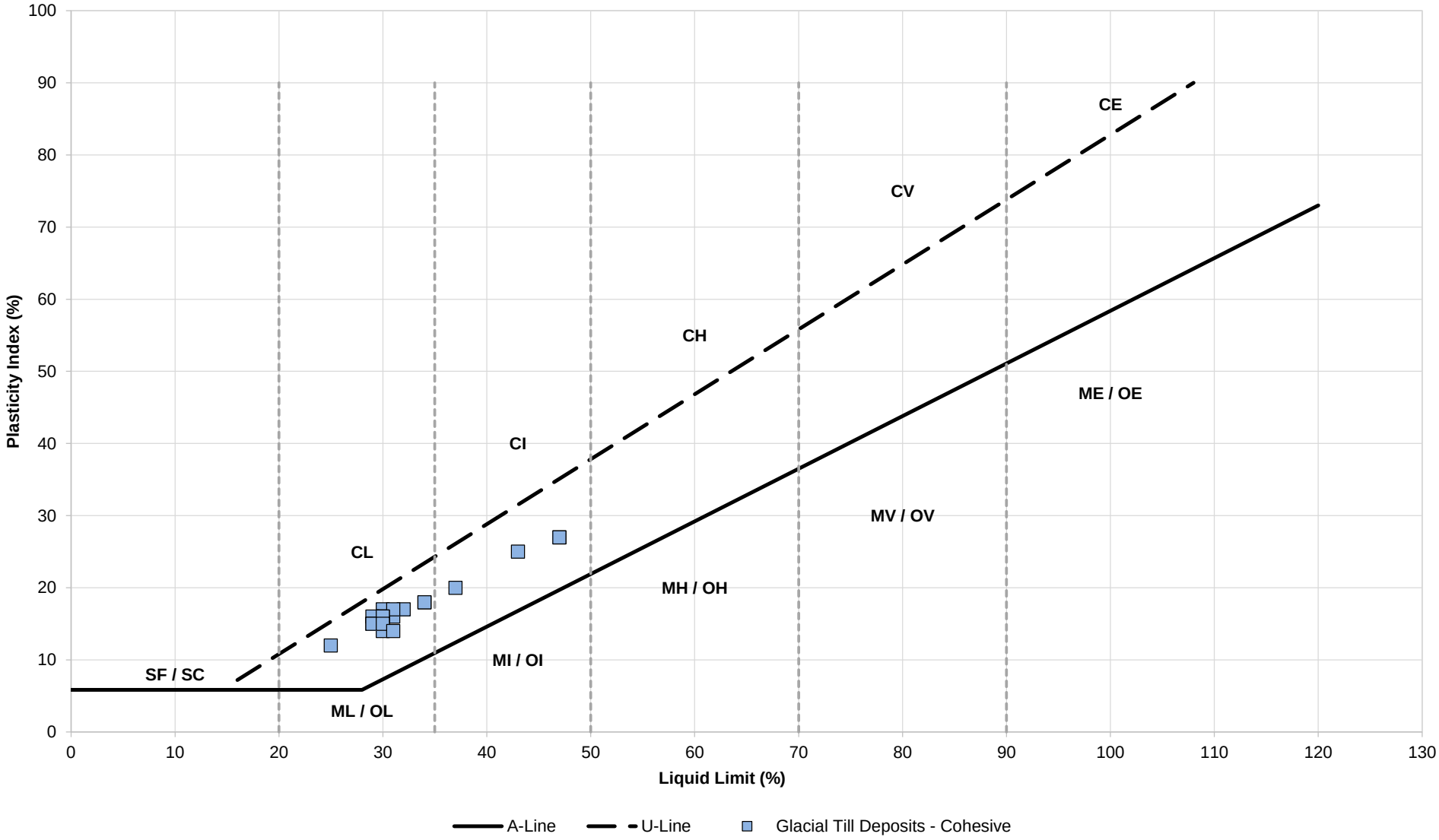


Title:	West Site: Corrected SPT N Value by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.129
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

AECOM

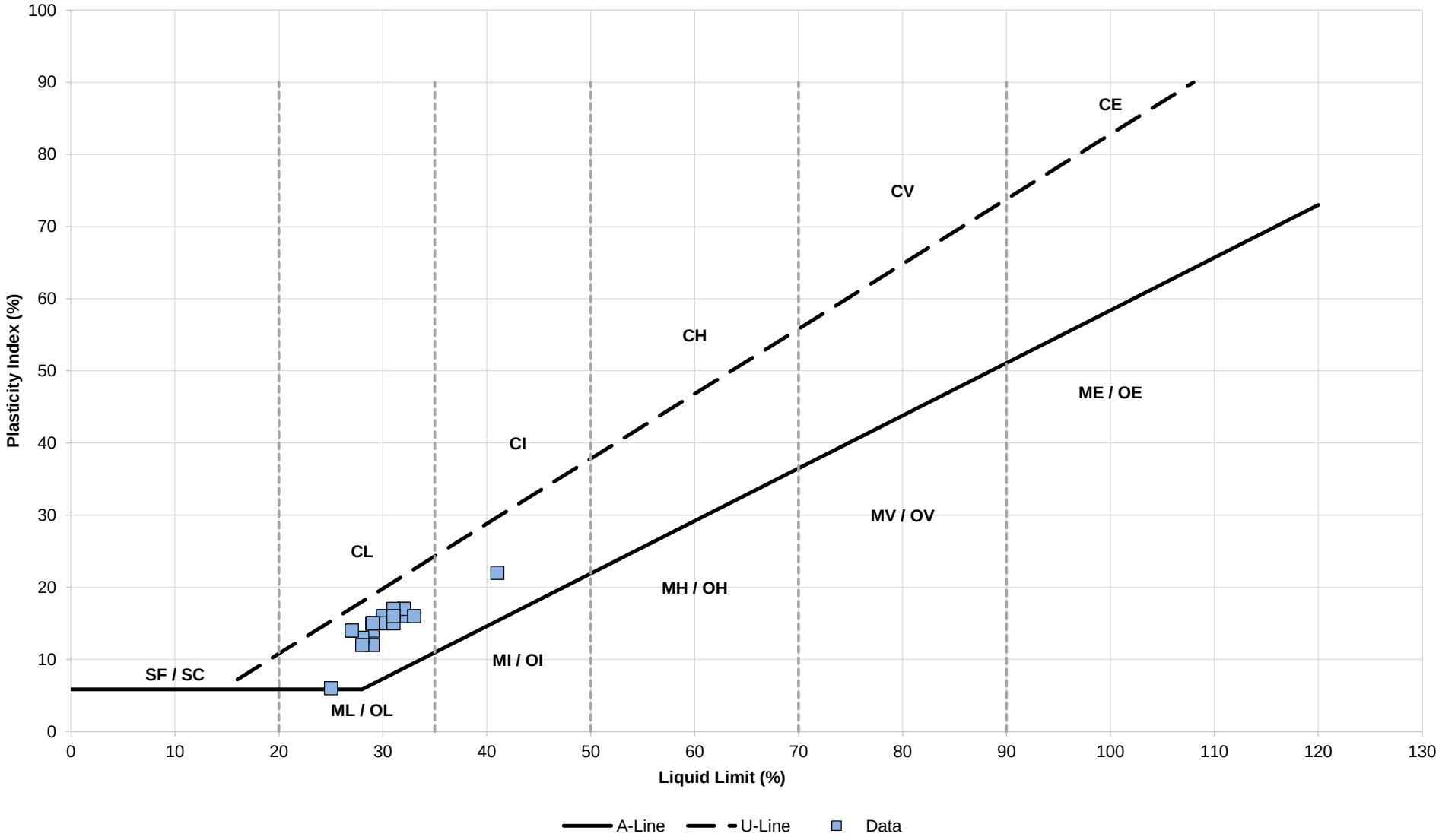
Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



Title:	East Site - Hydrogen Production - Plasticity chart - Cohesive Glacial Till Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.130	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

AECOM

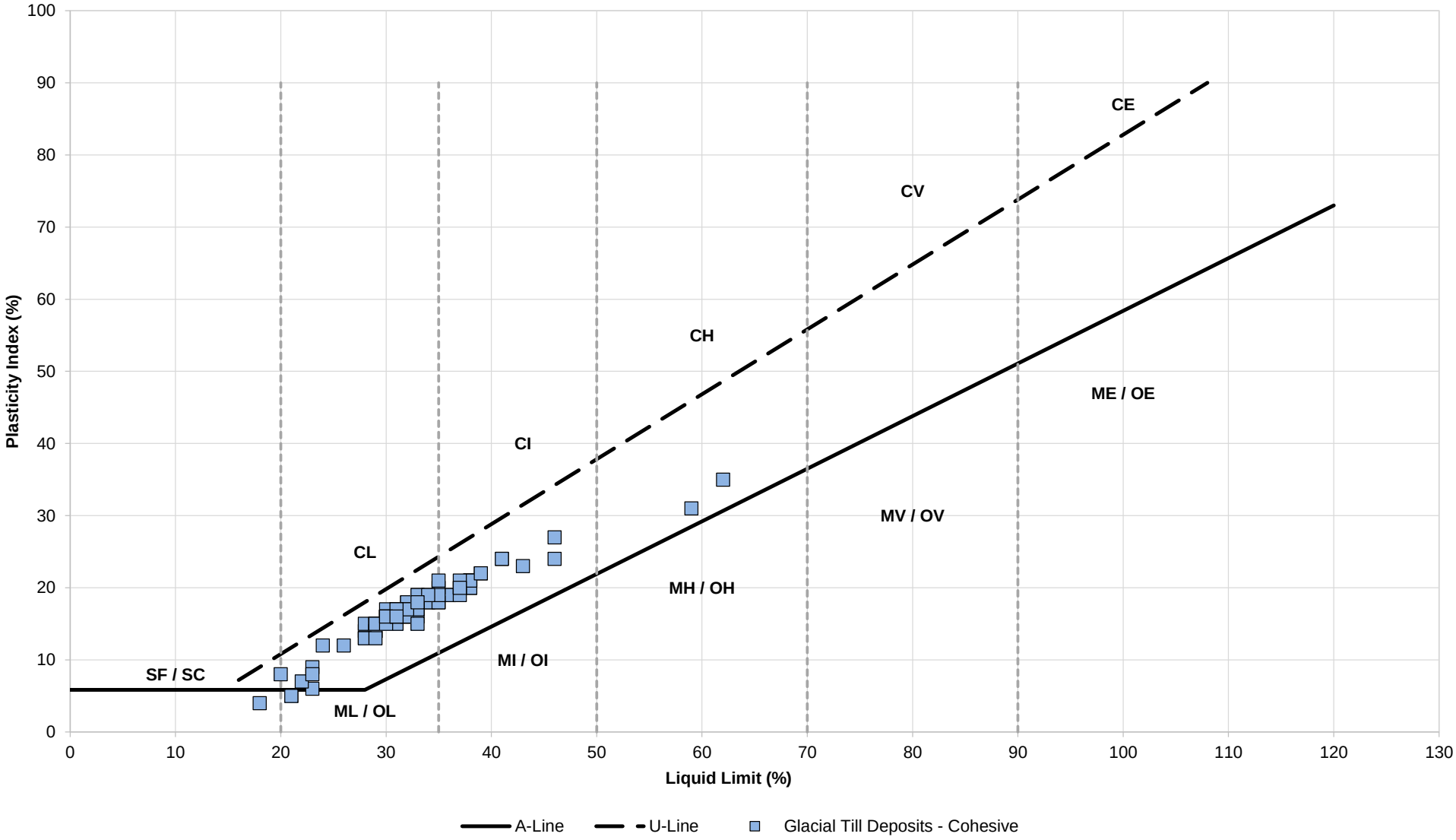
Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



Title:	East Site - Ammonia Storage - Plasticity chart - Cohesive Glacial Till Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.131	**Author:**	CC	**Date:**	June-23	**Location:**	Immingham
Revision:	P01	**Checker:**	DW	**Date:**	June-23	**Client:**	Air Products

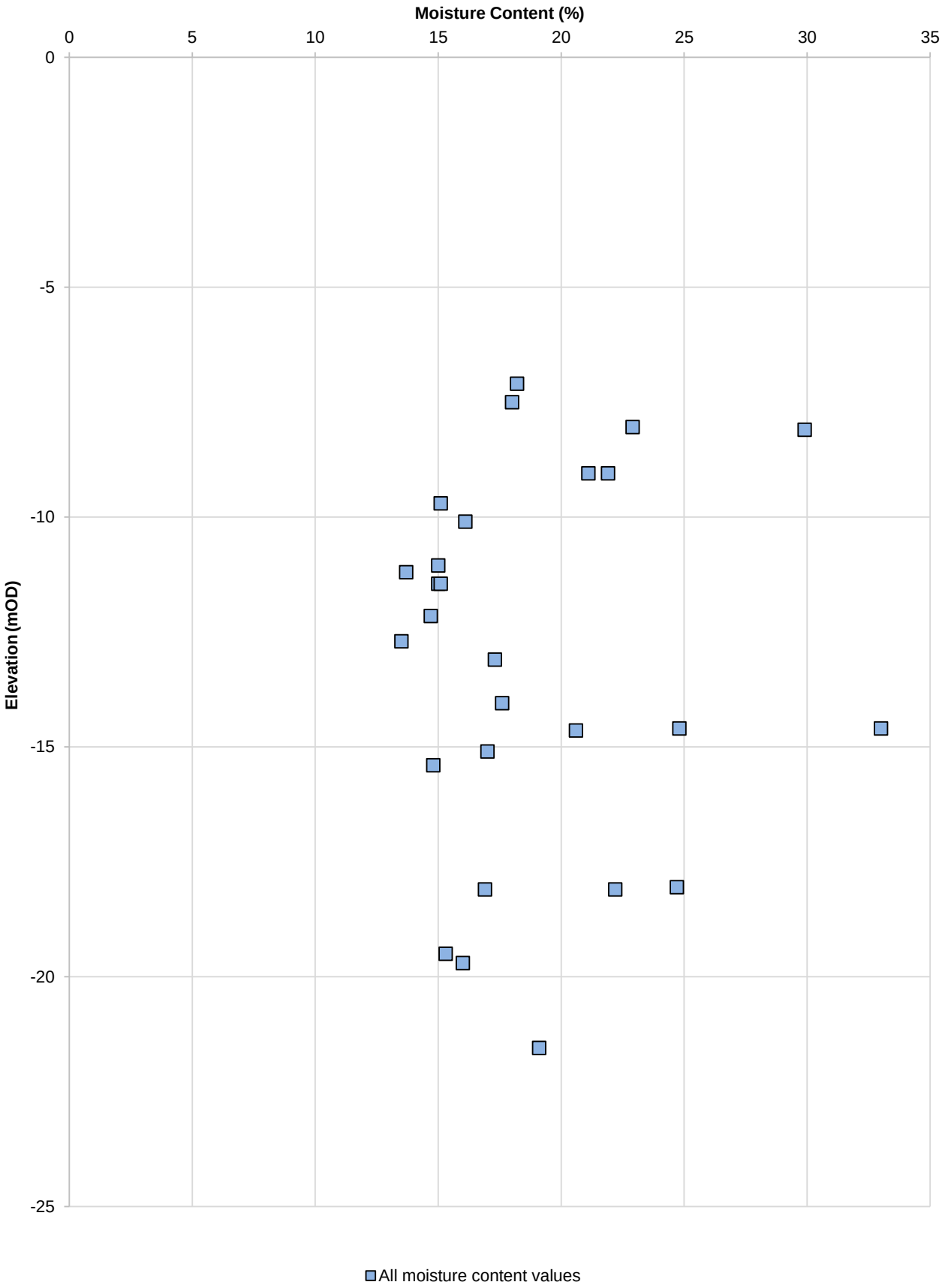
AECOM

Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



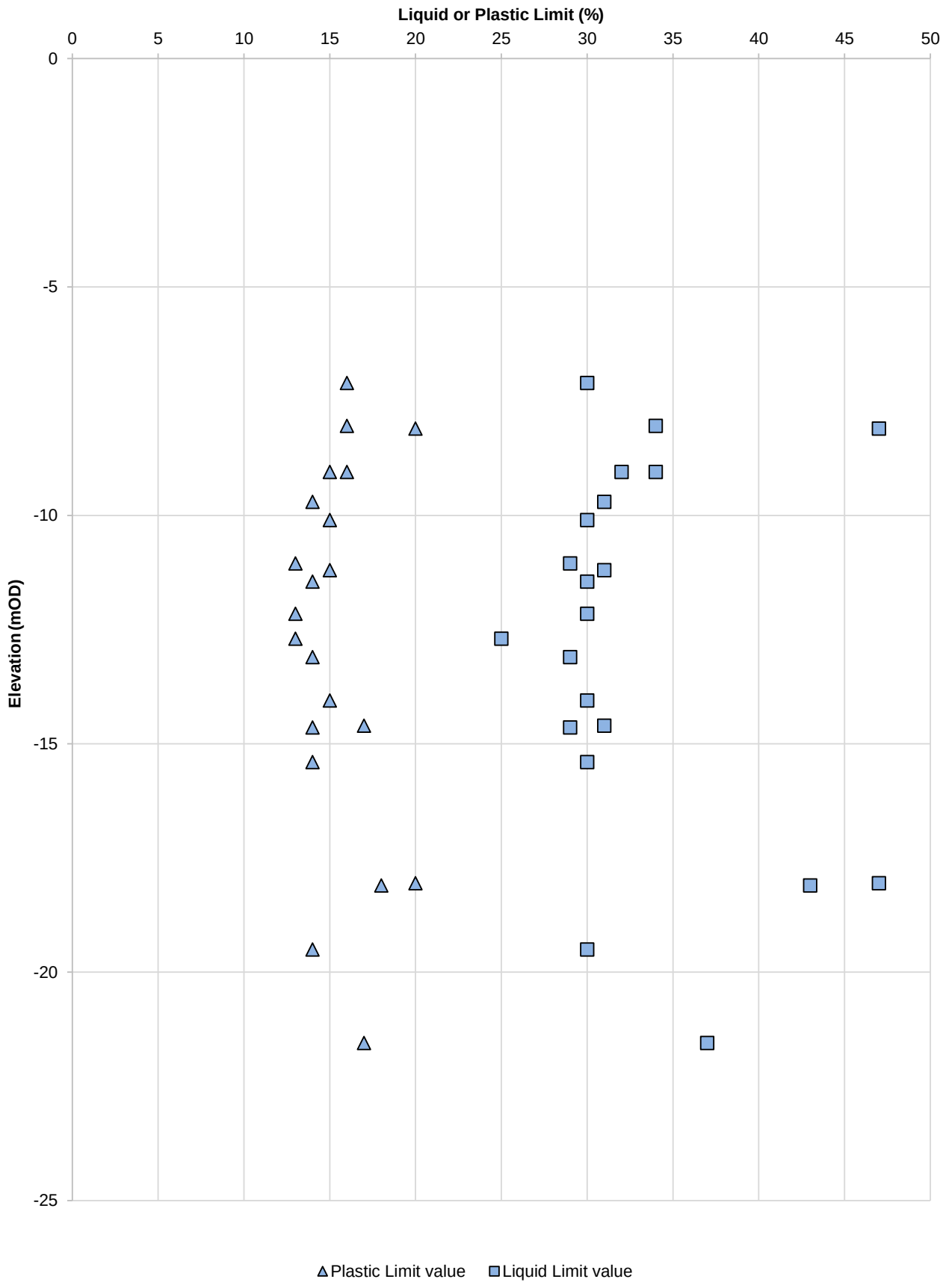
Title:	West Site - Plasticity chart - Cohesive Glacial Till Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.132	**Author:**	CC	**Date:**	June-23	**Location:**	Immingham
Revision:	P01	**Checker:**	DW	**Date:**	June-23	**Client:**	Air Products

AECOM



Title:	East Site - Hydrogen Production: Moisture content by Elevation for Cohesive Glacial Till Deposits	**Fig No.:**	D.133
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



Title:	East Site - Hydrogen Production: Liquid Limit and Plastic Limit by Elevation for Cohesive Glacial Till Deposits	**Fig No.:**	D.134
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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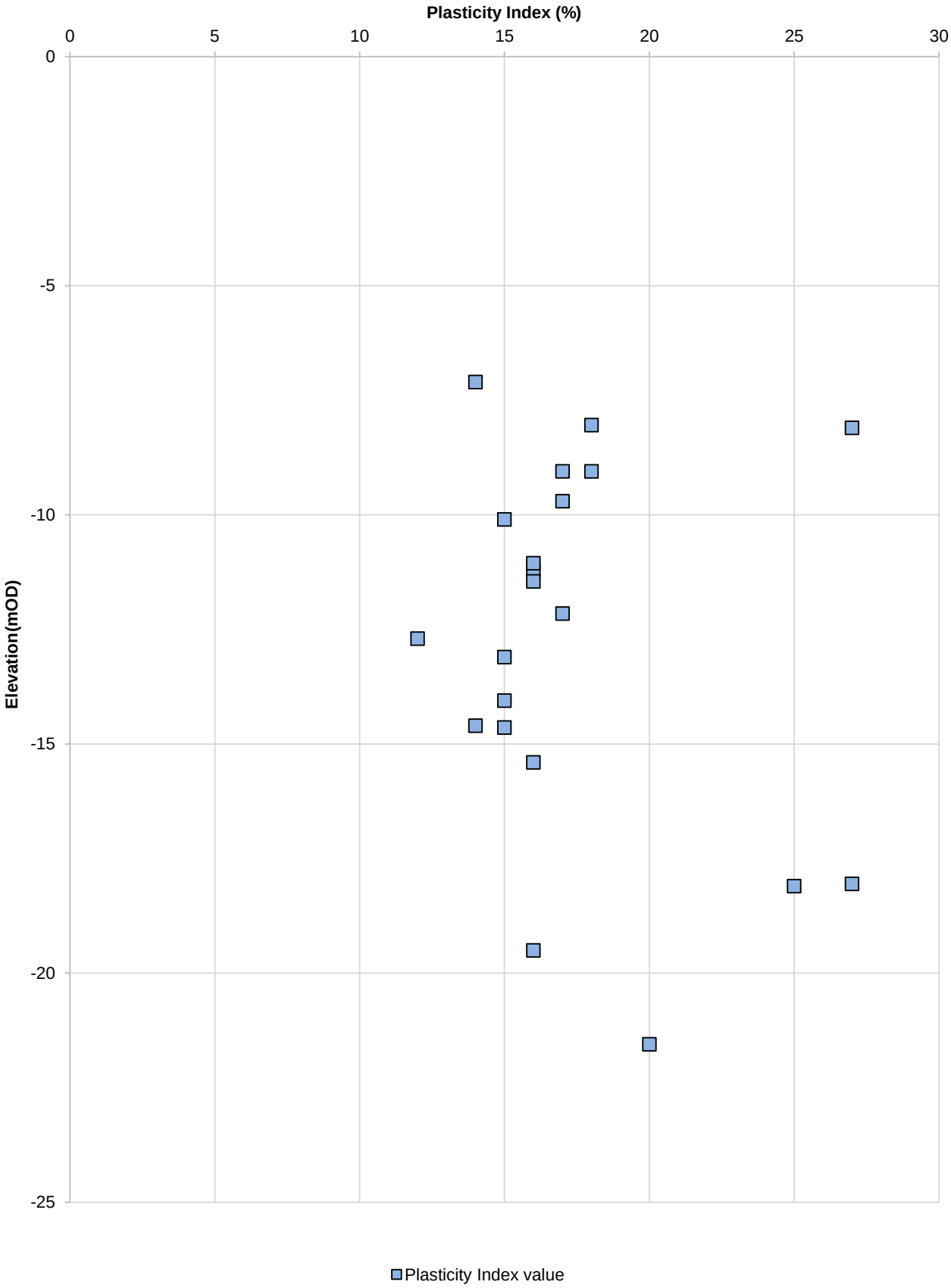

Title:	East Site - Hydrogen Production: Plasticity Index by Elevation for Cohesive Glacial Till Deposits	**Fig No.:**	D.135
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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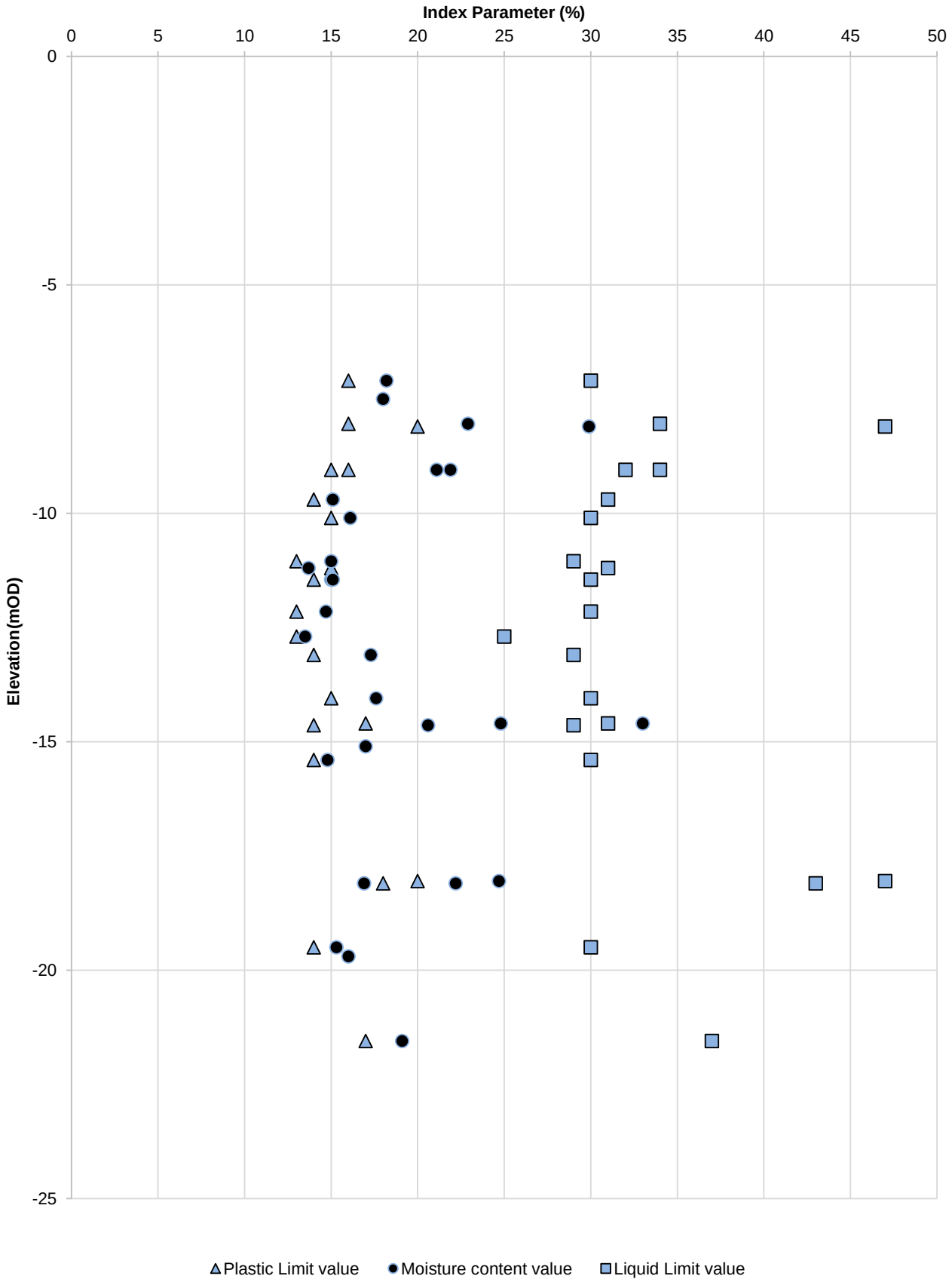
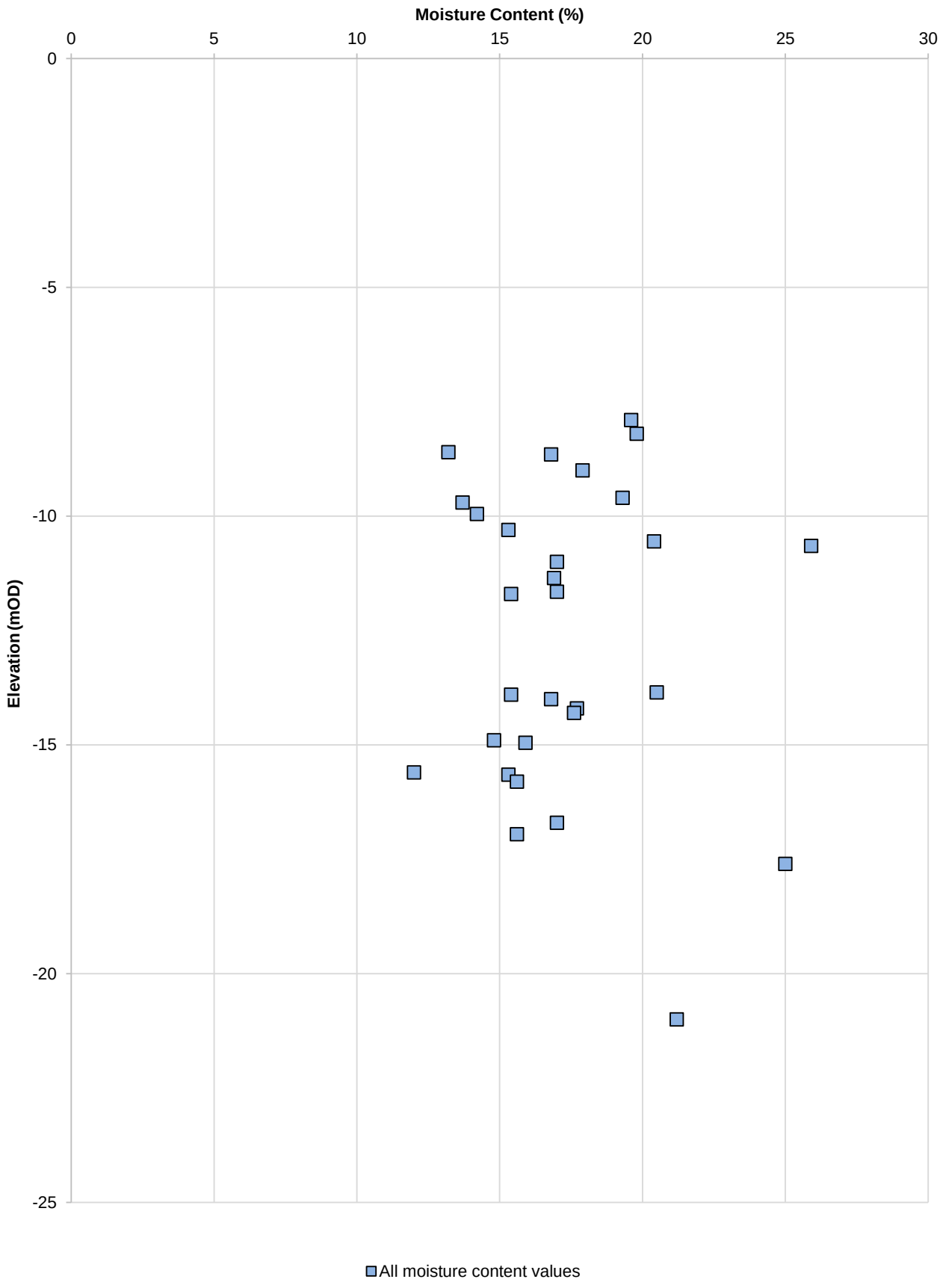


Title:	East Site - Hydrogen Production: Moisture content & Atterberg Limits by Elevation - Cohesive Glacial Till Deposits	**Fig No.:**	D.136
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



Title:	East Site Ammonia Storage - Moisture content by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.137
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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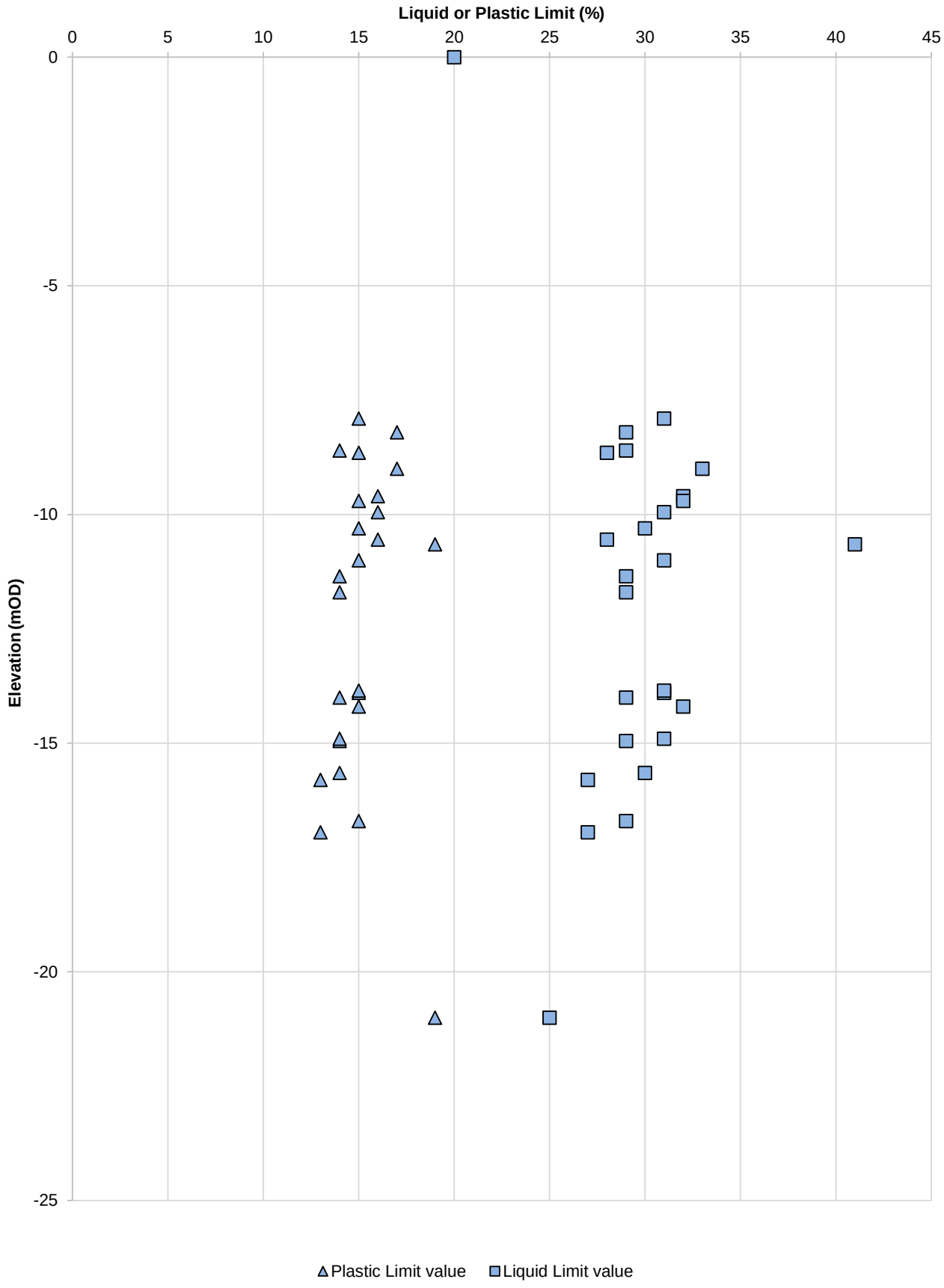

Title:	East Site Ammonia Storage - Liquid Limit and Plastic Limit by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.138
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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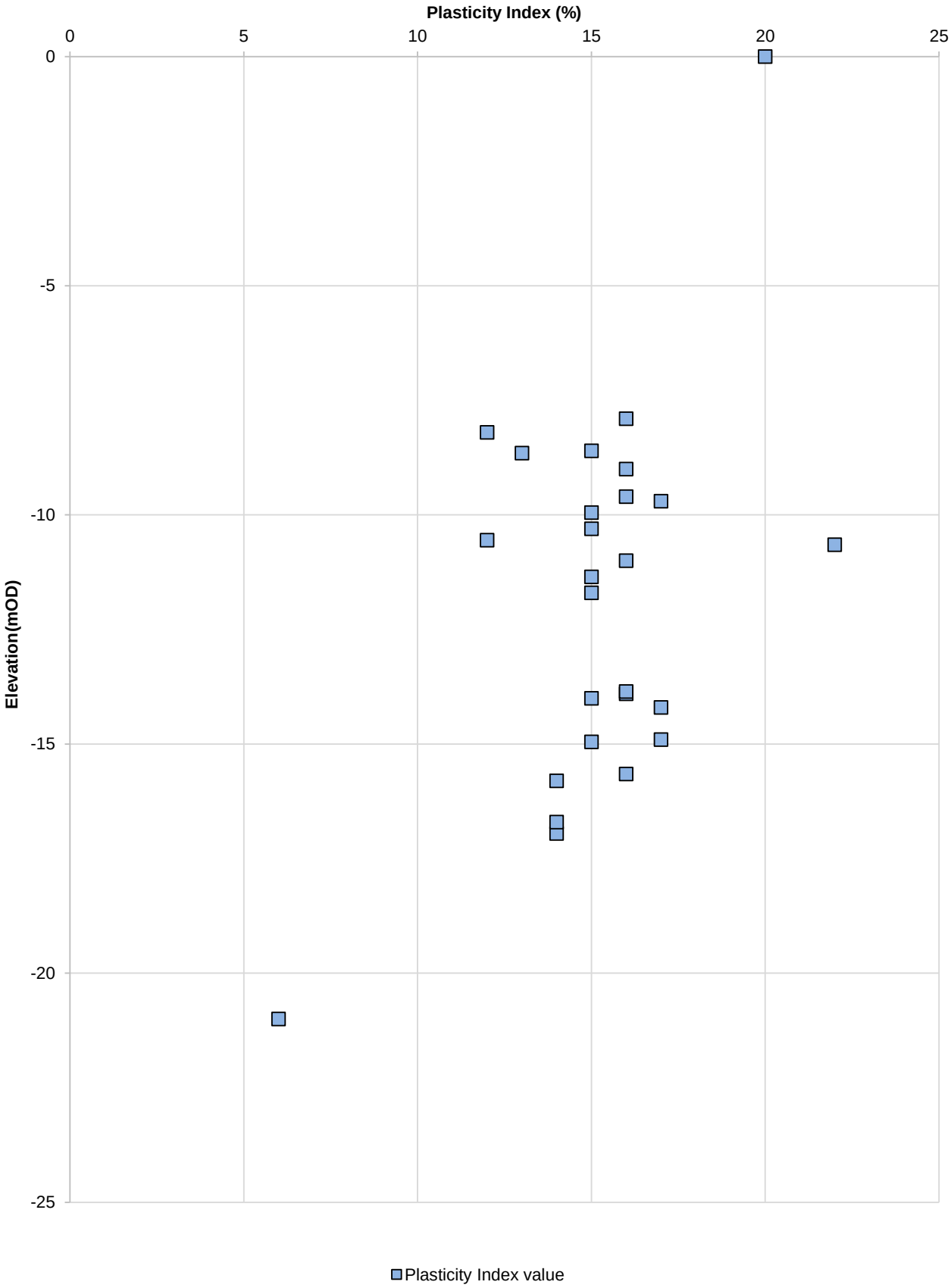
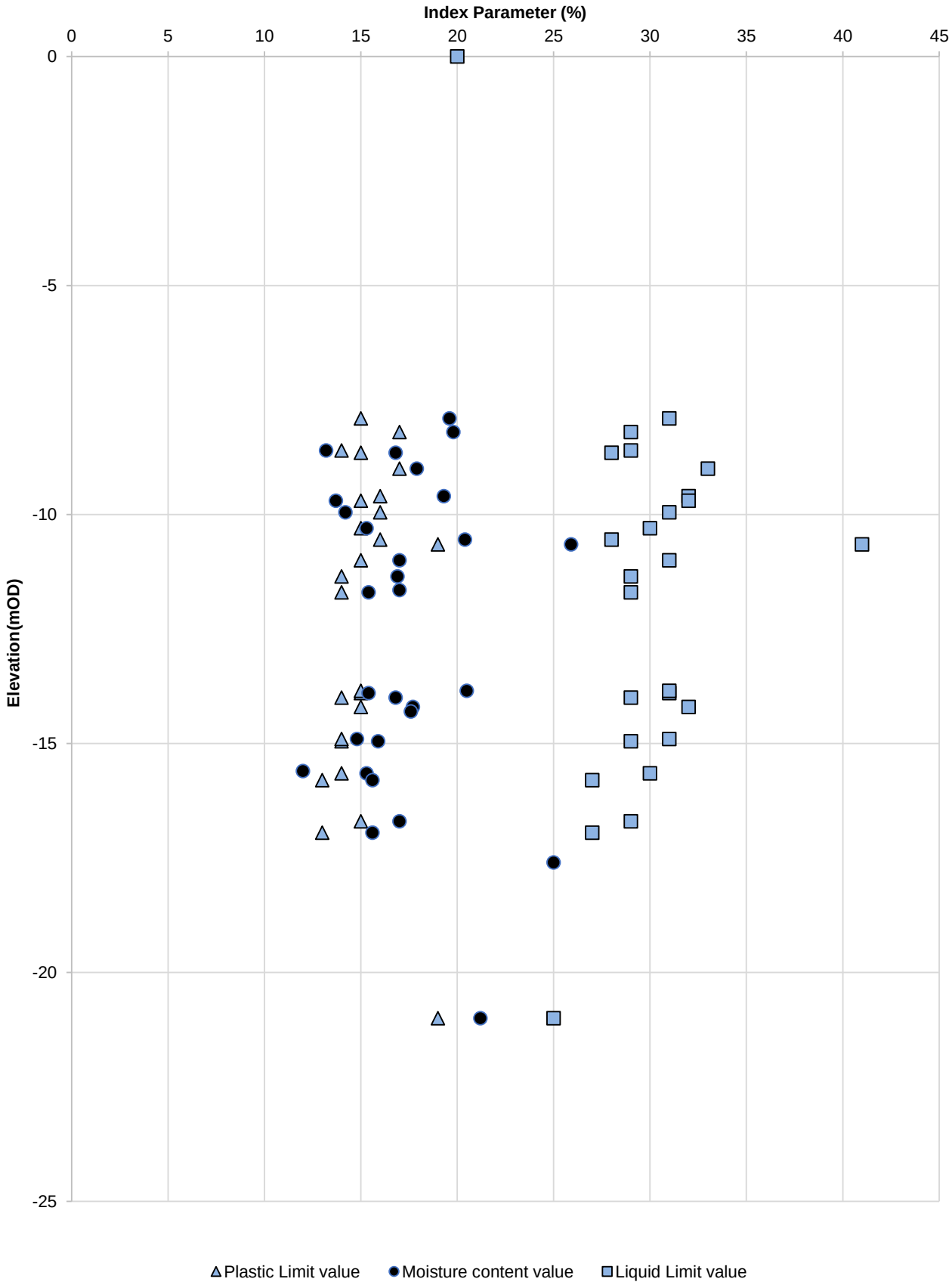


Title:	East Site Ammonia Storage - Plasticity Index by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.139
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



Title:	East Site Ammonia Storage - Moisture content & Atterberg Limits by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.140
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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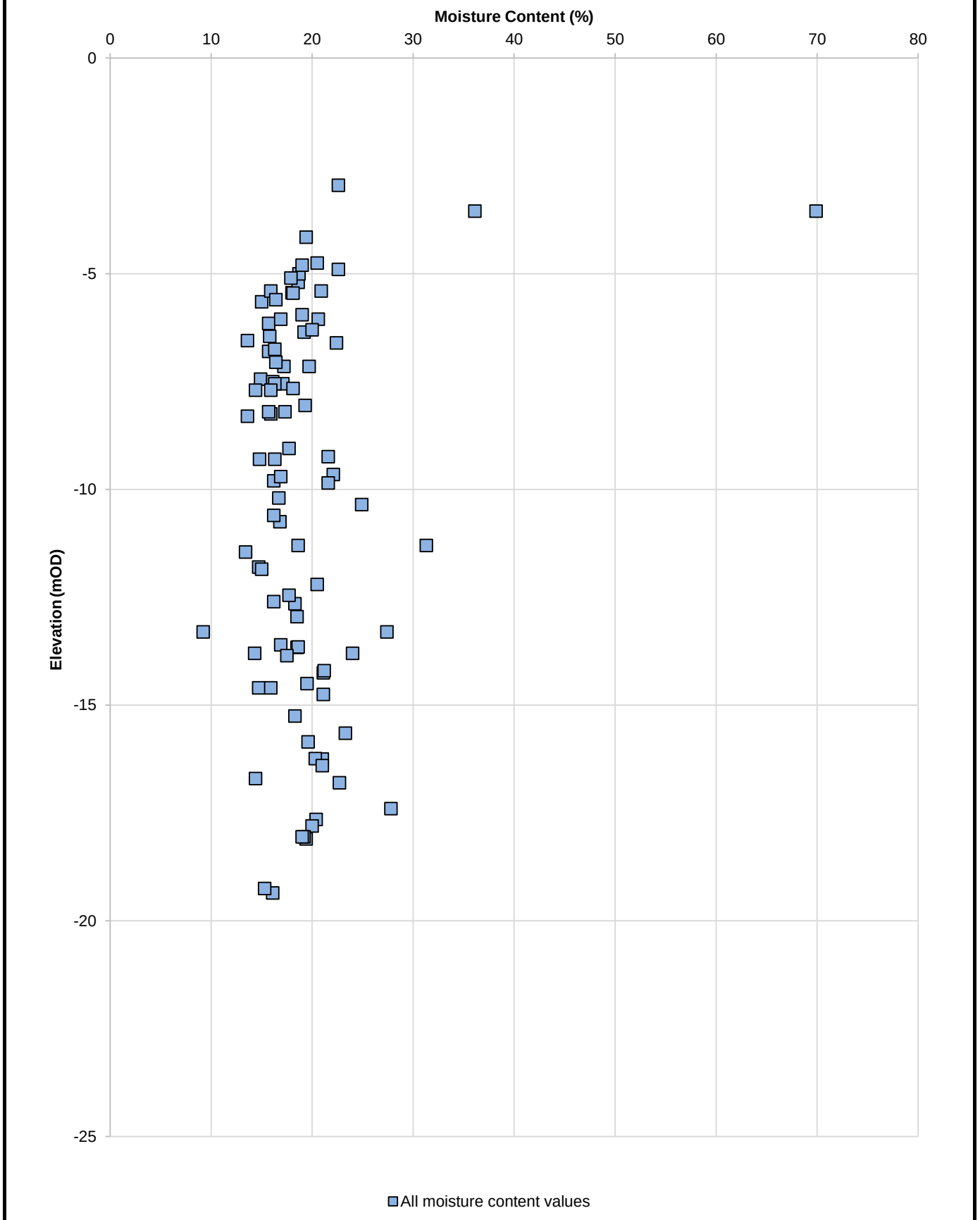

Title:	West Site - Moisture content by Elevation for Cohesive Glacial Till Deposits	**Fig No.:**	D.141
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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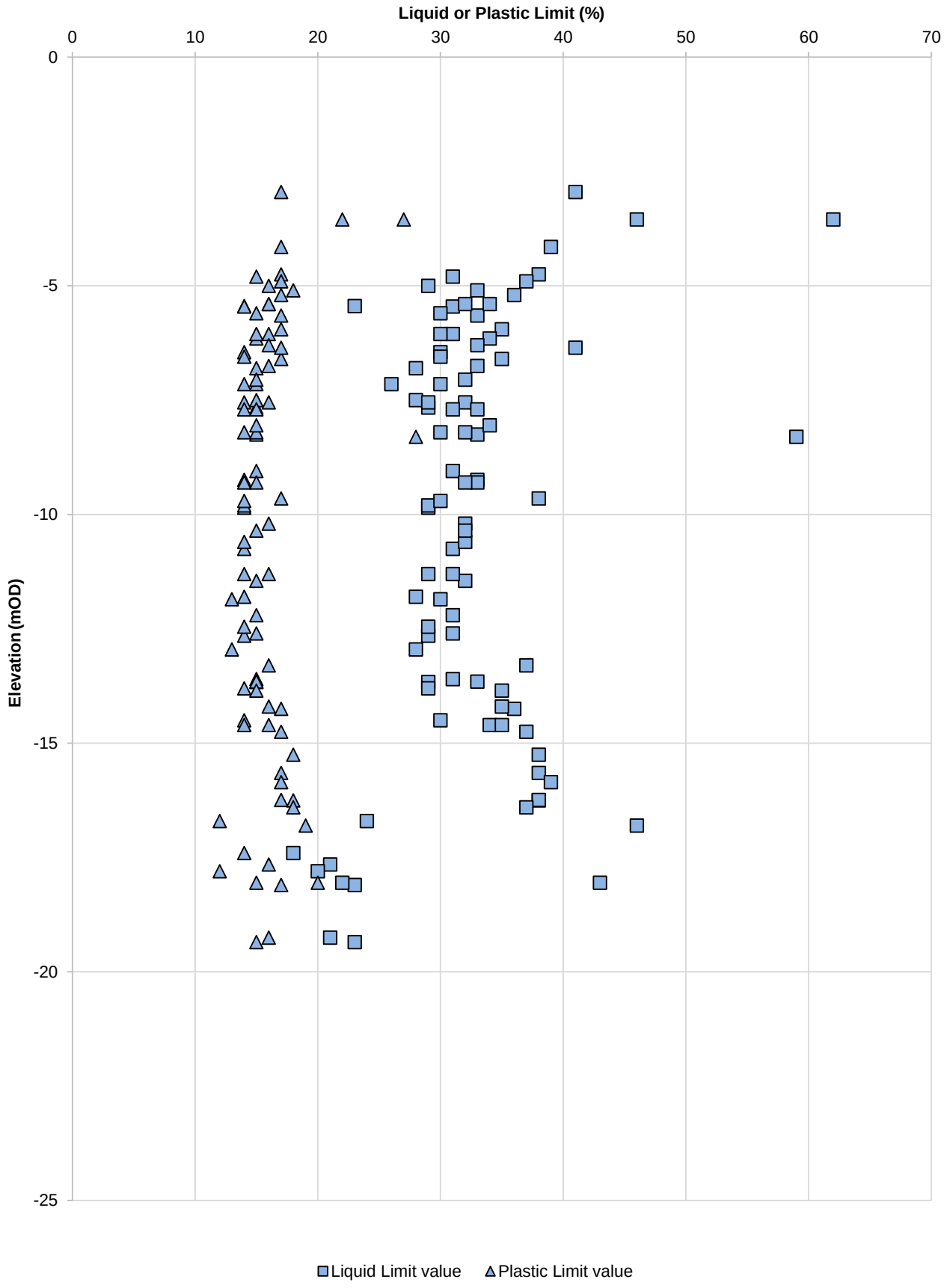

Title:	West Site - Liquid Limit and Plastic Limit by Elevation for Cohesive Glacial Till Deposits	**Fig No.:**	D.142
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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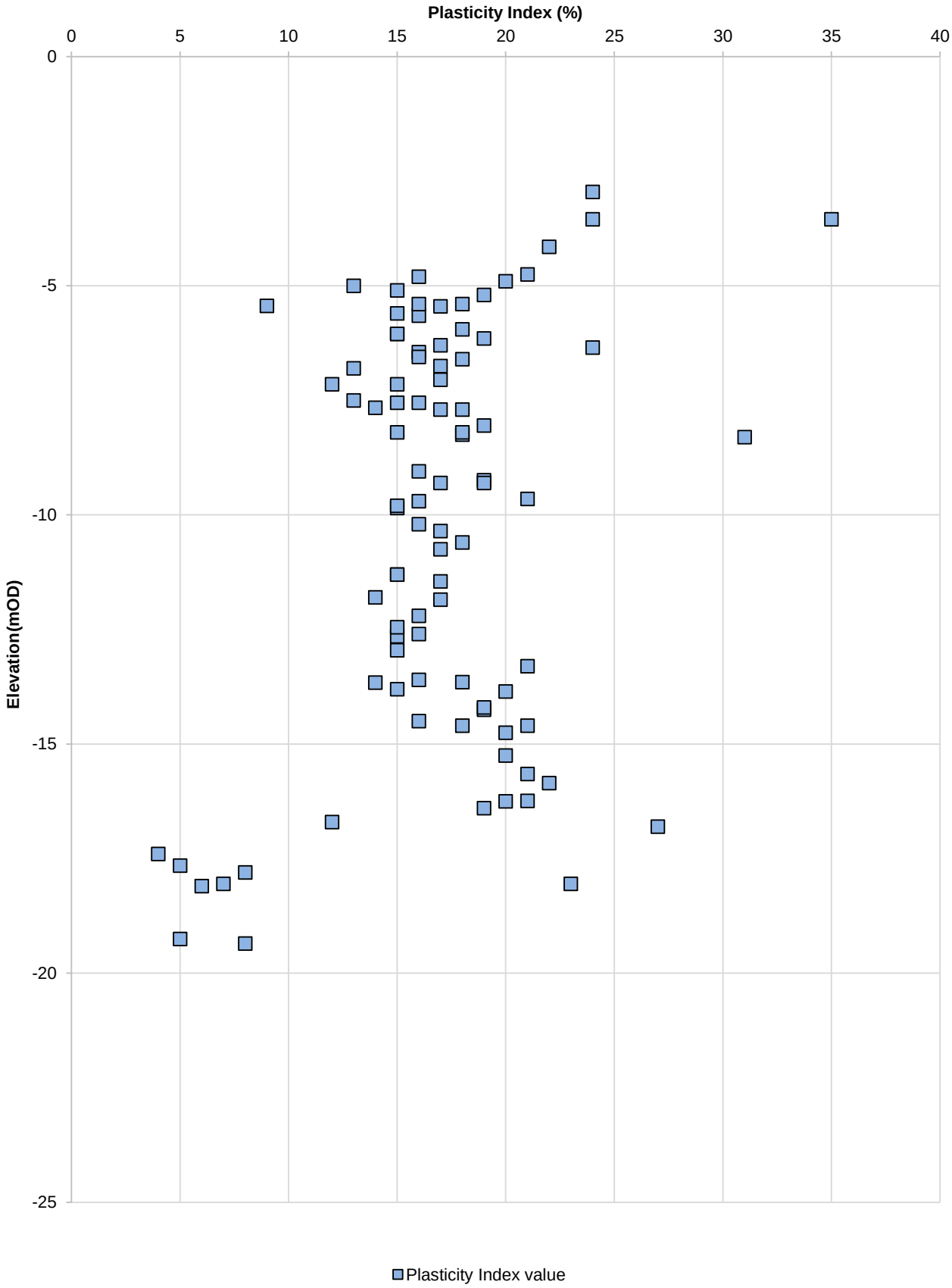

Title:	West Site - Plasticity Index by Elevation for Cohesive Glacial Till Deposits	**Fig No.:**	D.143
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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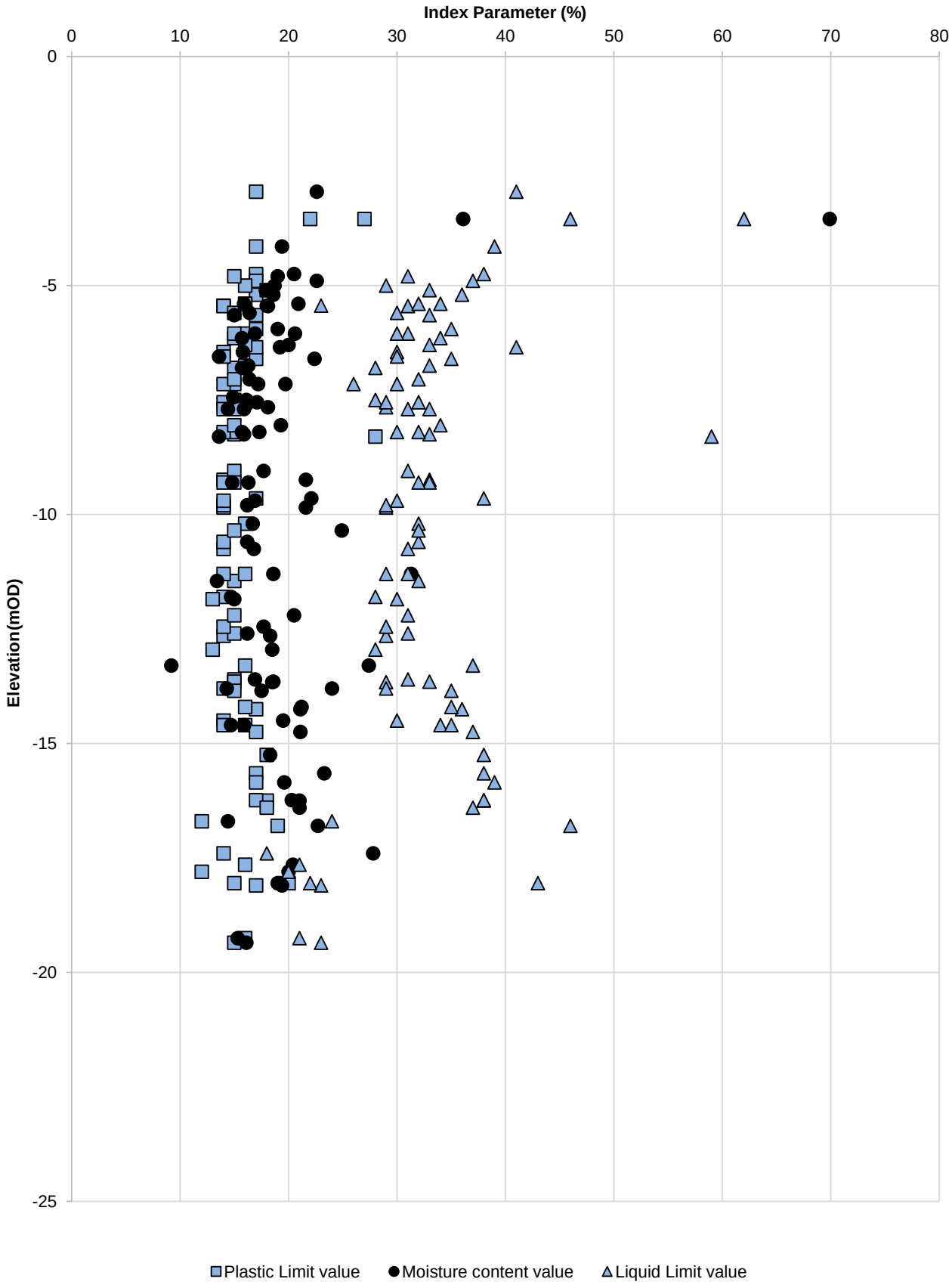

Title:	West Site - Moisture content & Atterberg Limits by Elevation - Cohesive Glacial Till Deposits	**Fig No.:**	D.144
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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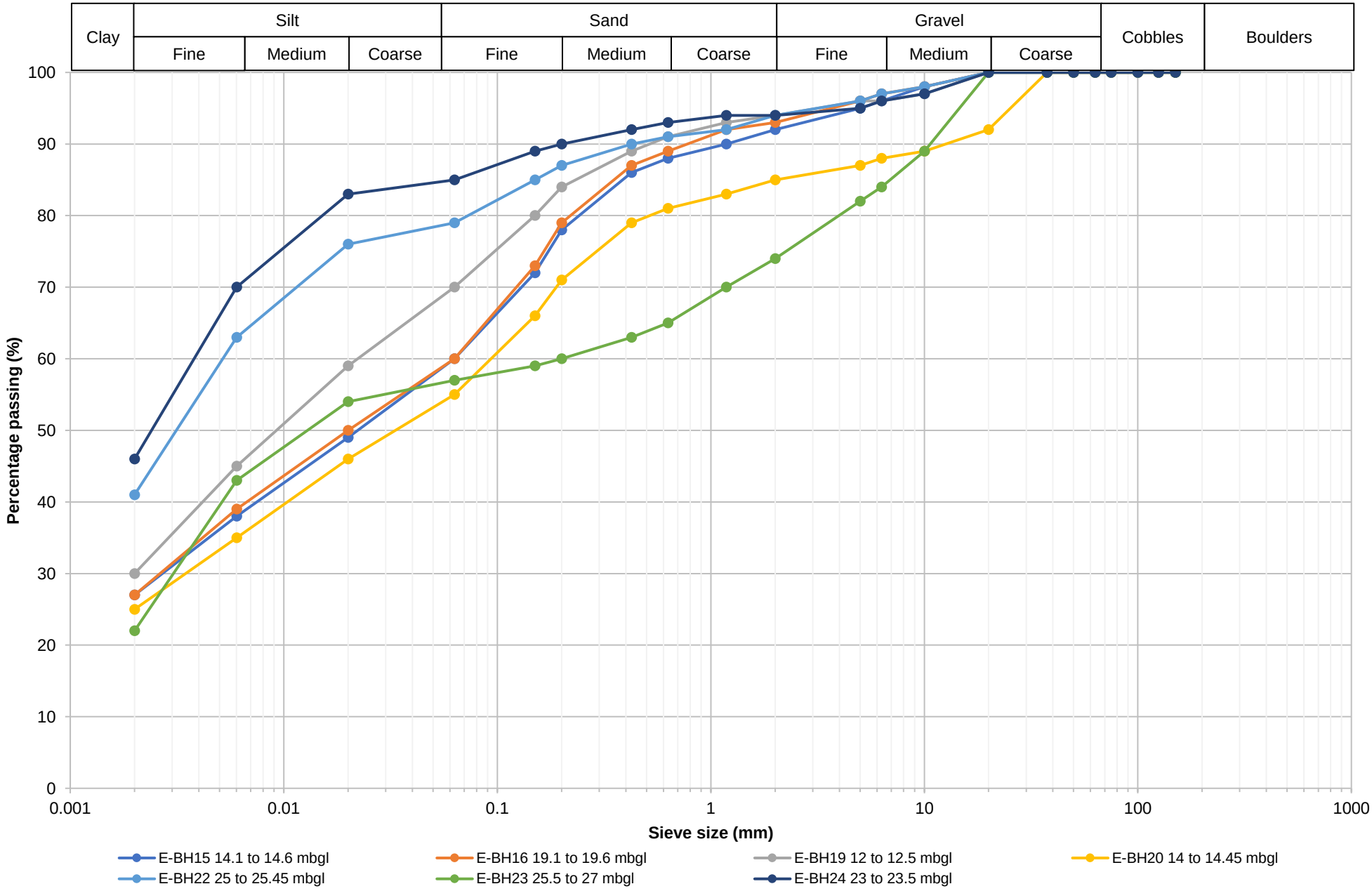

Title:	East Site Hydrogen Production: Plot of Particle size distribution (PSD) by Sample for Glacial Till Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.145	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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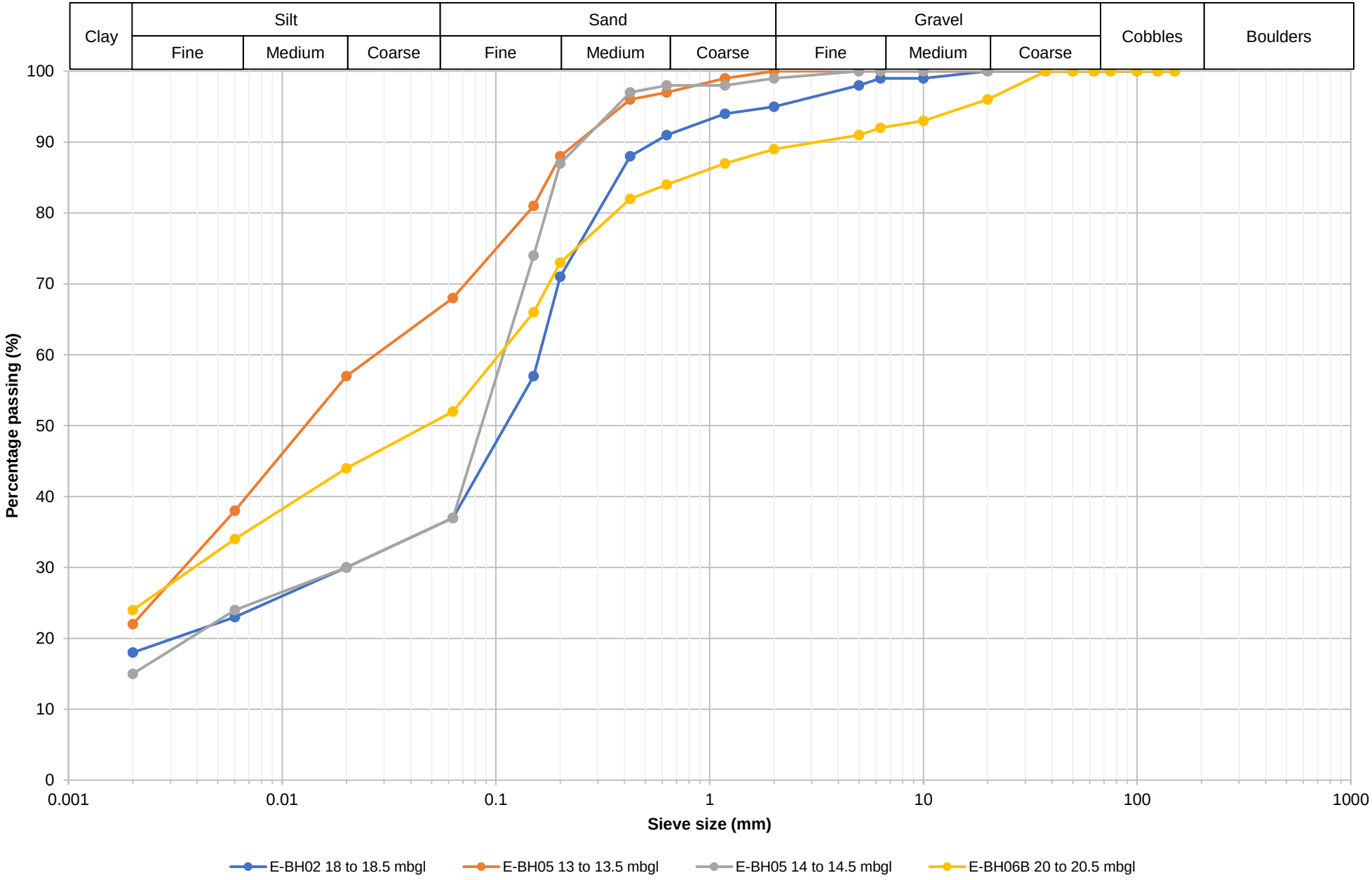

Title:	East Site Ammonia Storage: Plot of Particle size distribution (PSD) by Sample for Glacial Till Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.146	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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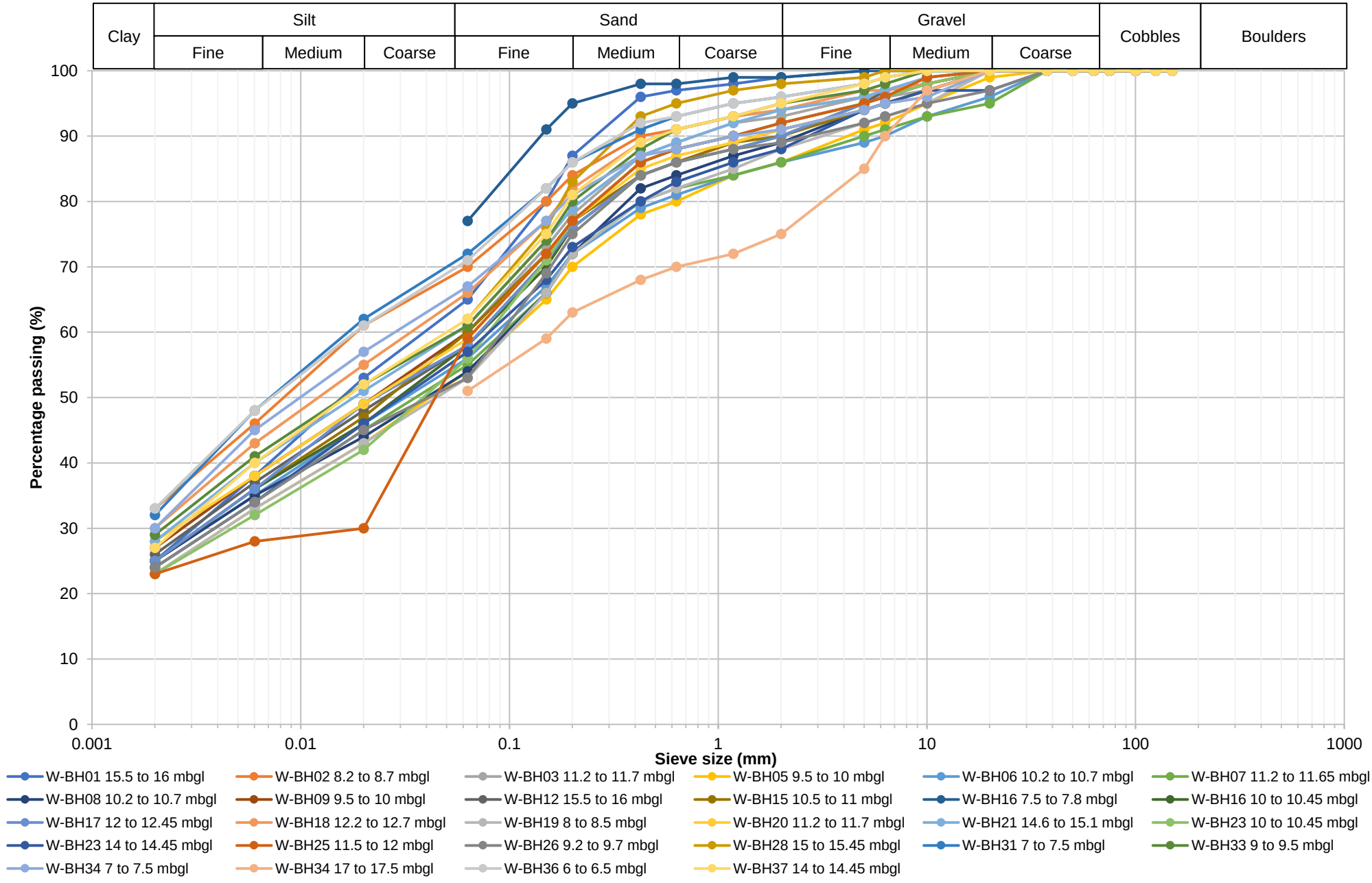

Title:	West Site: Plot of Particle size distribution (PSD) by Sample for Glacial Till Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.147	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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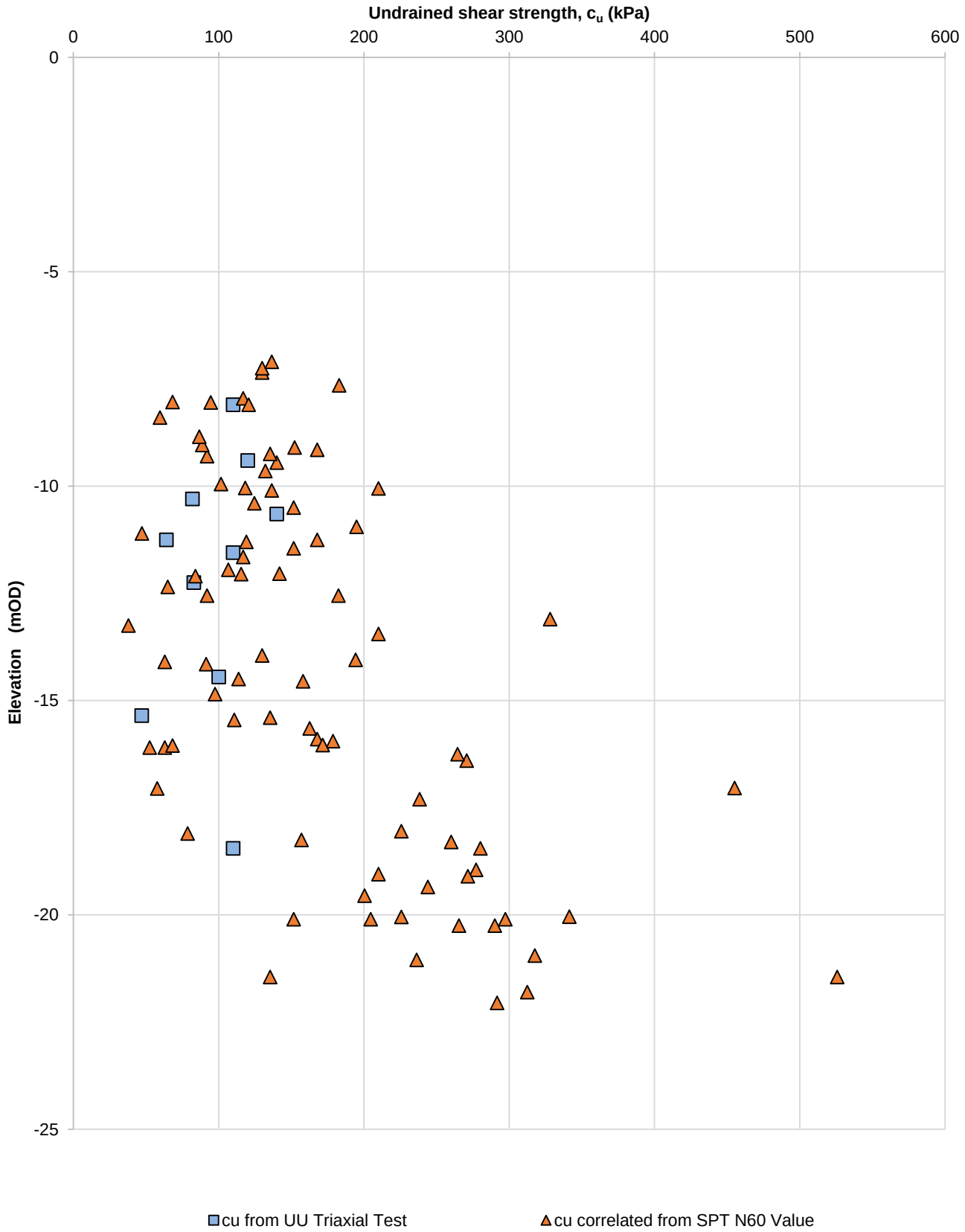

Title:	East Site Hydrogen Production: Undrained Shear Strength by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.148
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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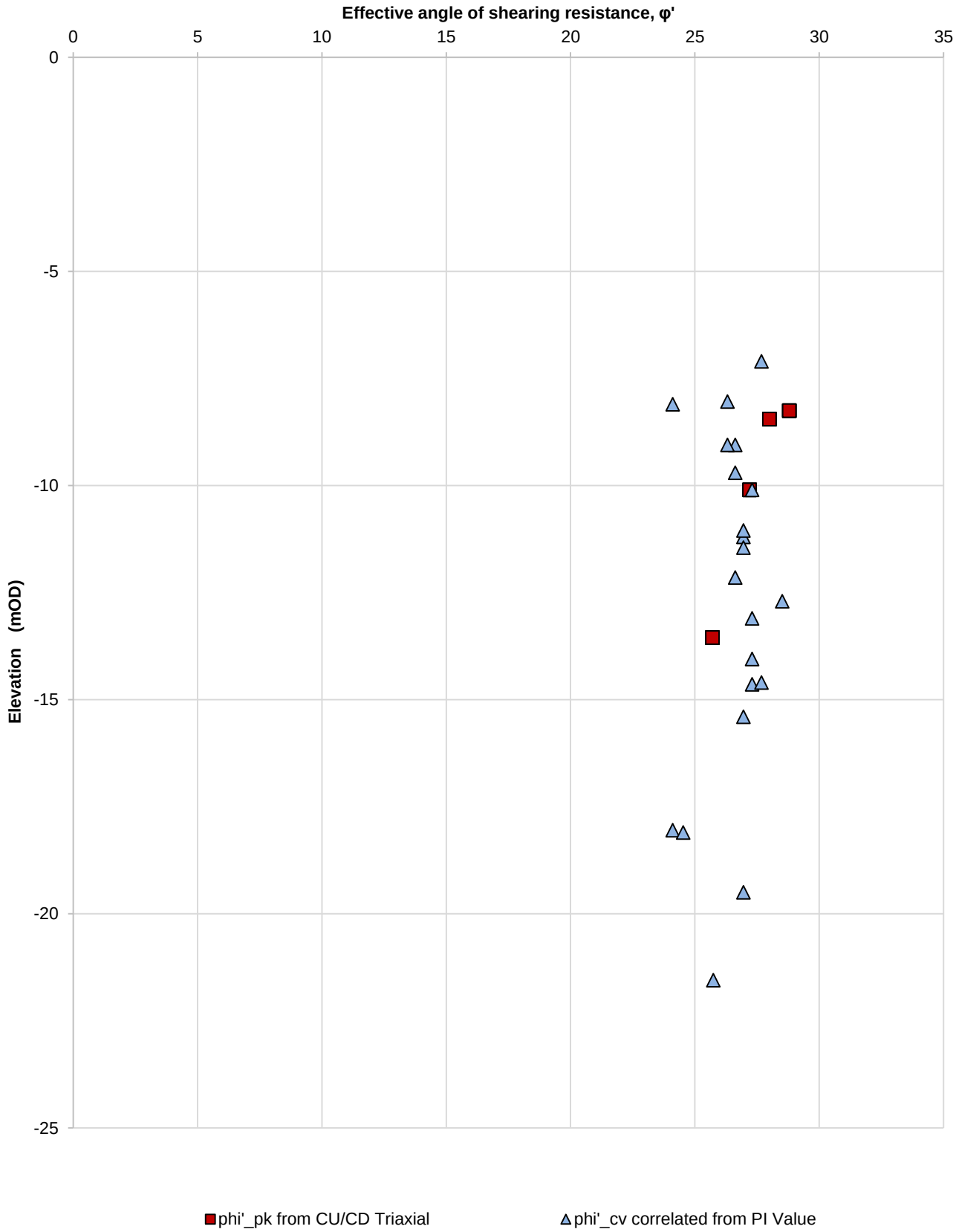

Title:	East Site Hydrogen Production: Effective Angle of Shearing Resistance by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.149
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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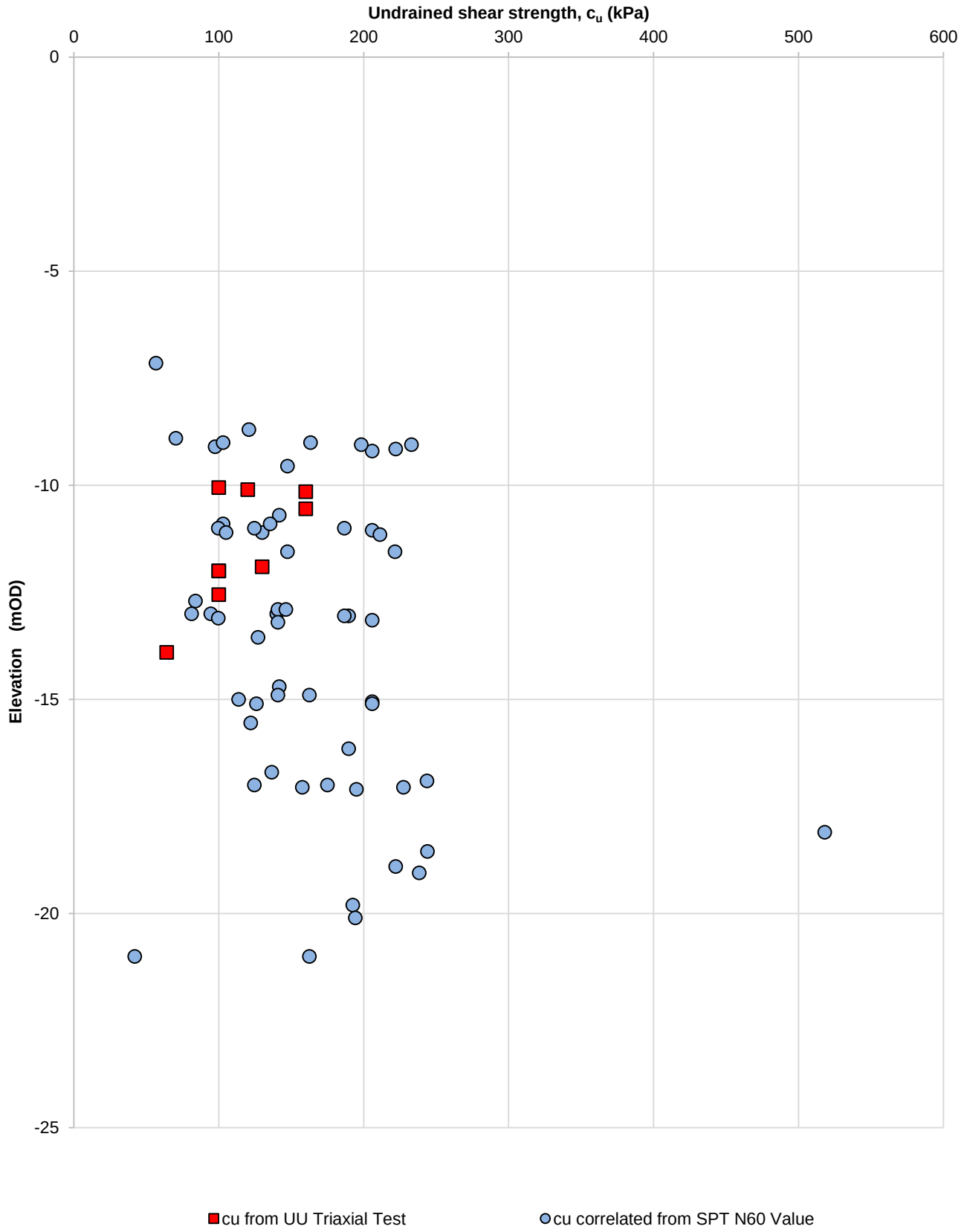

Title:	East Site Ammonia Storage: Undrained Shear Strength by Elevation for Glacial Till Deposits	**Figure No.:**	D.150
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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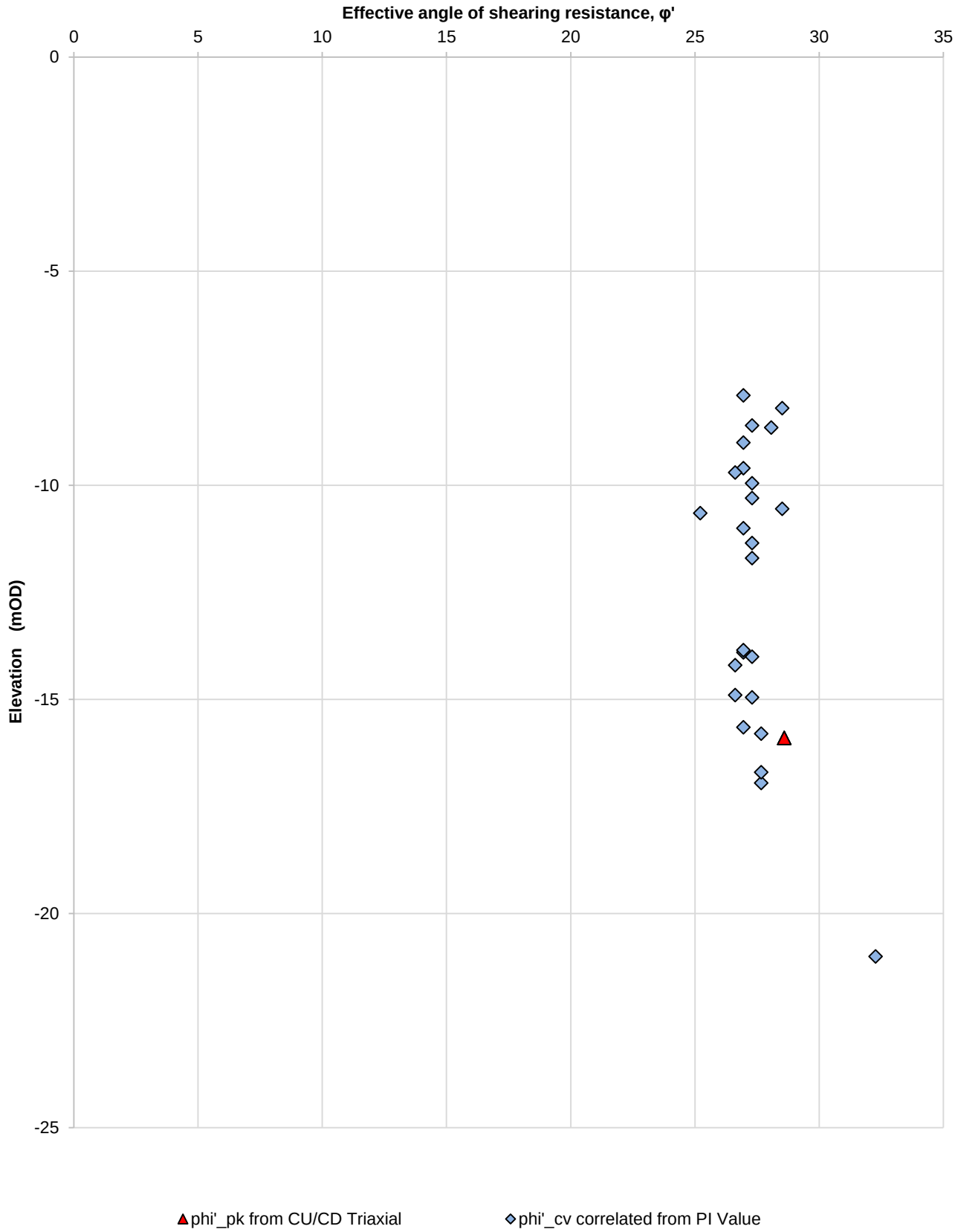

Title:	East Site Ammonia Storage: Effective Angle of Shearing Resistance by Elevation for Glacial Till Deposits	**Figure No.:**	D.151
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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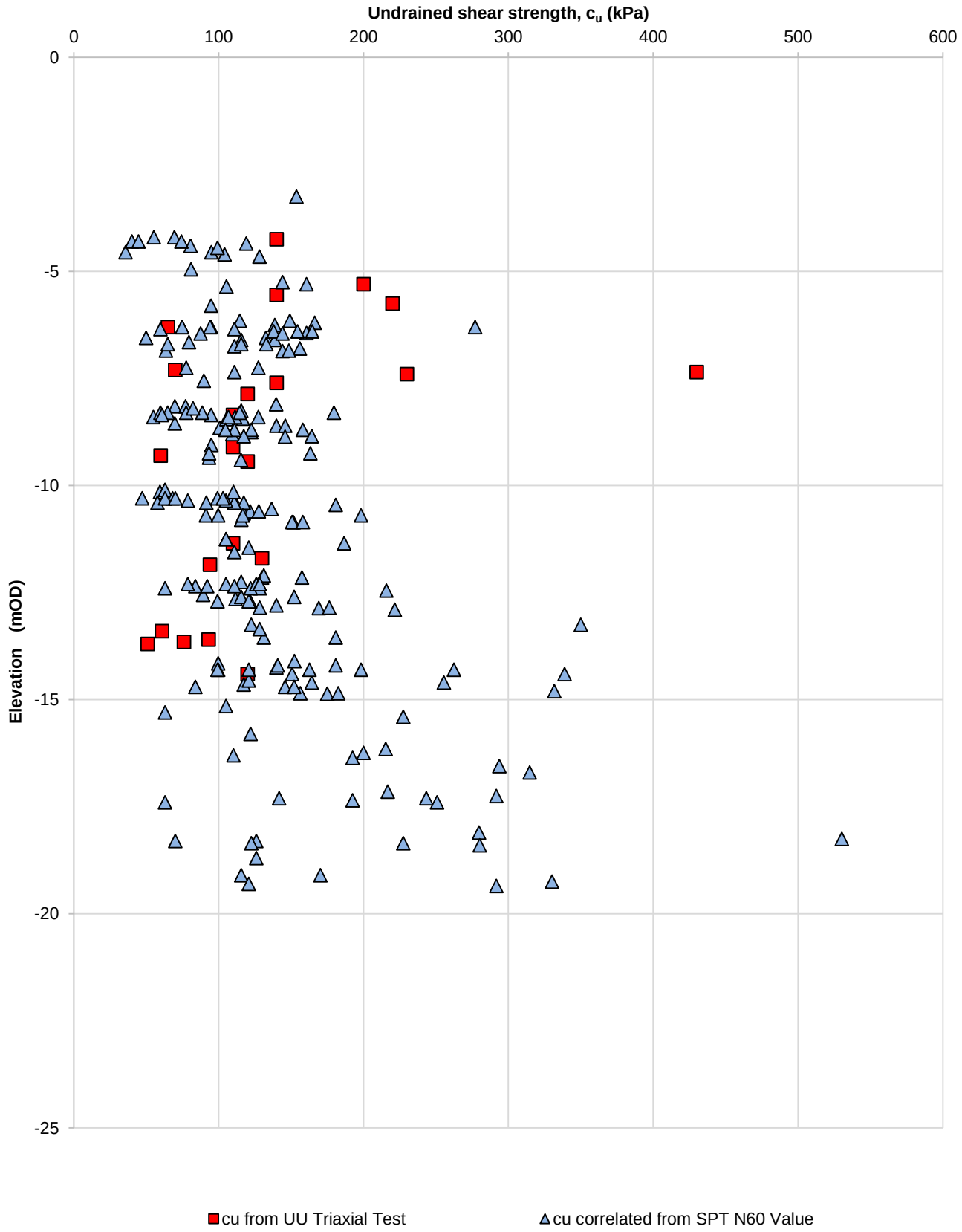

Title:	West Site: Undrained Shear Strength by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.152
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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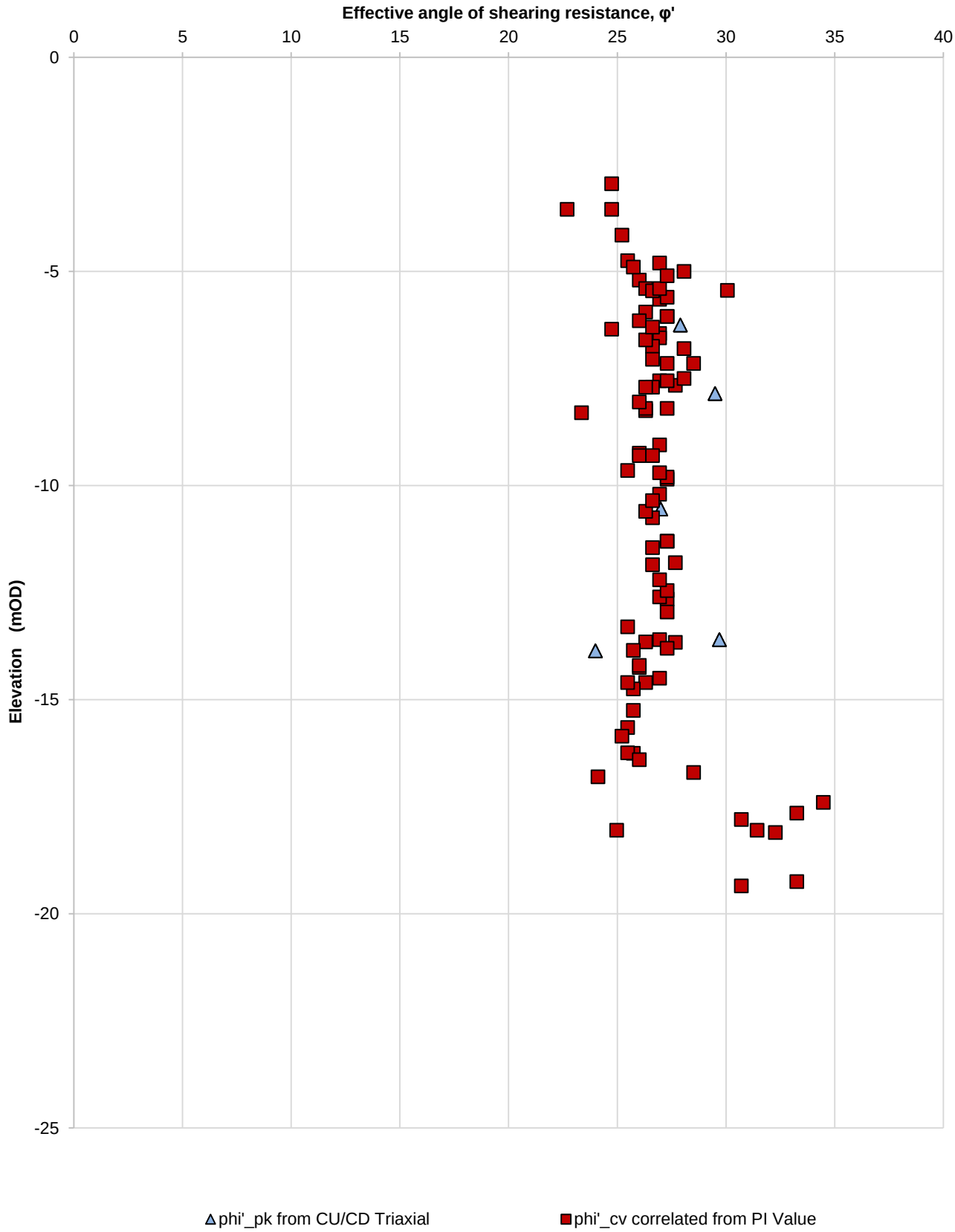

Title:	West Site: Effective Angle of Shearing Resistance by Elevation for Cohesive Glacial Till Deposits	**Figure No.:**	D.153
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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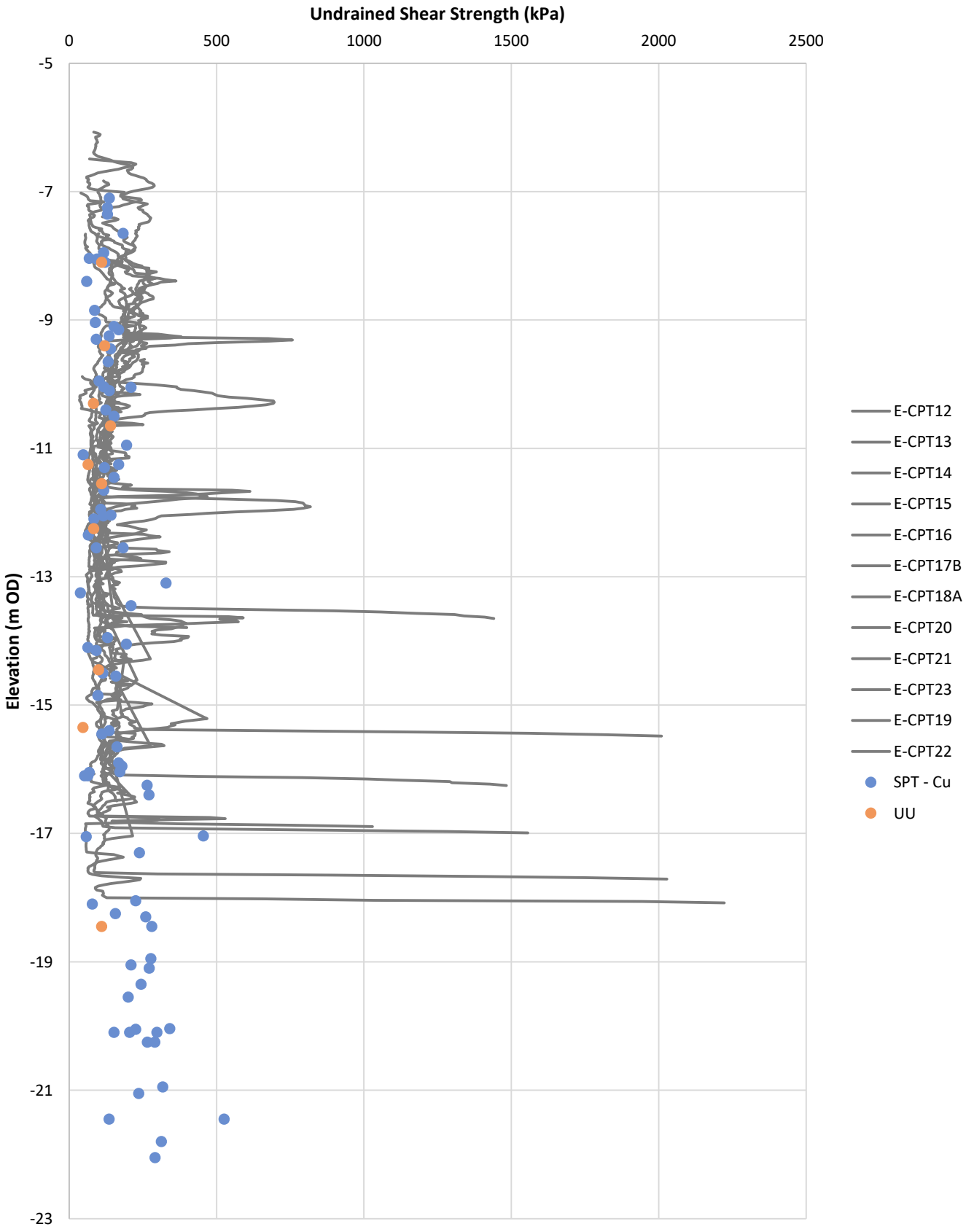

Title	East Site - Hydrogen Production - GTD - Undrained Shear Strength (CPT, SPT, UU) vs Elevation	**Figure No.:** D.154	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

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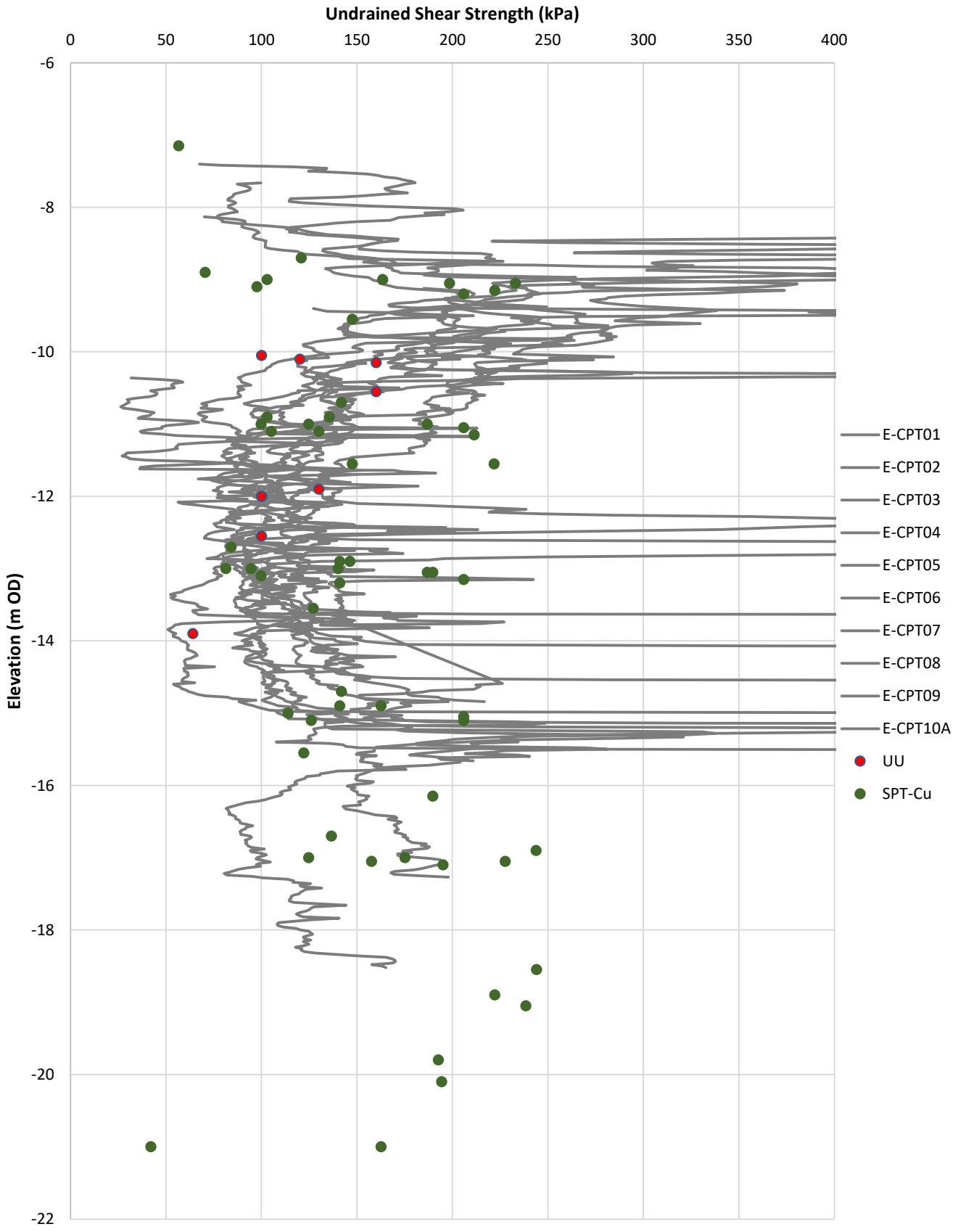

Title	East Site - Ammonia Storage - GTD - Undrained Shear Strength (CPT, SPT, UU) vs Elevation	**Figure No.:** D.155	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author**	AL
Proj. No	60687114	**Date**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

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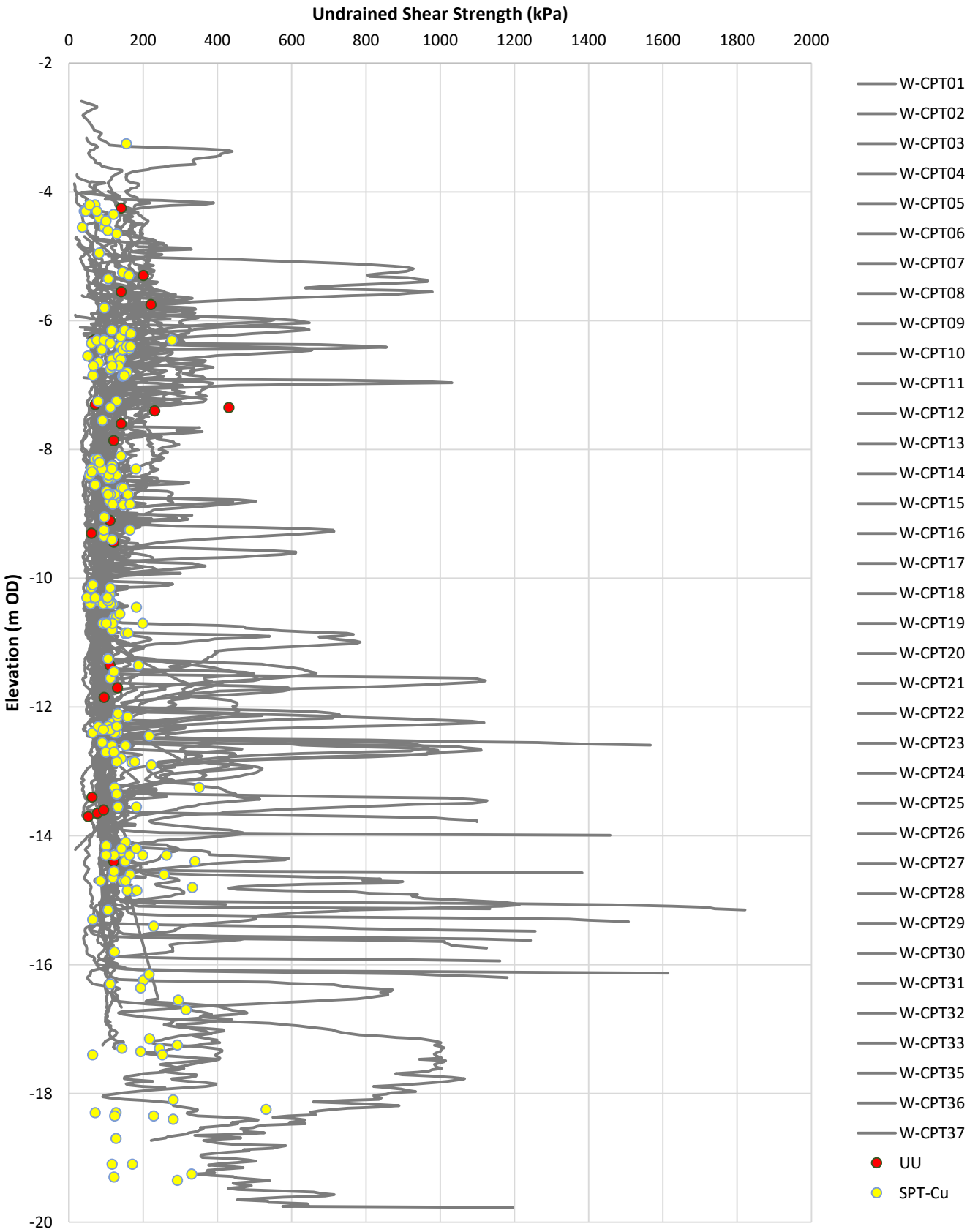
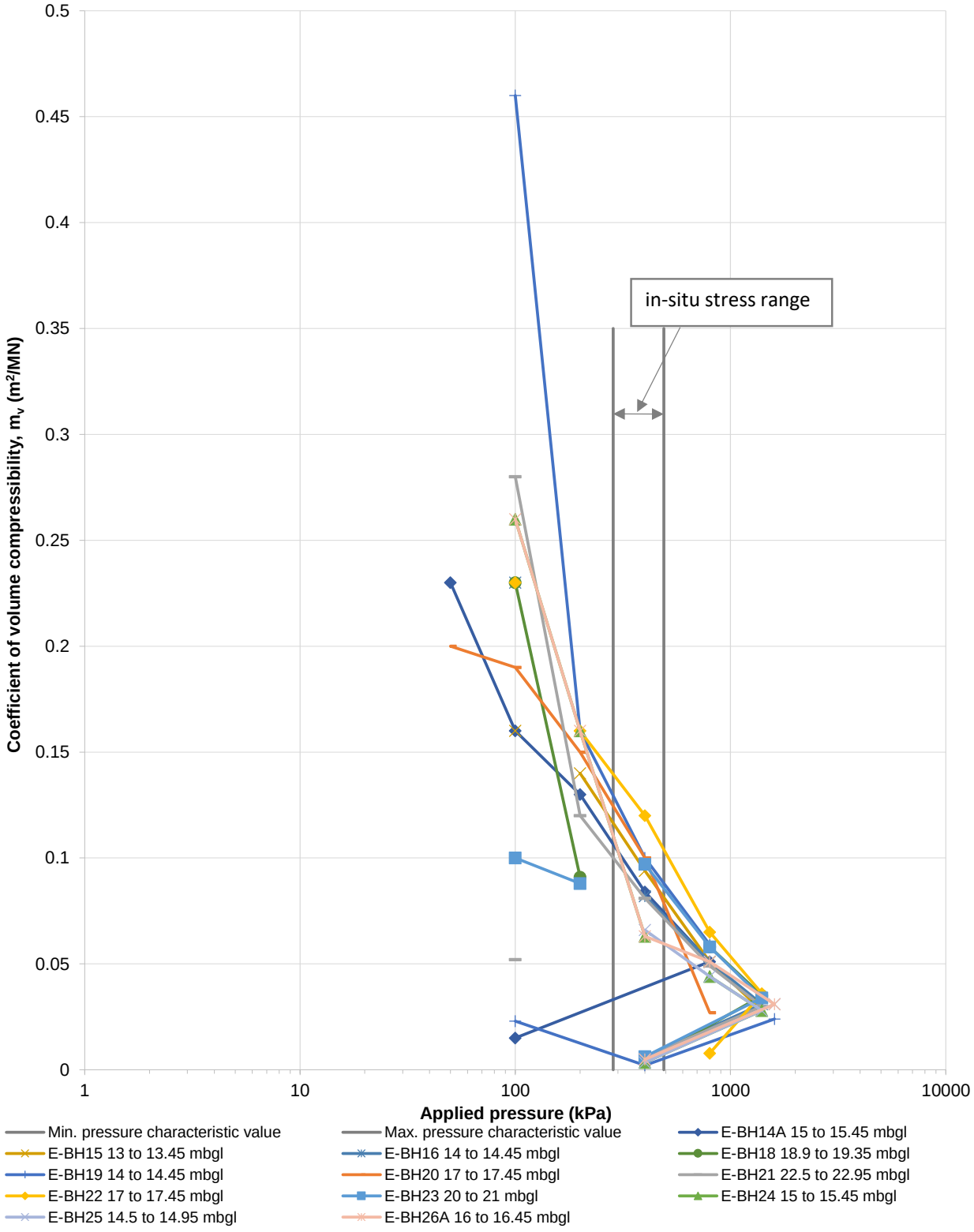


Title	West Site - GTD - Undrained Shear Strength (CPT, SPT, UU) vs Elevation	**Figure No.:** D.156	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

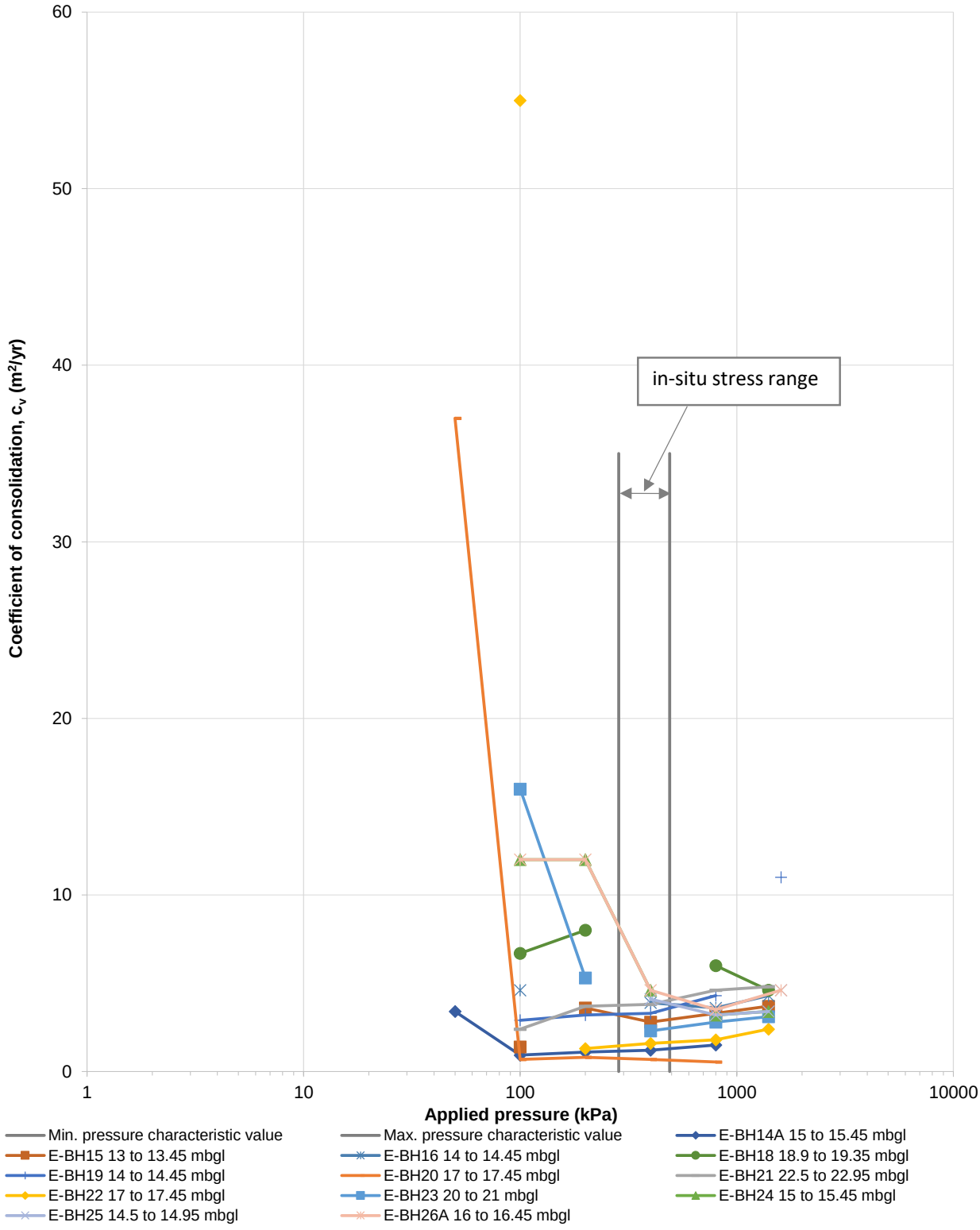
AECOM



Pressure range (kPa)	
Min. value =	285
Max. value =	490

Title:	East Site Hydrogen Production: Coefficient of volume compressibility (mv) vs Applied pressure by Sample for Cohesive Glacial Till Deposits	**Fig No.:**	D.157
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



Pressure range (kPa)	
Min. value =	285
Max. value =	490

Title:	East Site Hydrogen Production: Coefficient of consolidation (cv) vs Applied pressure by Sample for Cohesive Glacial Till Deposits	**Fig No.:**	D.158
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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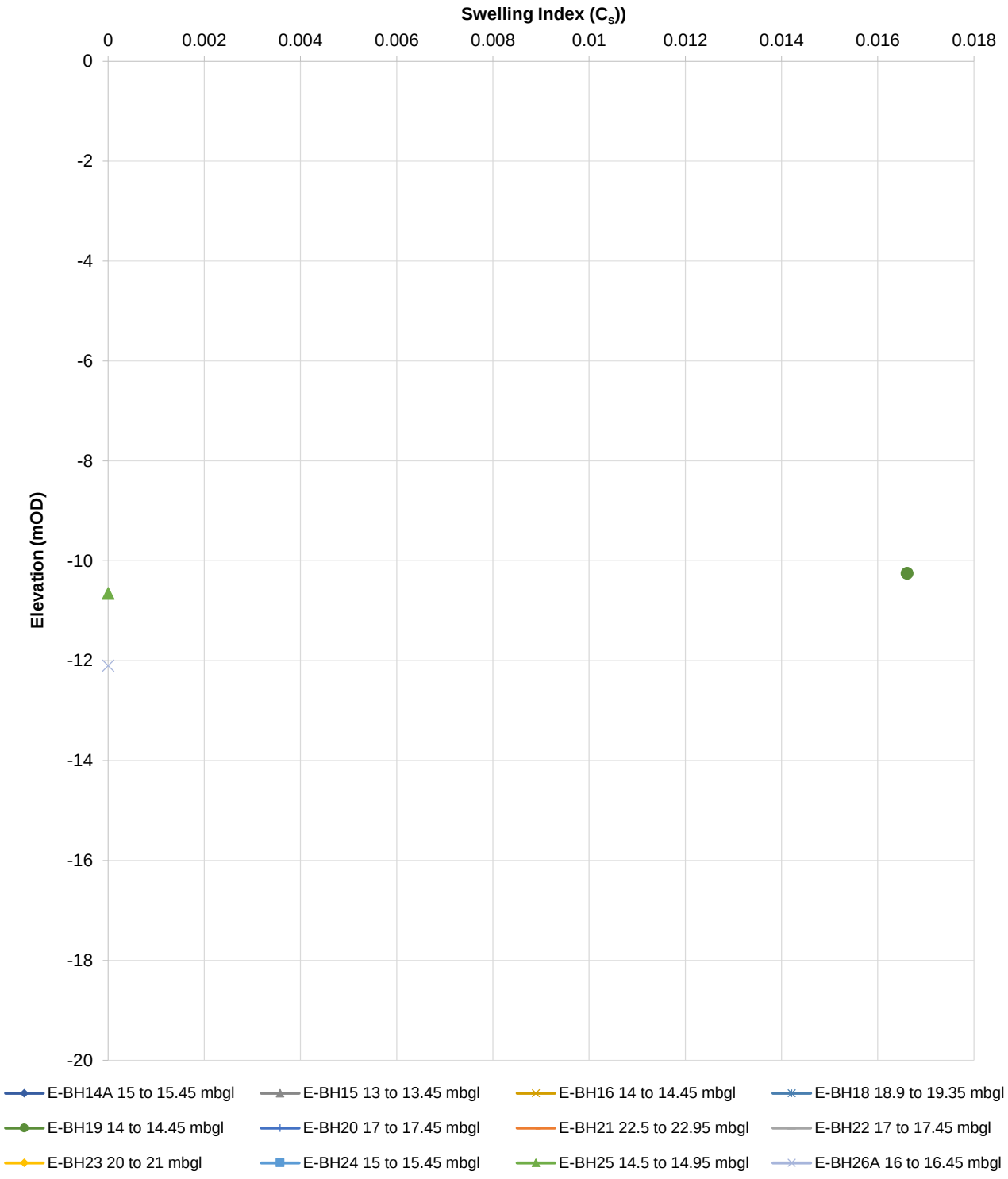

Elevation range (mOD)

Title:	East Site Hydrogen Production: Swelling Index (Cs) vs Elevation by Sample for Cohesive Glacial Till Deposits	**Fig No.:**	D.159
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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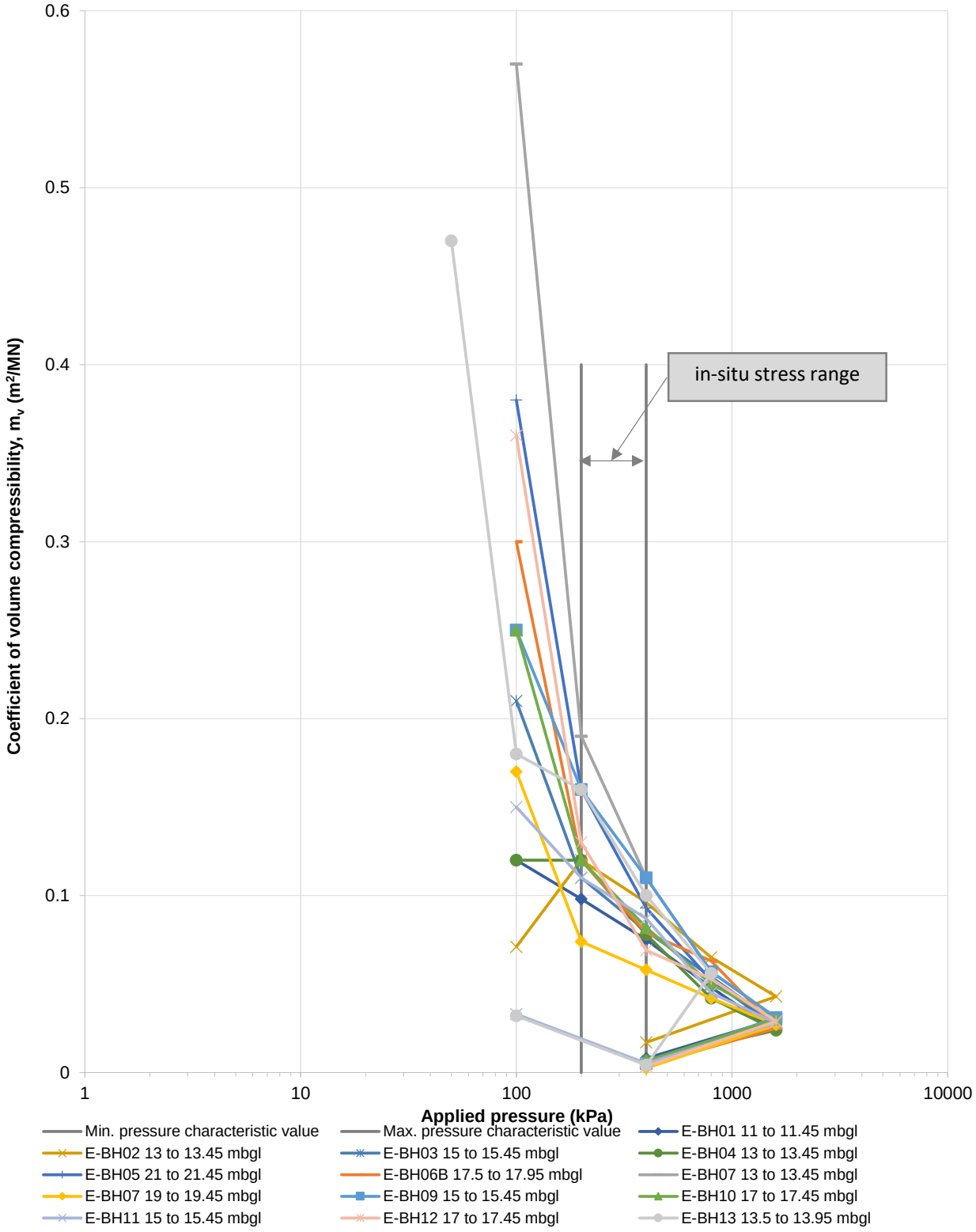
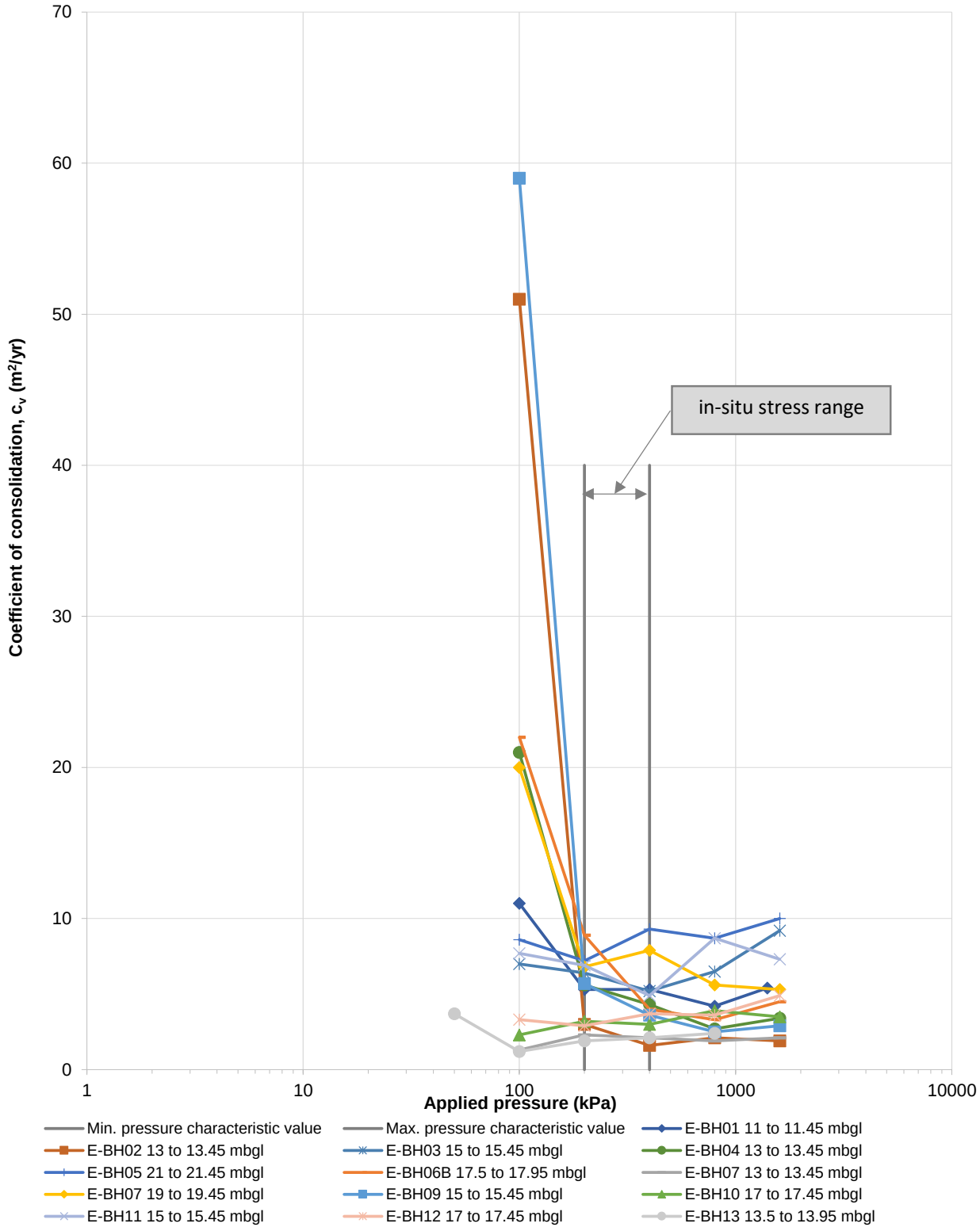


Pressure range (kPa)	
Min. value =	200
Max. value =	400

Title:	East Site Ammonia Storage: Coefficient of volume compressibility (mv) vs Applied pressure by Sample for Cohesive Glacial Till Deposits	**Fig No.:**	D.160
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

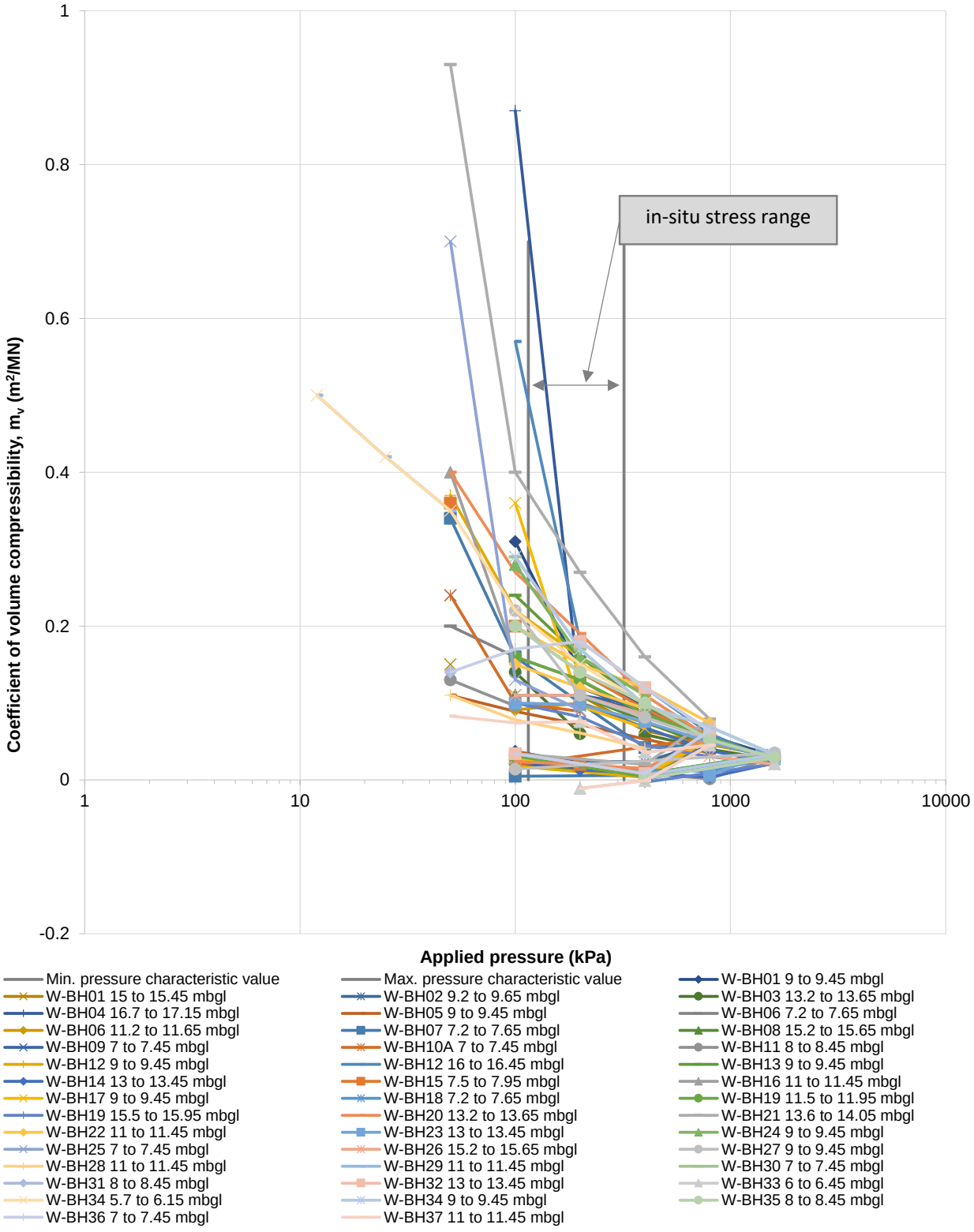
AECOM



Pressure range (kPa)	
Min. value =	200
Max. value =	400

Title:	East Site Ammonia Storage: Coefficient of consolidation (cv) vs Applied pressure by Sample for Cohesive Glacial Till Deposits	**Fig No.:**	D.161
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



Pressure range (kPa)	
Min. value =	115
Max. value =	320

Title:	West Site: Coefficient of volume compressibility (mv) vs Applied pressure by Sample for Cohesive Glacial Till Deposits	**Fig No.:**	D.162
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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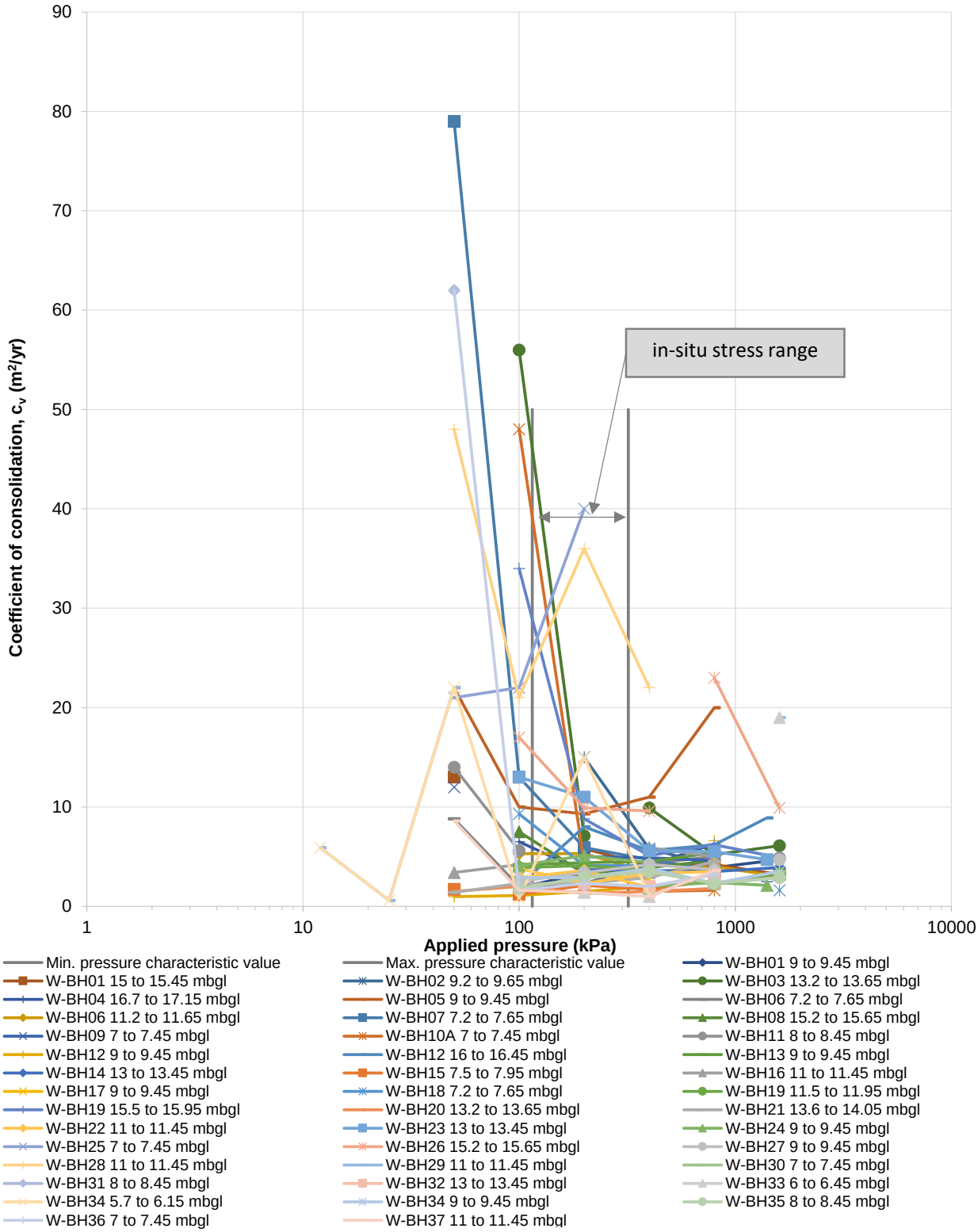

Pressure range (kPa)	
Min. value =	115
Max. value =	320

Title:	West Site: Coefficient of consolidation (cv) vs Applied pressure by Sample for Cohesive Glacial Till Deposits	**Fig No.:**	D.163
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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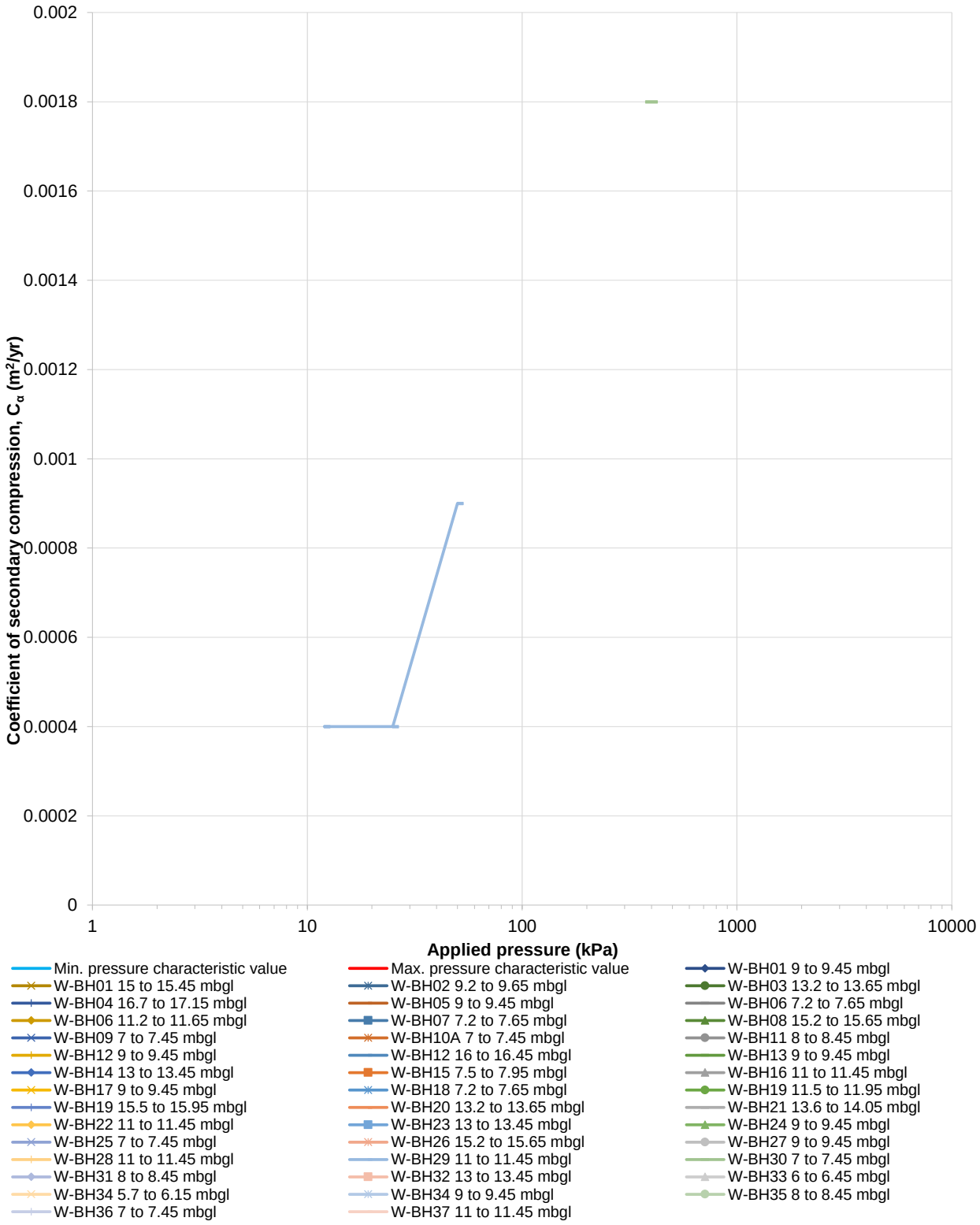

Pressure range (kPa)	
Min. value =	115
Max. value =	320

Title:	West Site: Coefficient of secondary compression (Cα) vs Applied pressure by Sample for Cohesive Glacial Till Deposits	**Fig No.:**	D.164
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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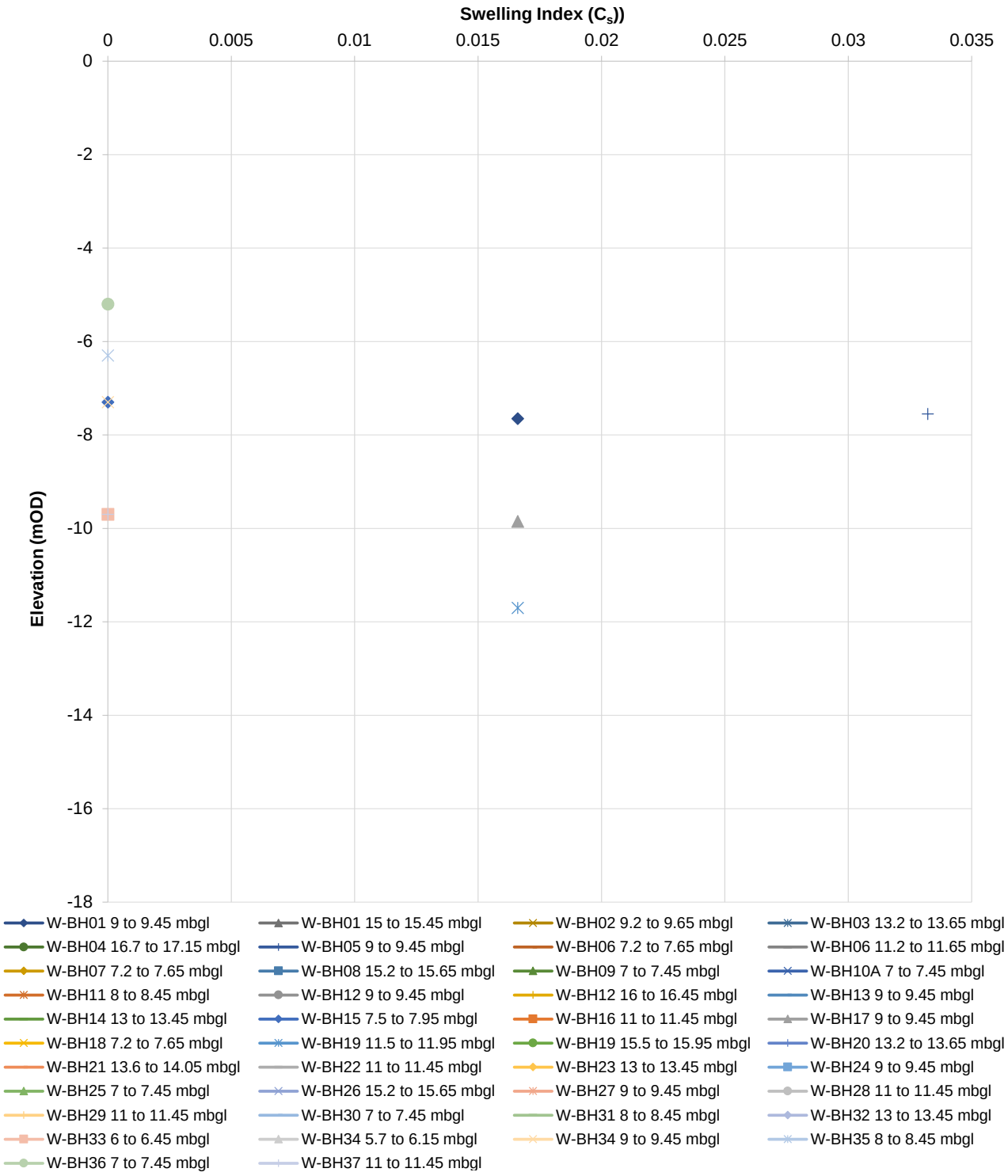

Elevation range (mOD)
-7.6
-14.1

Title:	West Site: Swelling Index (Cs) vs Elevation by Sample for Cohesive Glacial Till Deposits	**Fig No.:**	D.165
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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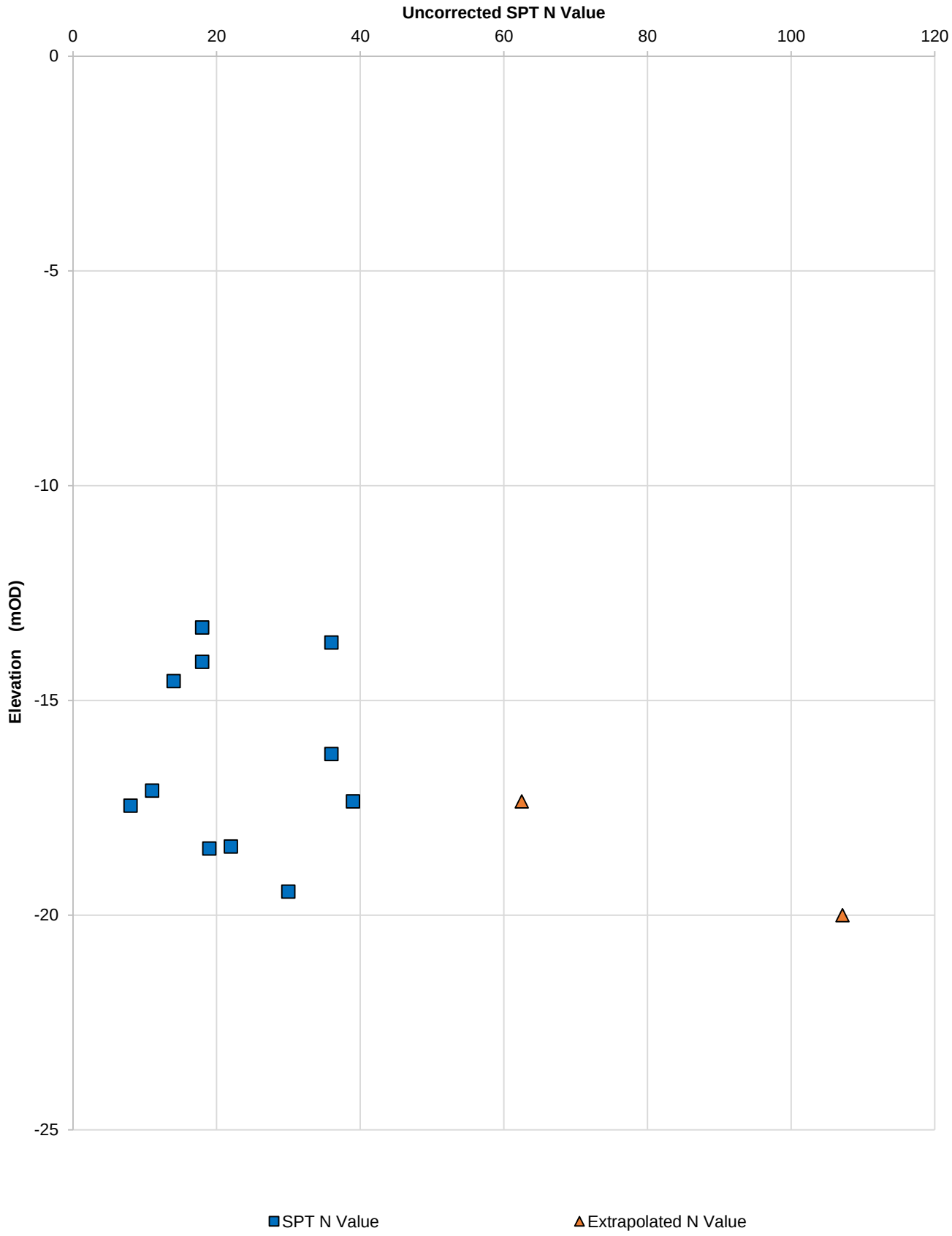

Title:	East Site Hydrogen Production: Uncorrected SPT N Value by Elevation for Granular Glacial Till Deposits	**Figure No.:**	D.166
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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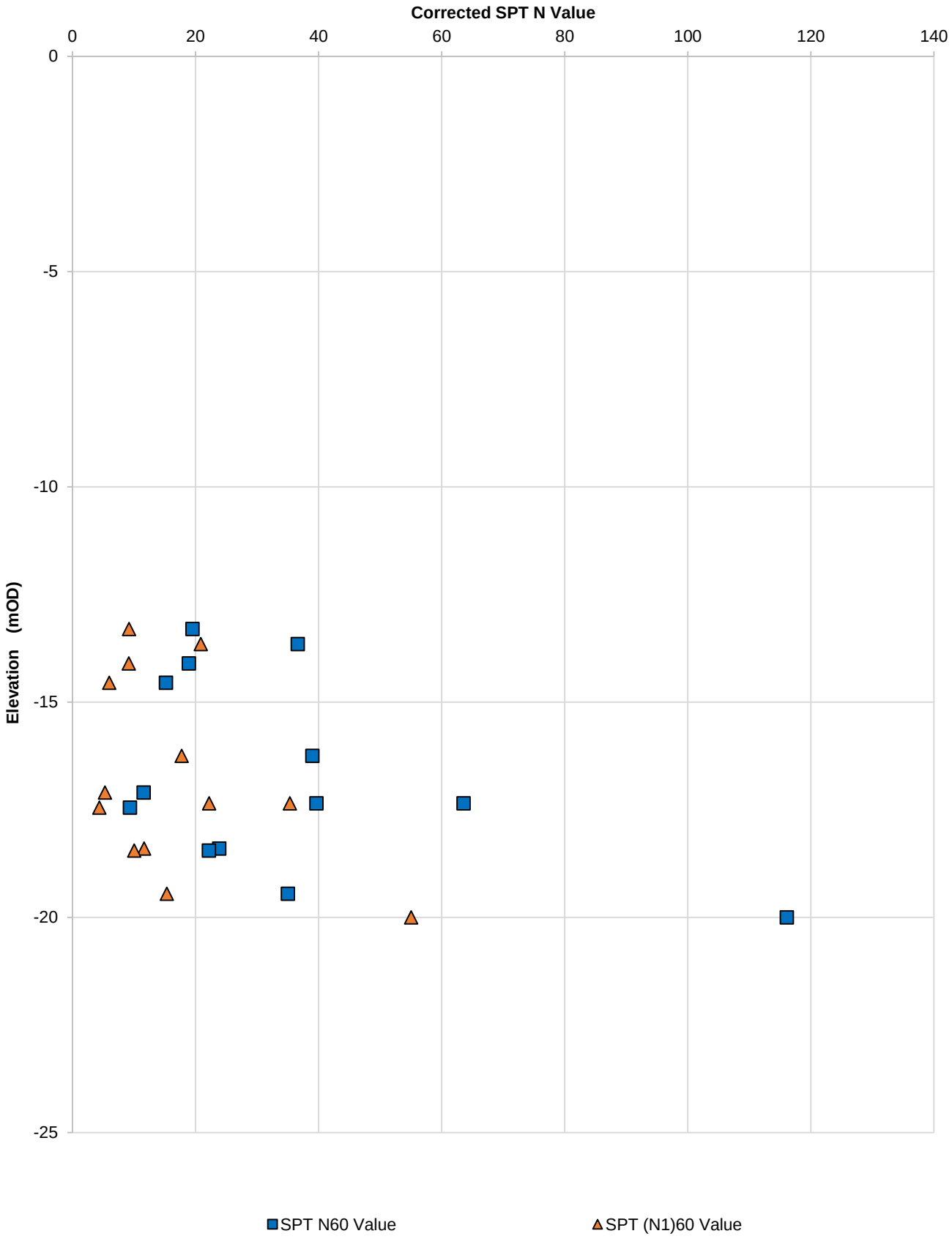

Title:	East Site Hydrogen Production: Corrected SPT N Value by Elevation for Granular Glacial Till Deposits	**Figure No.:**	D.167
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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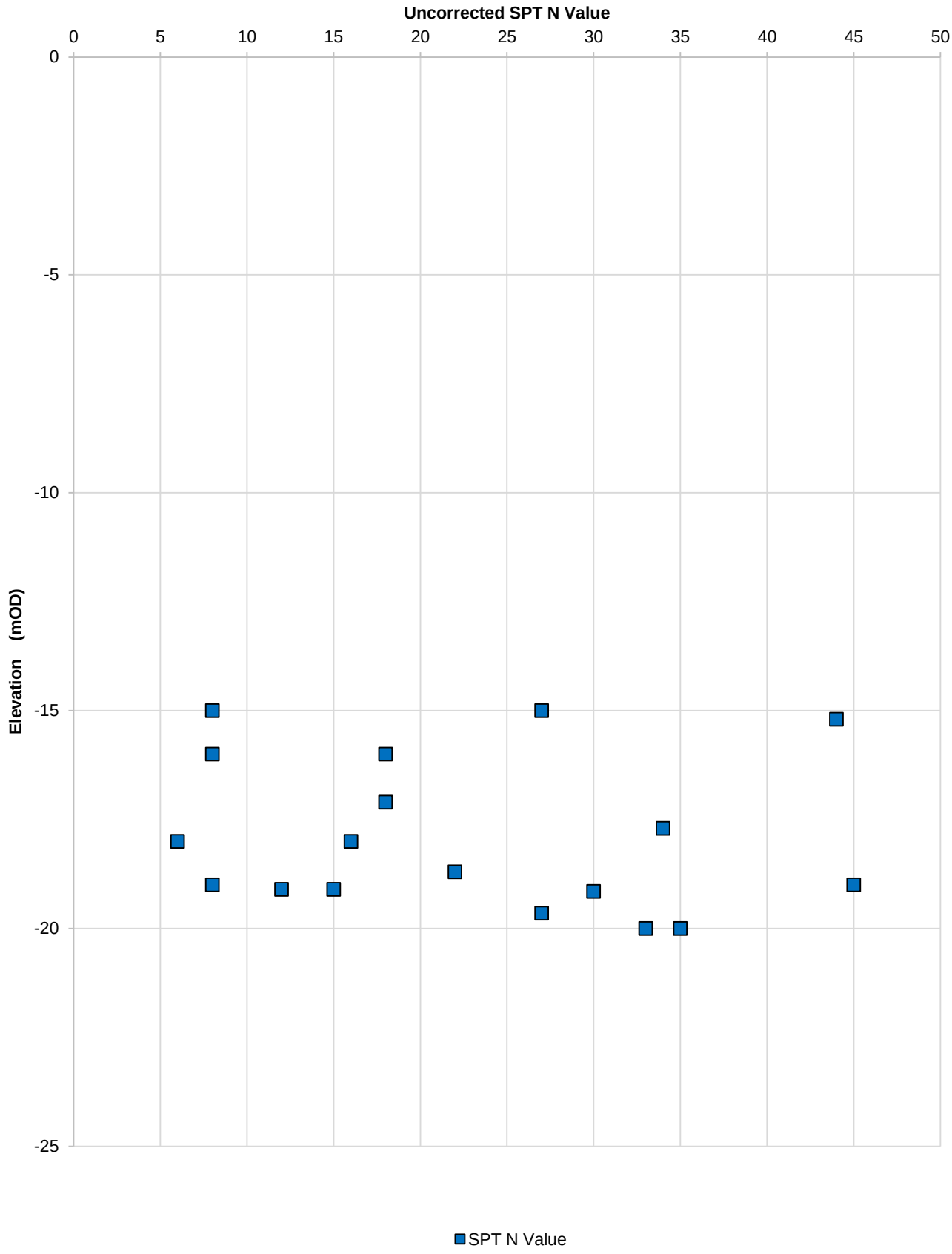

Title:	East Site Ammonia Storage: Uncorrected SPT N Value by Elevation for Granular Glacial Till Deposits	**Figure No.:**	D.168
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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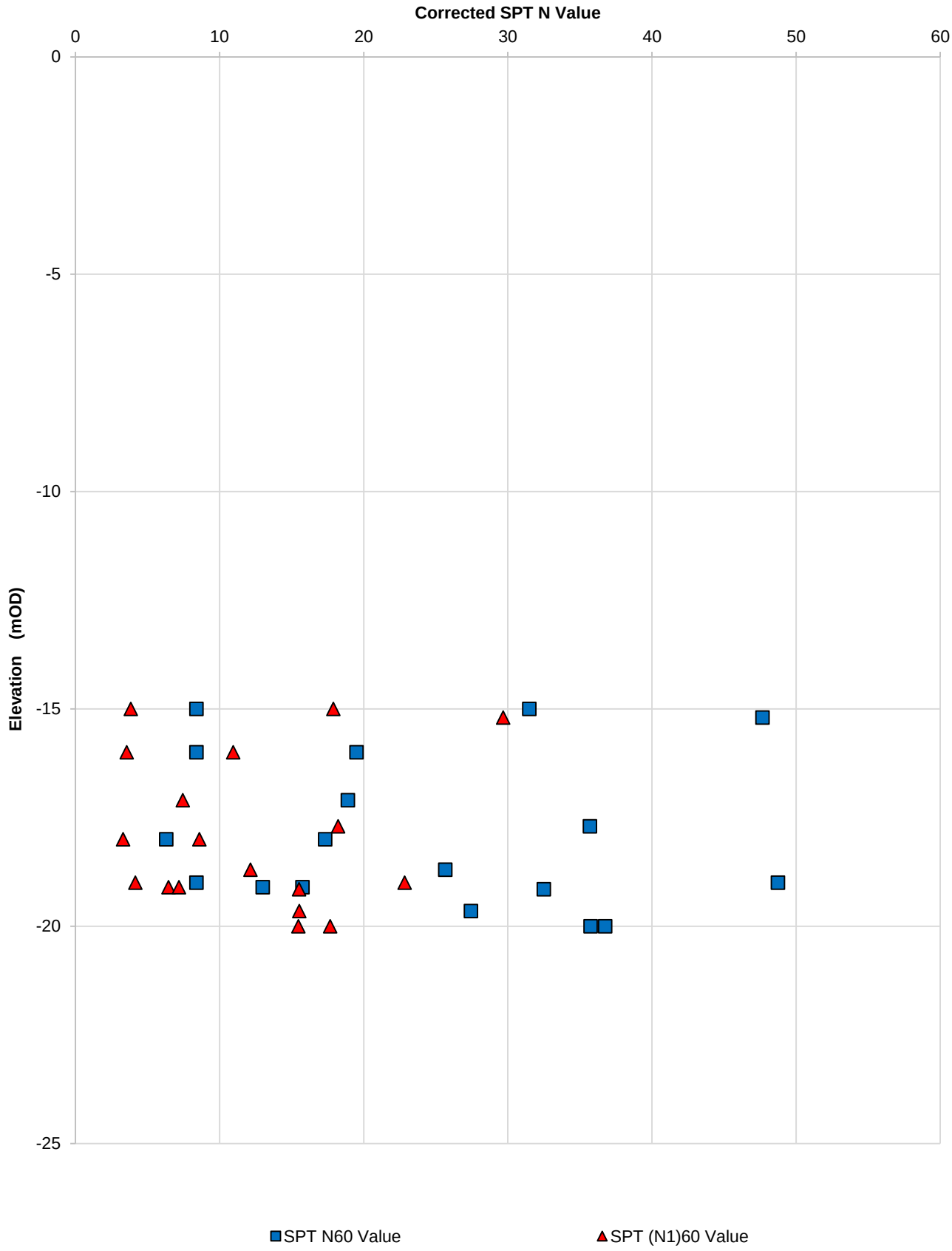

Title:	East Site Ammonia Storage: Corrected SPT N Value by Elevation for Granular Glacial Till Deposits	**Figure No.:**	D.169
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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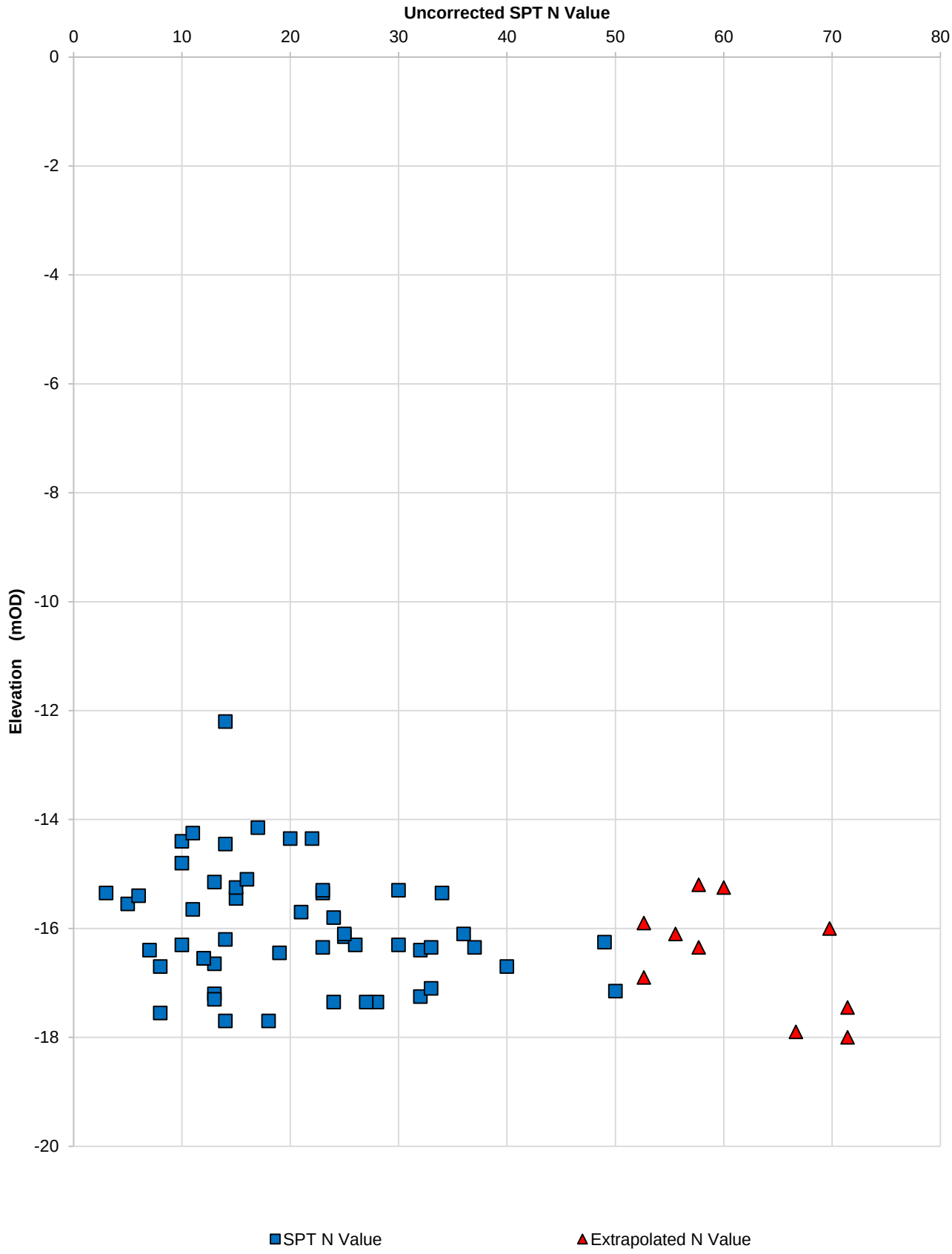

Title:	West Site: Uncorrected SPT N Value by Elevation for Granular Glacial Till Deposits	**Figure No.:**	D.170
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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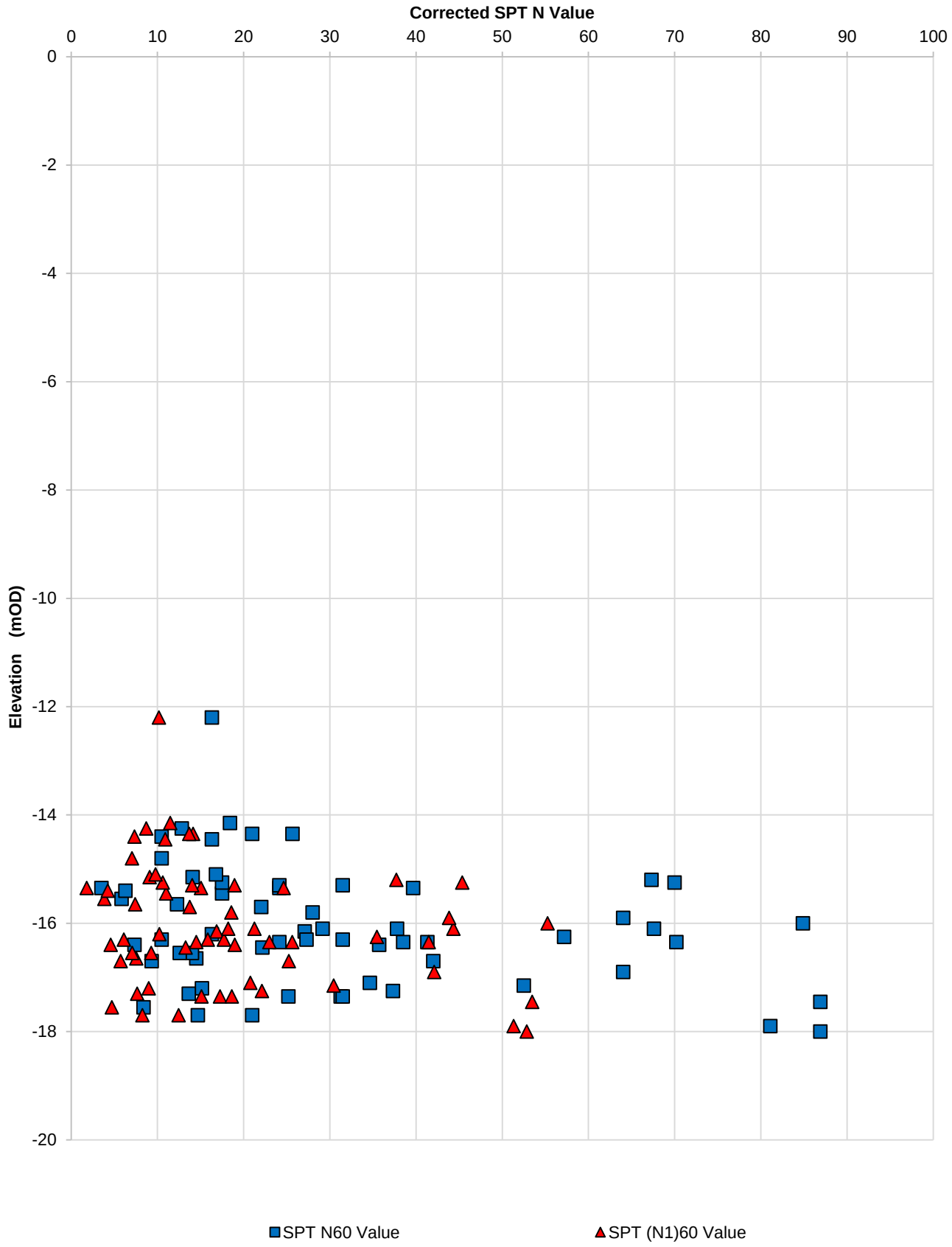

Title:	West Site: Corrected SPT N Value by Elevation for Granular Glacial Till Deposits	**Figure No.:**	D.171
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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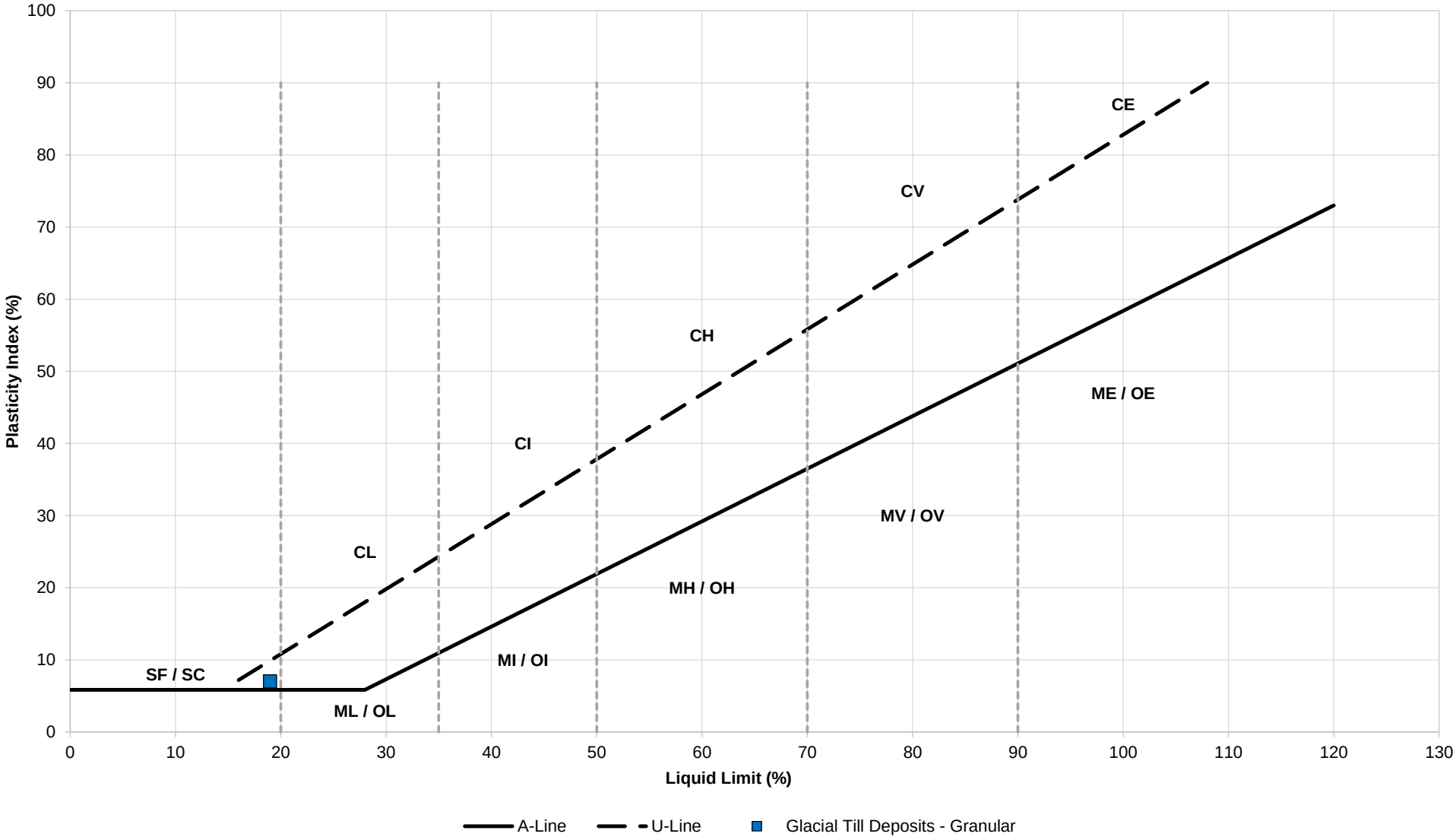
Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



Title:	West Site - Plasticity chart - Granular Glacial Till Deposits					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.172	**Author:**	CC	**Date:**	June-23	**Location:**	Immingham
Revision:	P01	**Checker:**	DW	**Date:**	June-23	**Client:**	Air Products

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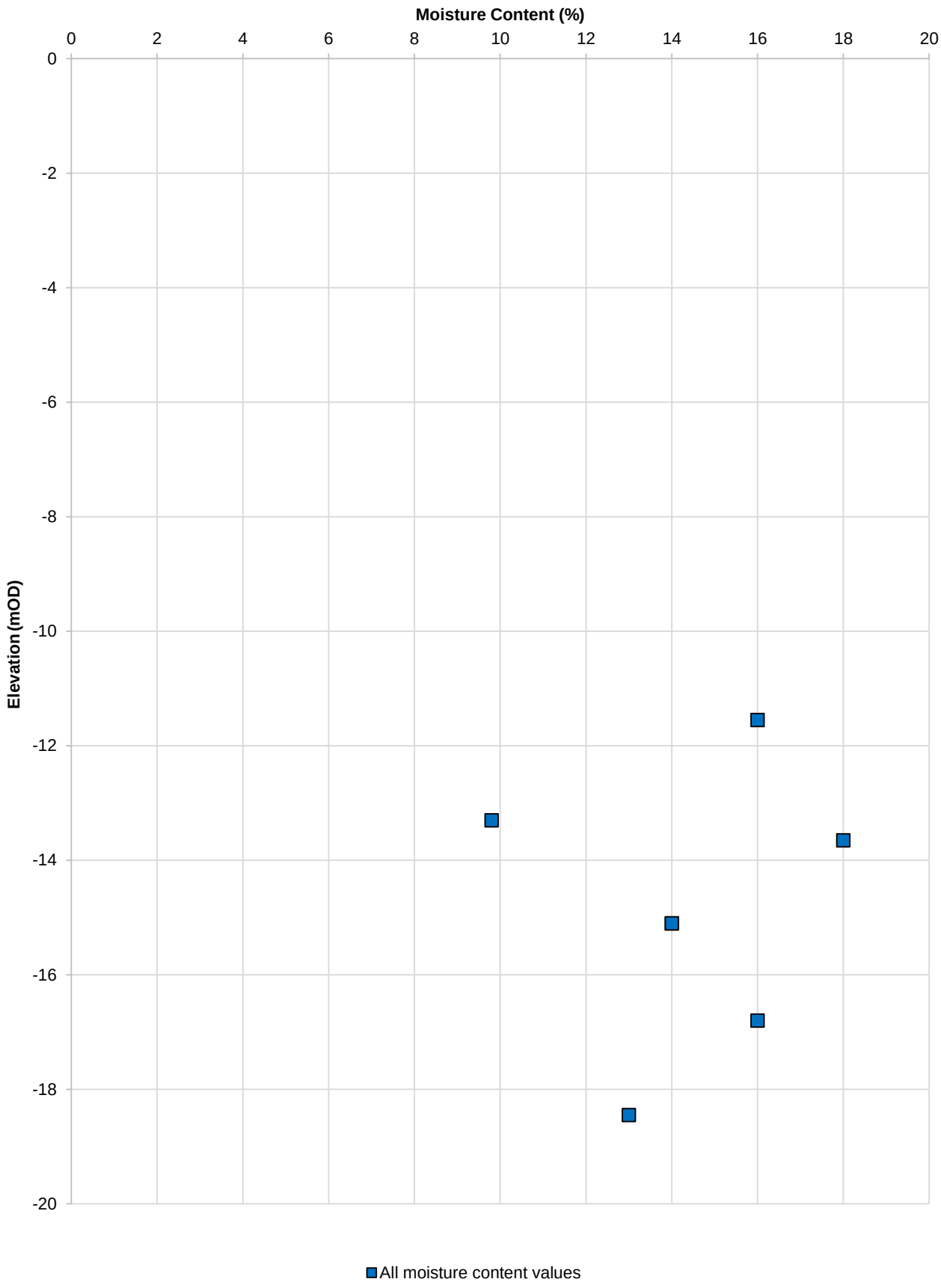

Title:	East Site - Hydrogen Production: Moisture content by Elevation for Granular Glacial Till Deposits	**Fig No.:**	D.173
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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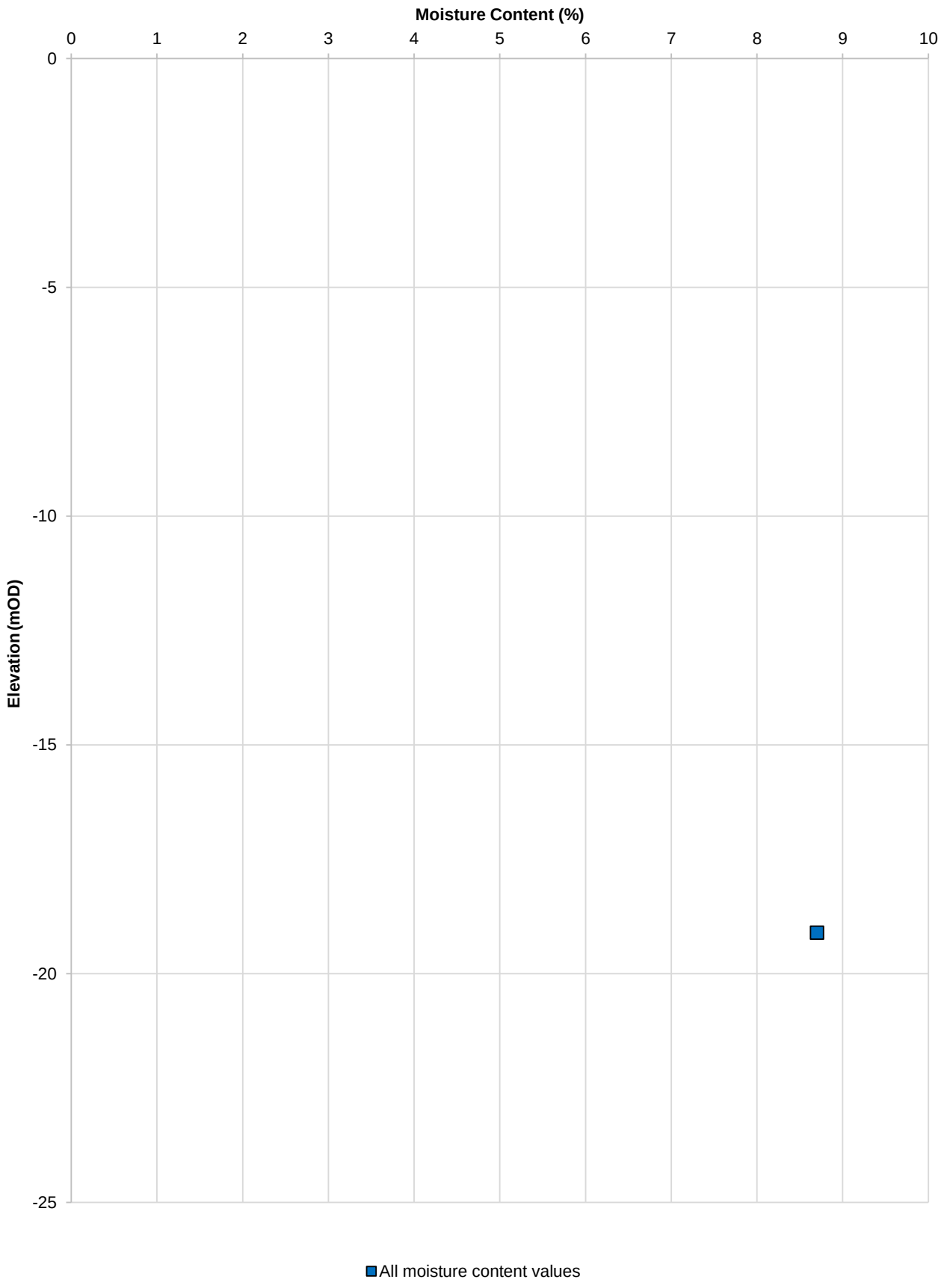

Title:	East Site Ammonia Storage - Moisture content by Elevation for Granular Glacial Till Deposits	**Figure No.:**	D.174
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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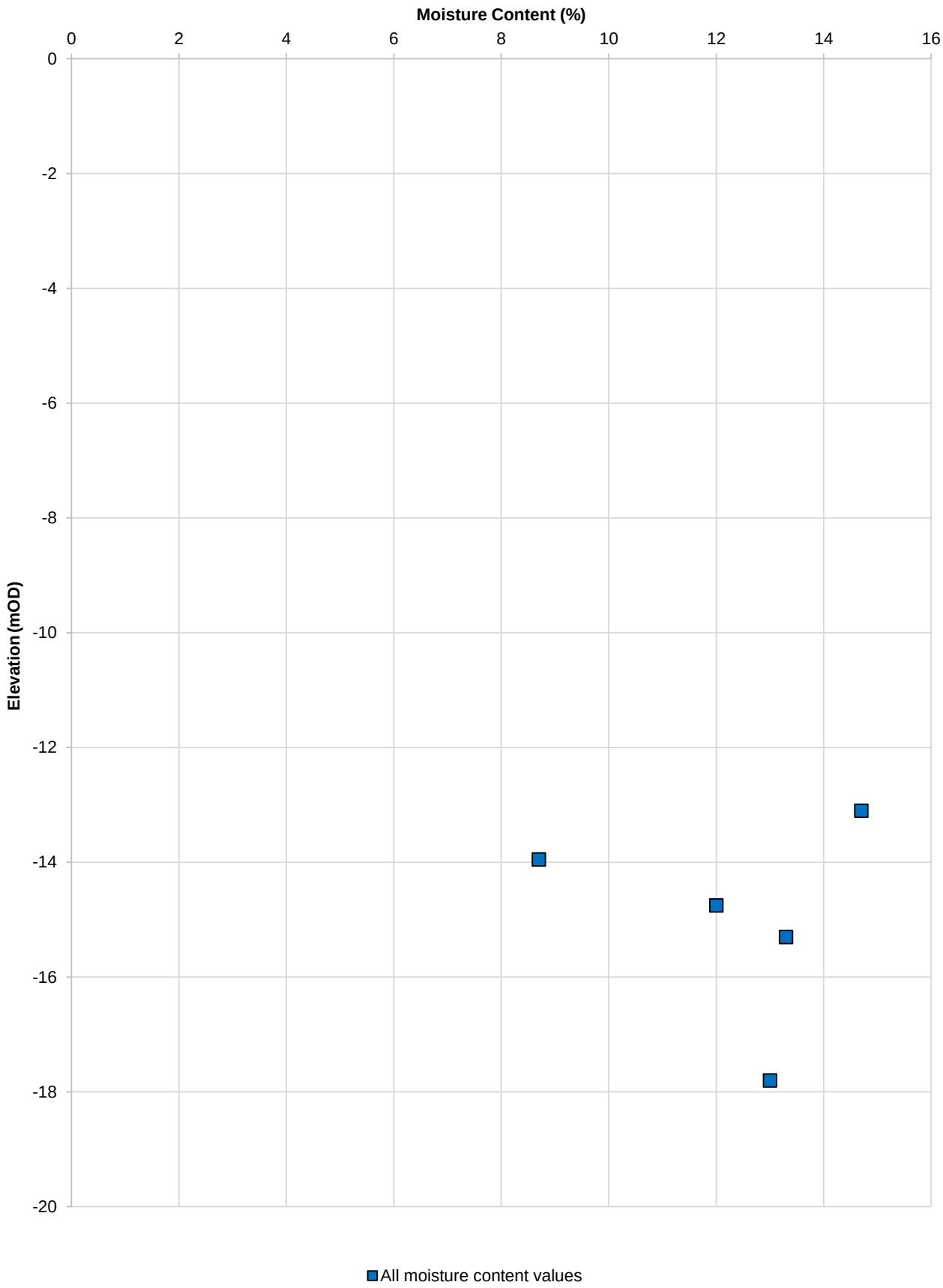

Title:	West Site - Moisture content by Elevation for Granular Glacial Till Deposits	**Fig No.:**	D.175
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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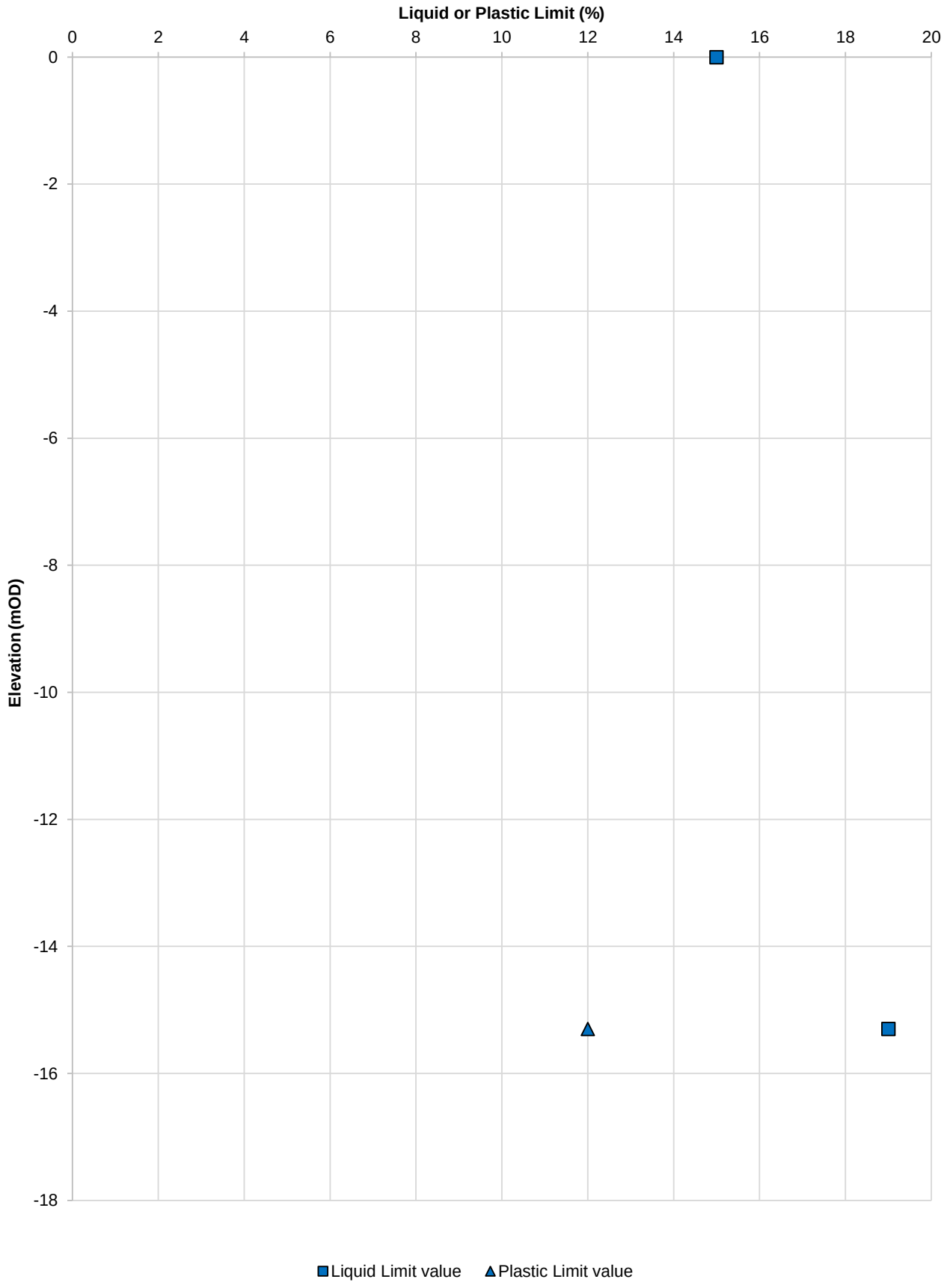

Title:	West Site - Liquid Limit and Plastic Limit by Elevation for Granular Glacial Till Deposits	**Fig No.:**	D.176
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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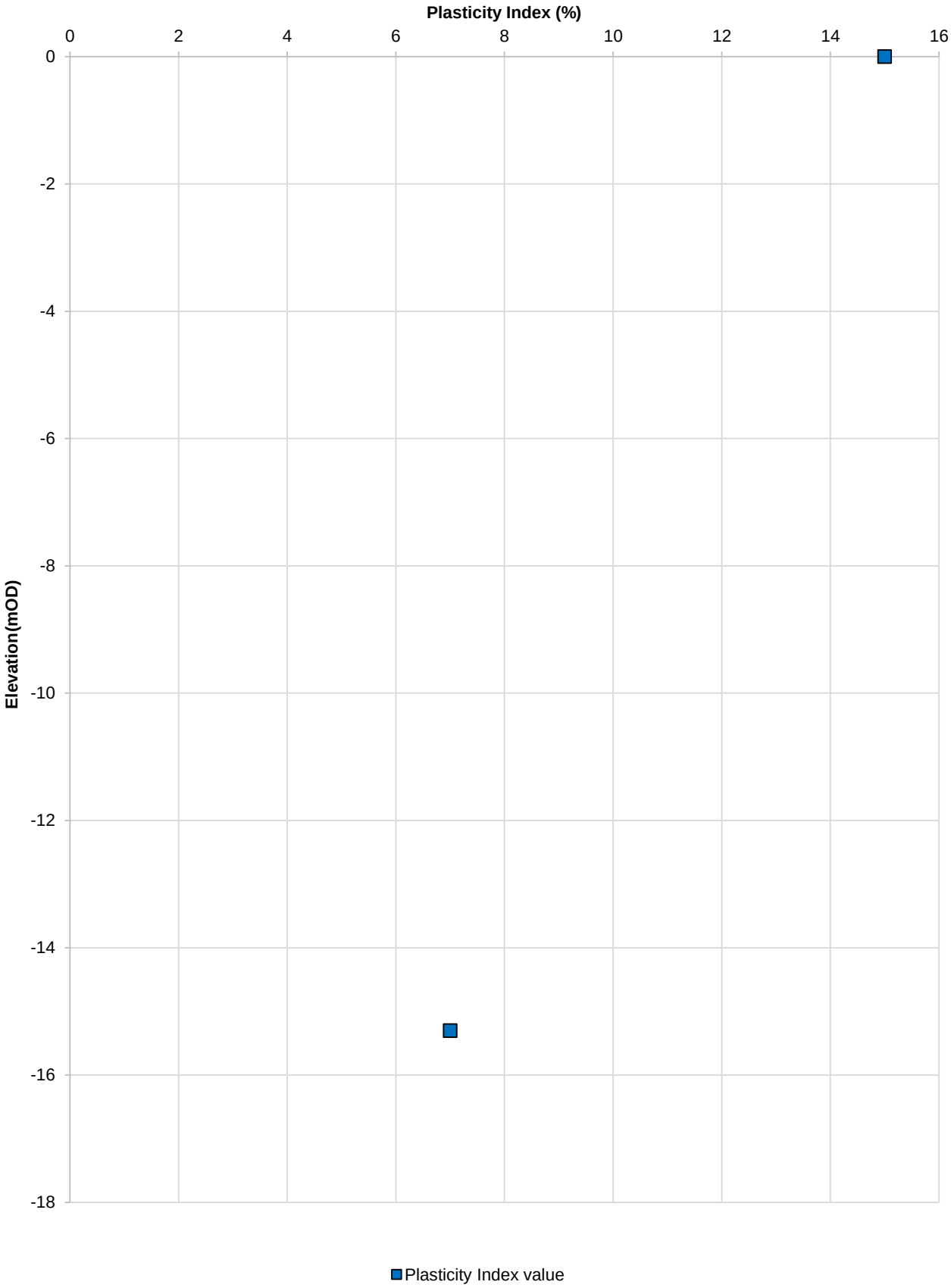

Title:	West Site - Plasticity Index by Elevation for Granular Glacial Till Deposits	**Fig No.:**	D.177
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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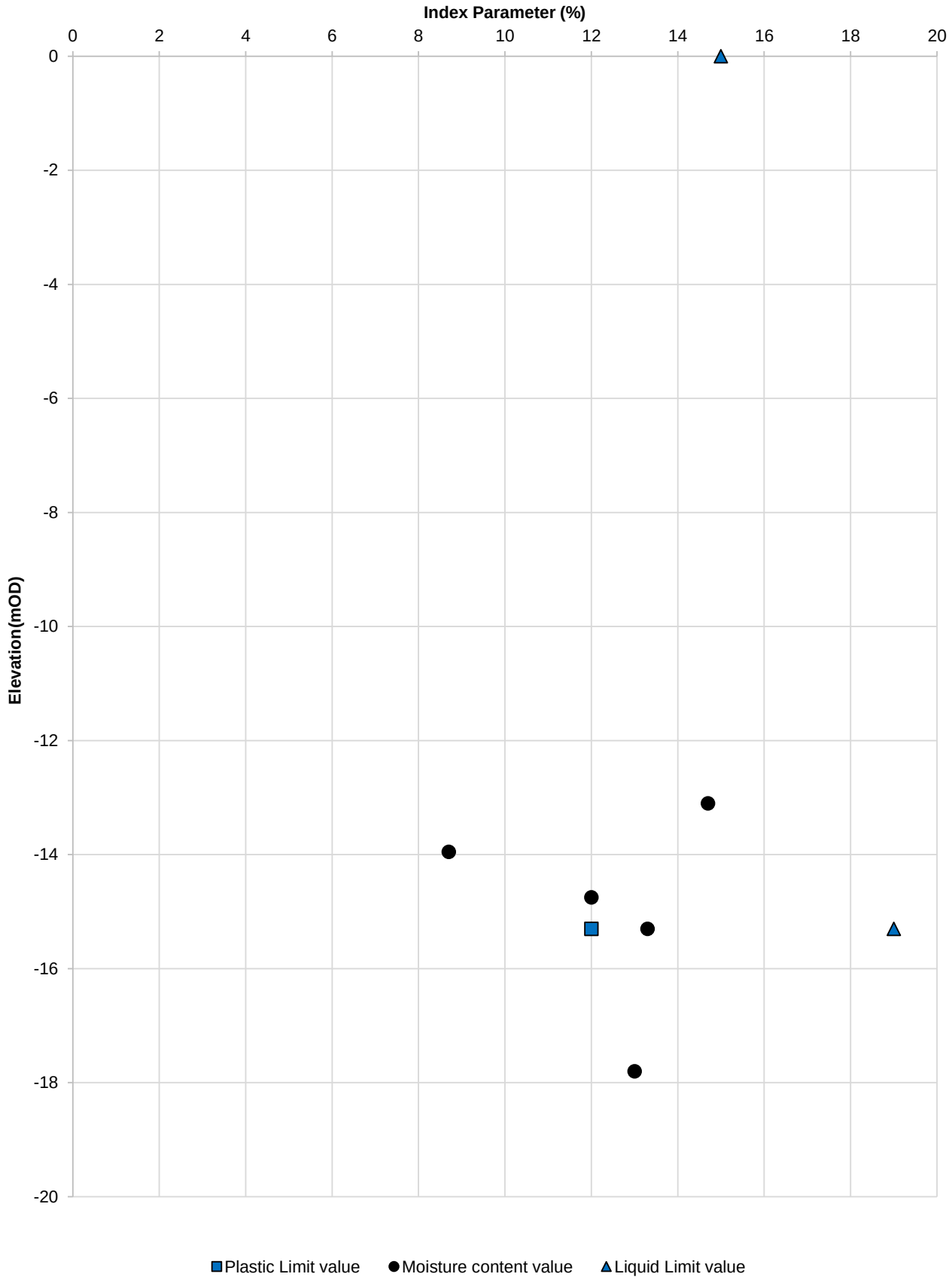

Title:	West Site - Moisture content & Atterberg Limits by Elevation - Granular Glacial Till Deposits	**Fig No.:**	D.178
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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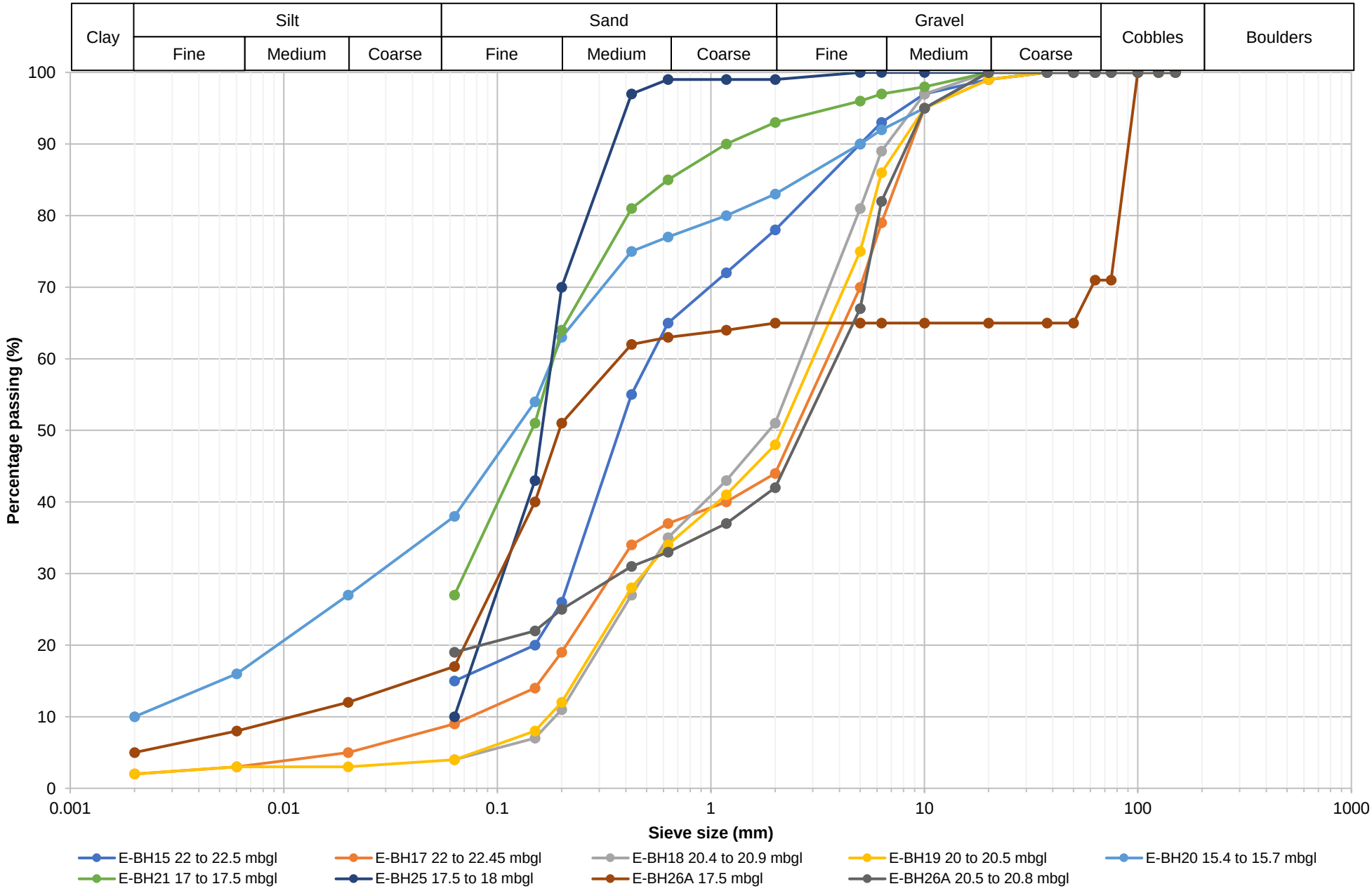

Title:	East Site Hydrogen Production: Plot of Particle size distribution (PSD) by Sample for GGTD					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.179	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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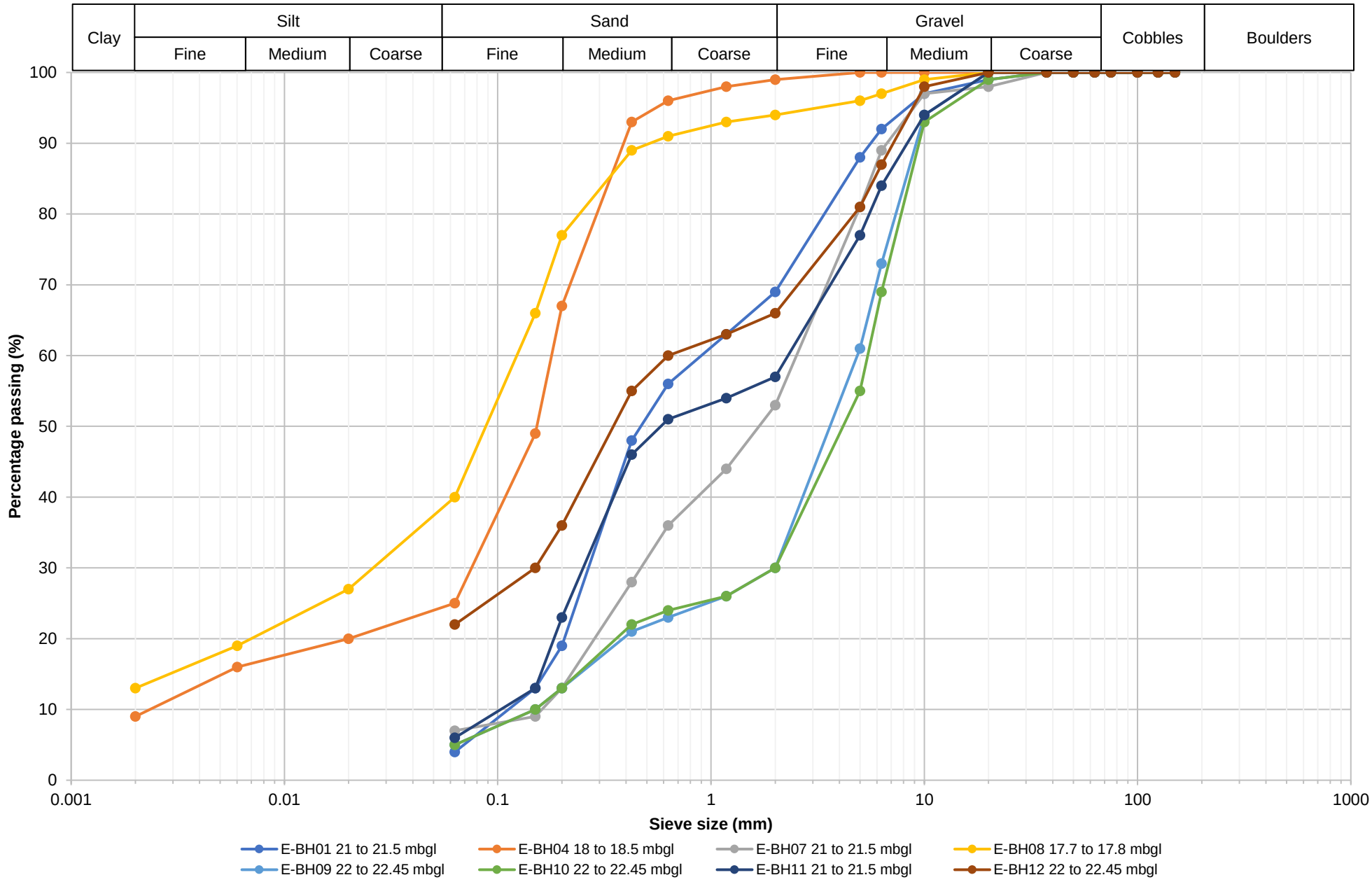

Title:	East Site Ammonia Storage: Plot of Particle size distribution (PSD) by Sample for GGTD					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.180	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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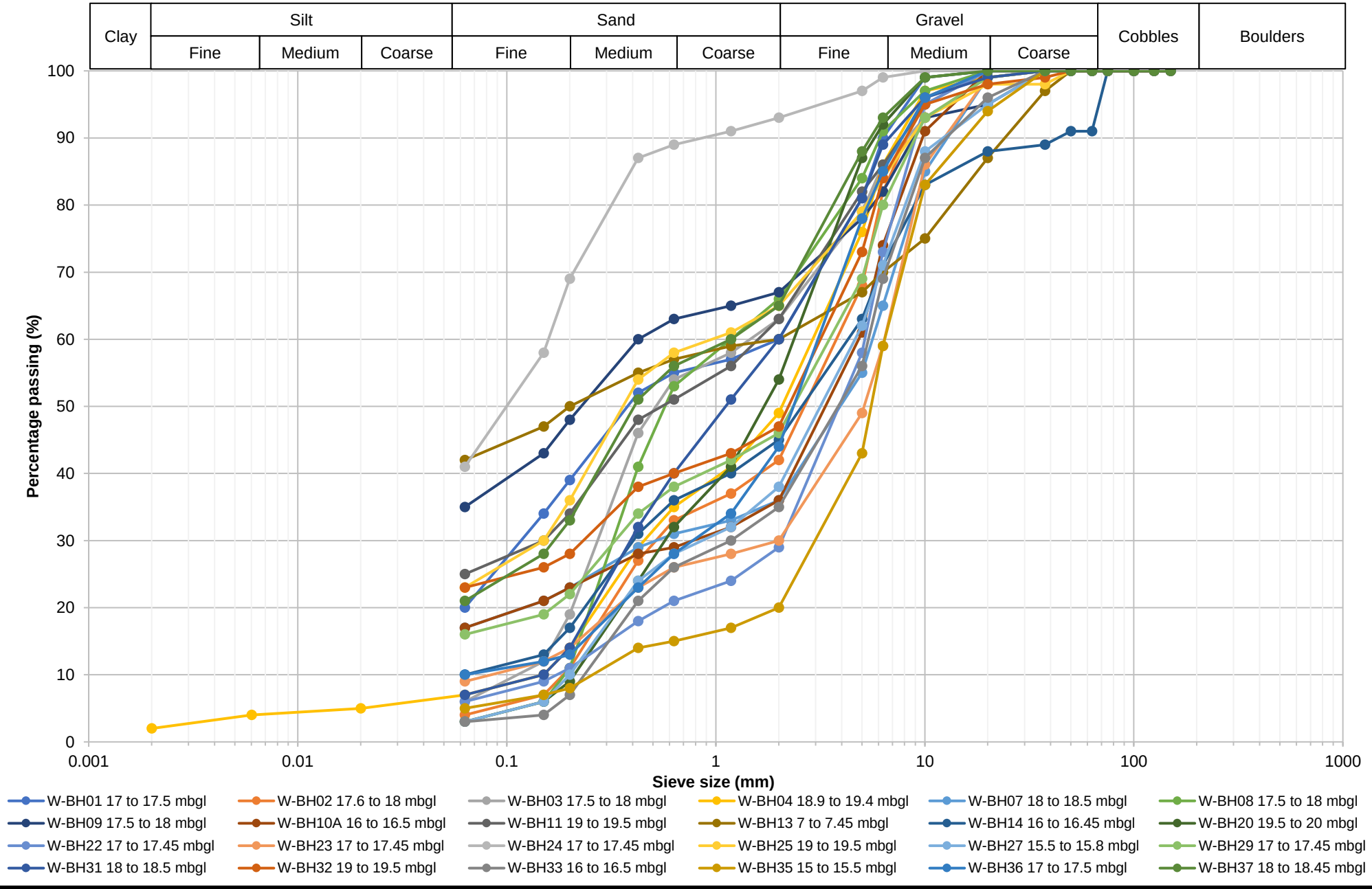

Title:	West Site: Plot of Particle size distribution (PSD) by Sample for GGTD					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.181	**Author:**	CC	**Date:**	Jun-23	**Location:**	Immingham
Revision:	0	**Checker:**	DW	**Date:**	Jun-23	**Client:**	Air Products

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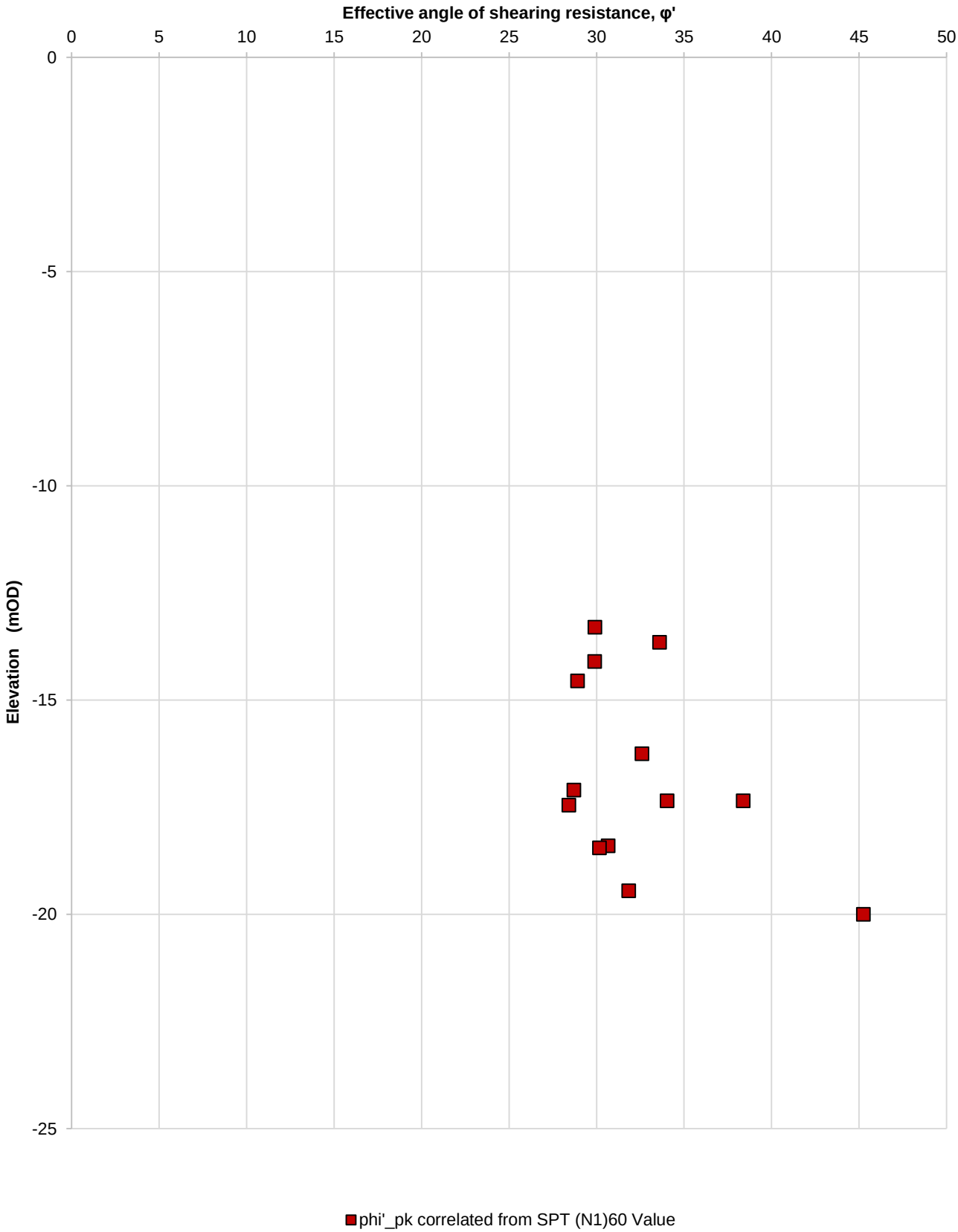

Title:	East Site Hydrogen Production: Effective Angle of Shearing Resistance by Elevation for Granular Glacial Till Deposits	**Figure No.:**	D.182
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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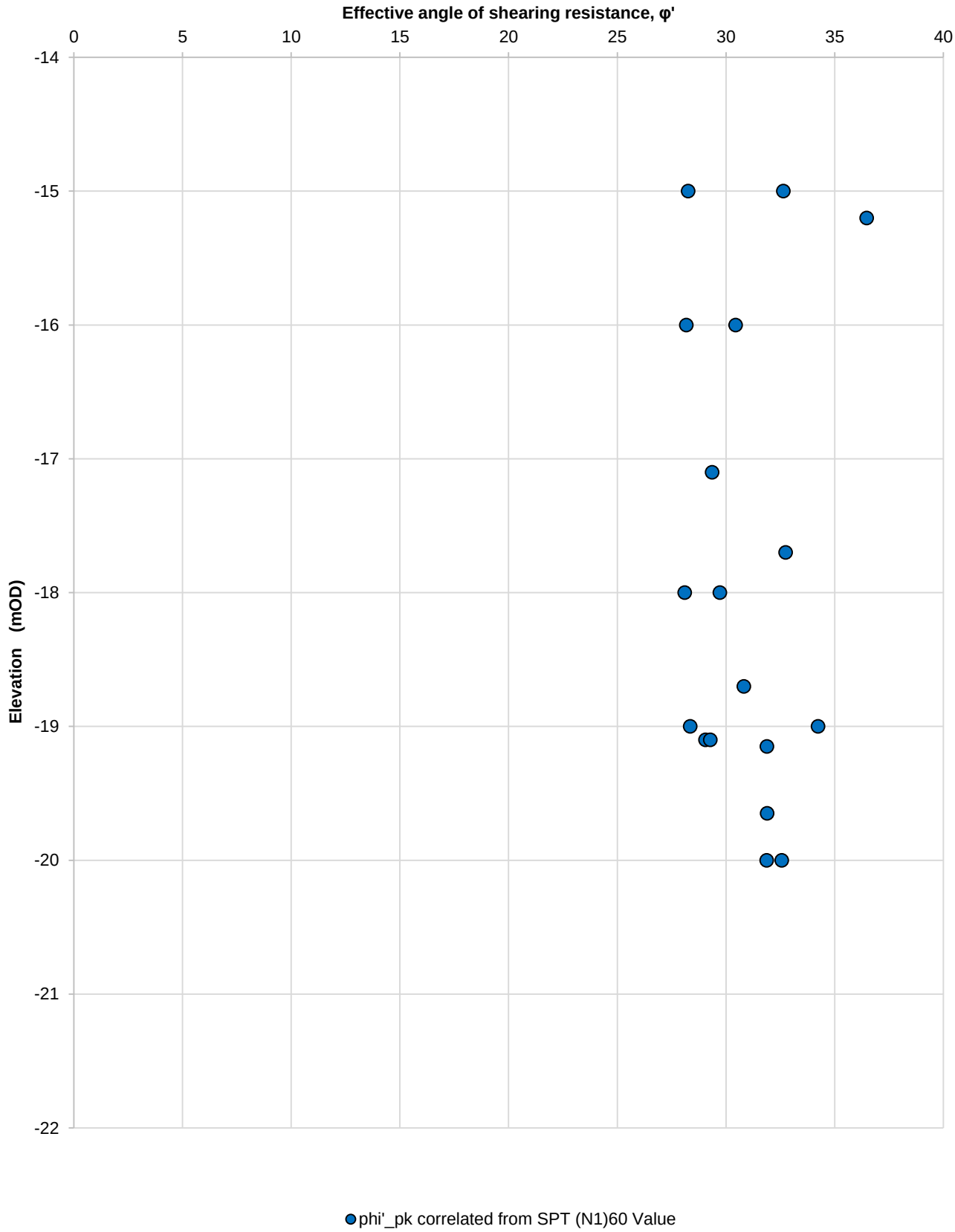

Title:	East Site Ammonia Storage: Effective Angle of Shearing Resistance by Elevation for Granular Glacial Till Deposits	**Figure No.:**	D.183
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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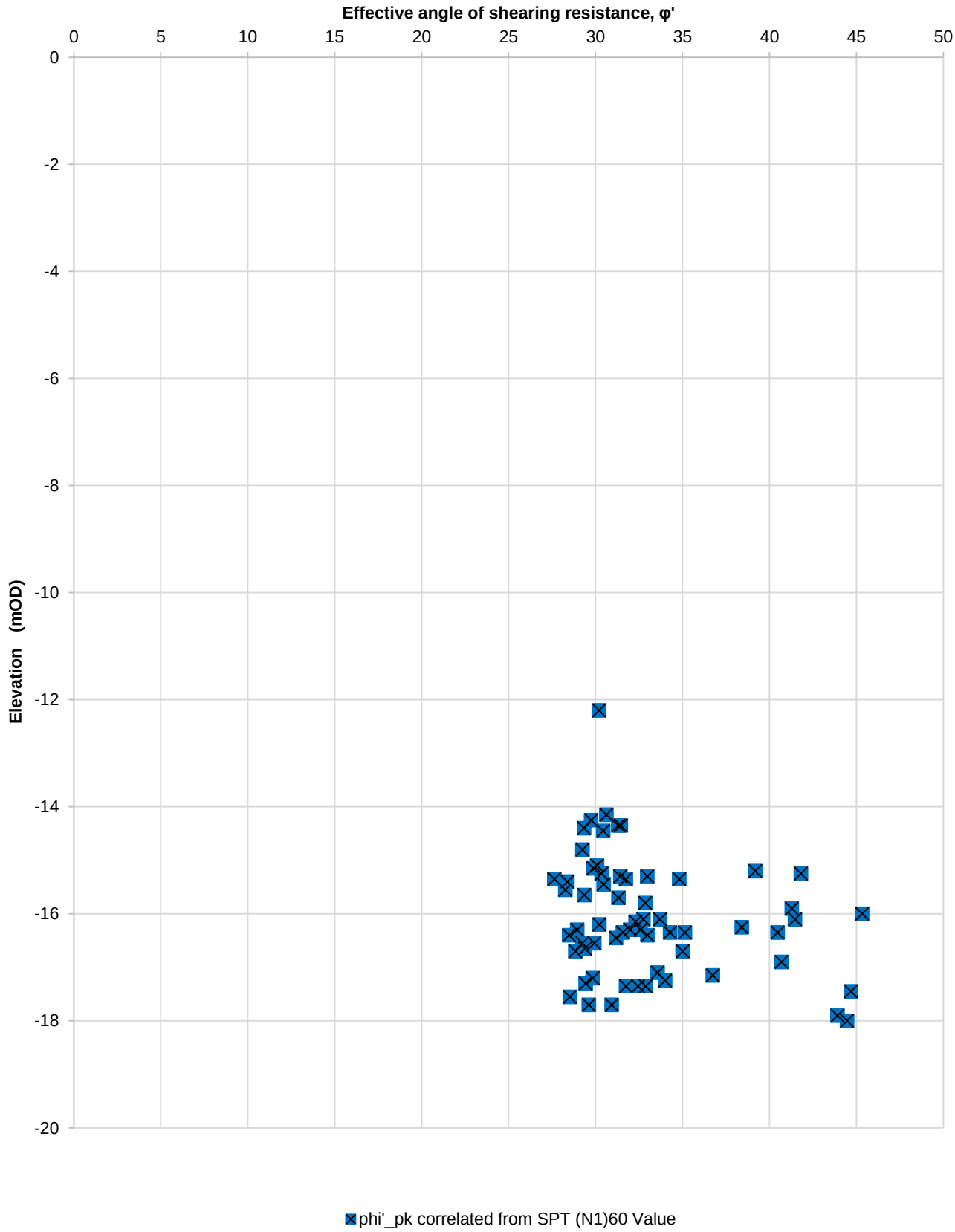

Title:	West Site: Effective Angle of Shearing Resistance by Elevation for Granular Glacial Till Deposits	**Figure No.:**	D.184
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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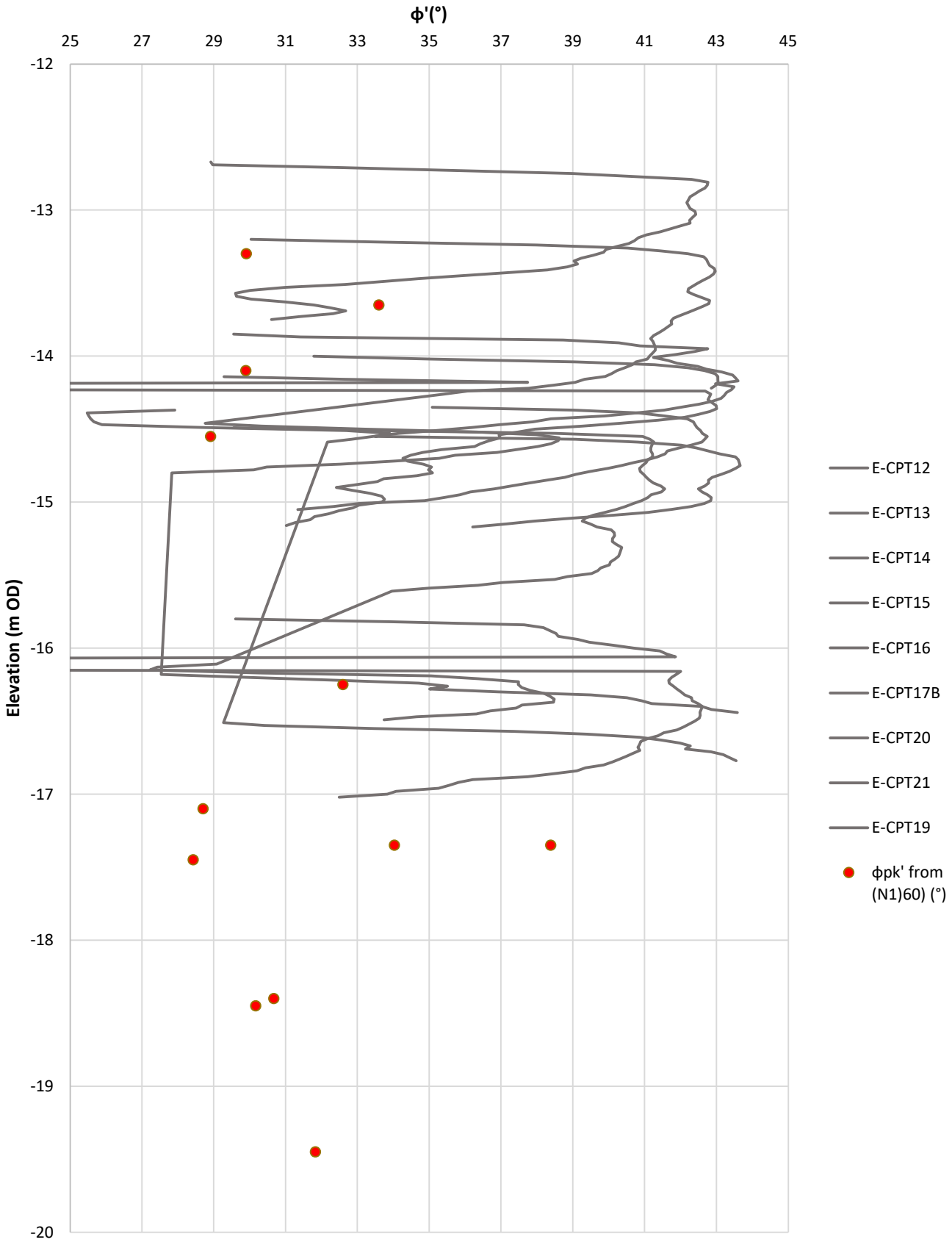

Title	East Site - Hydrogen Production - GGTD - ϕ' angle (CPT - Robert. and Campanella, SPT) vs Elevation	**Figure No.:** D.185	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

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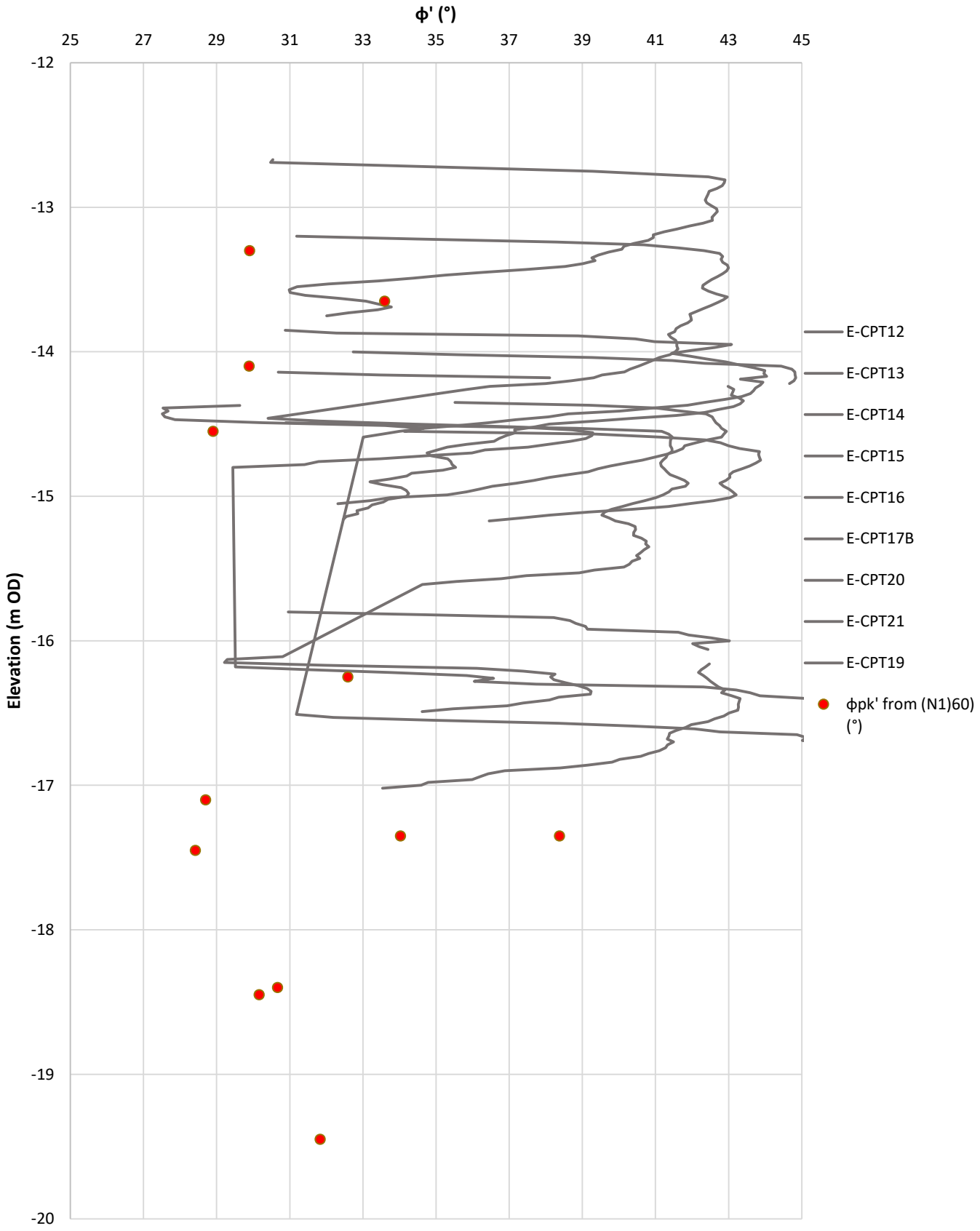

Title	East Site - Hydrogen Production - GGTD - ϕ' angle (CPT - Kulhawy and Mayne, SPT) vs Elevation	**Figure No.:** D.186	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

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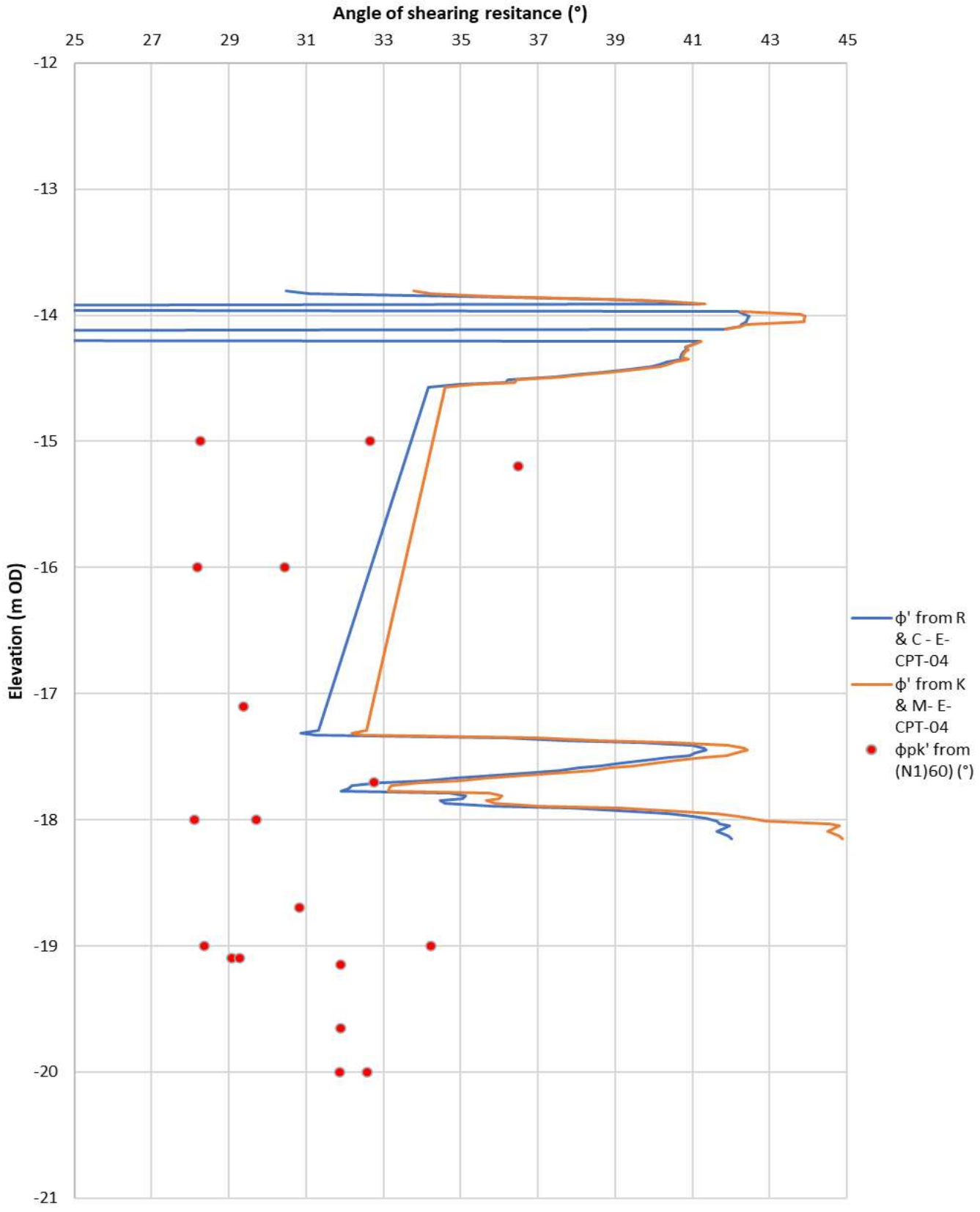
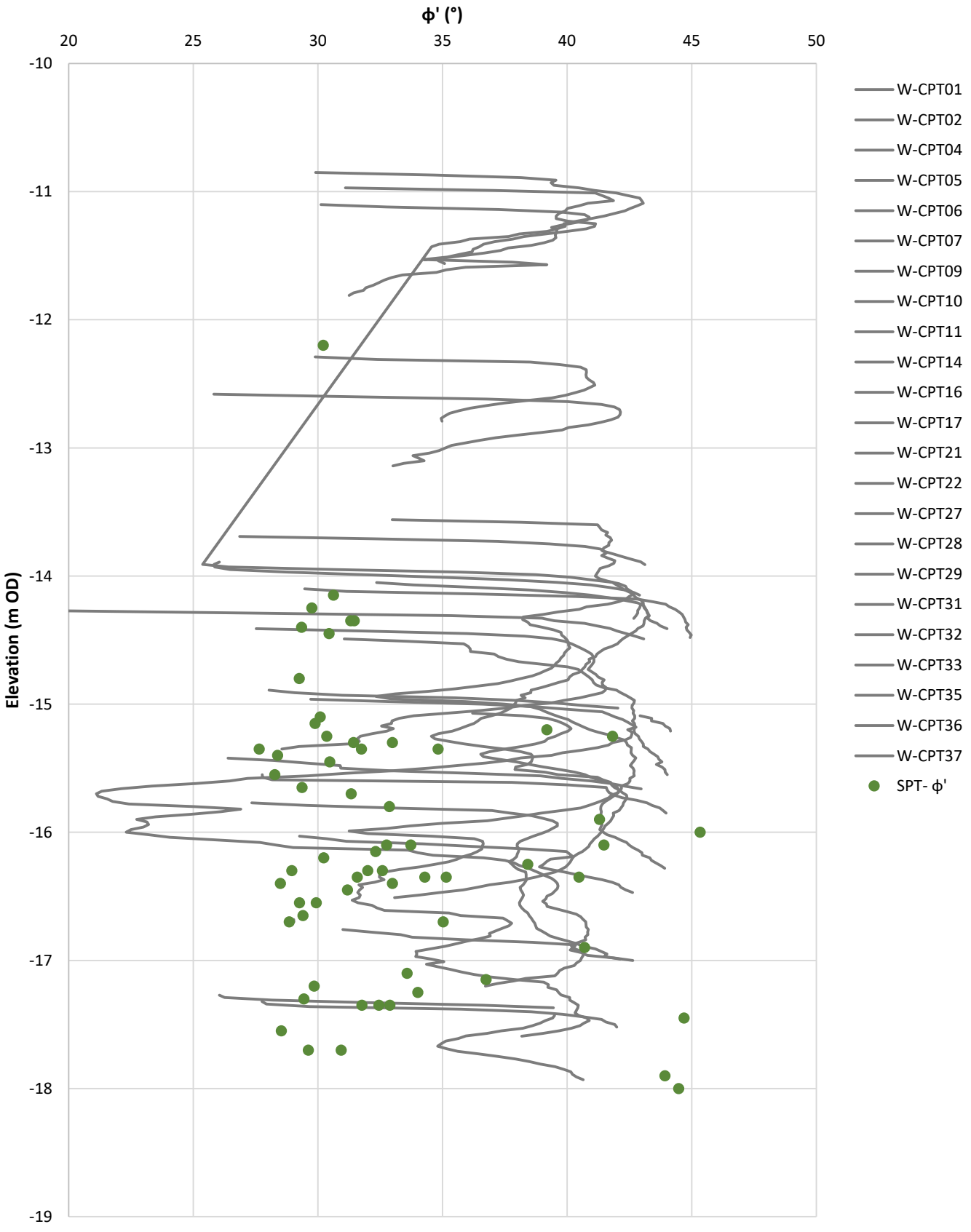


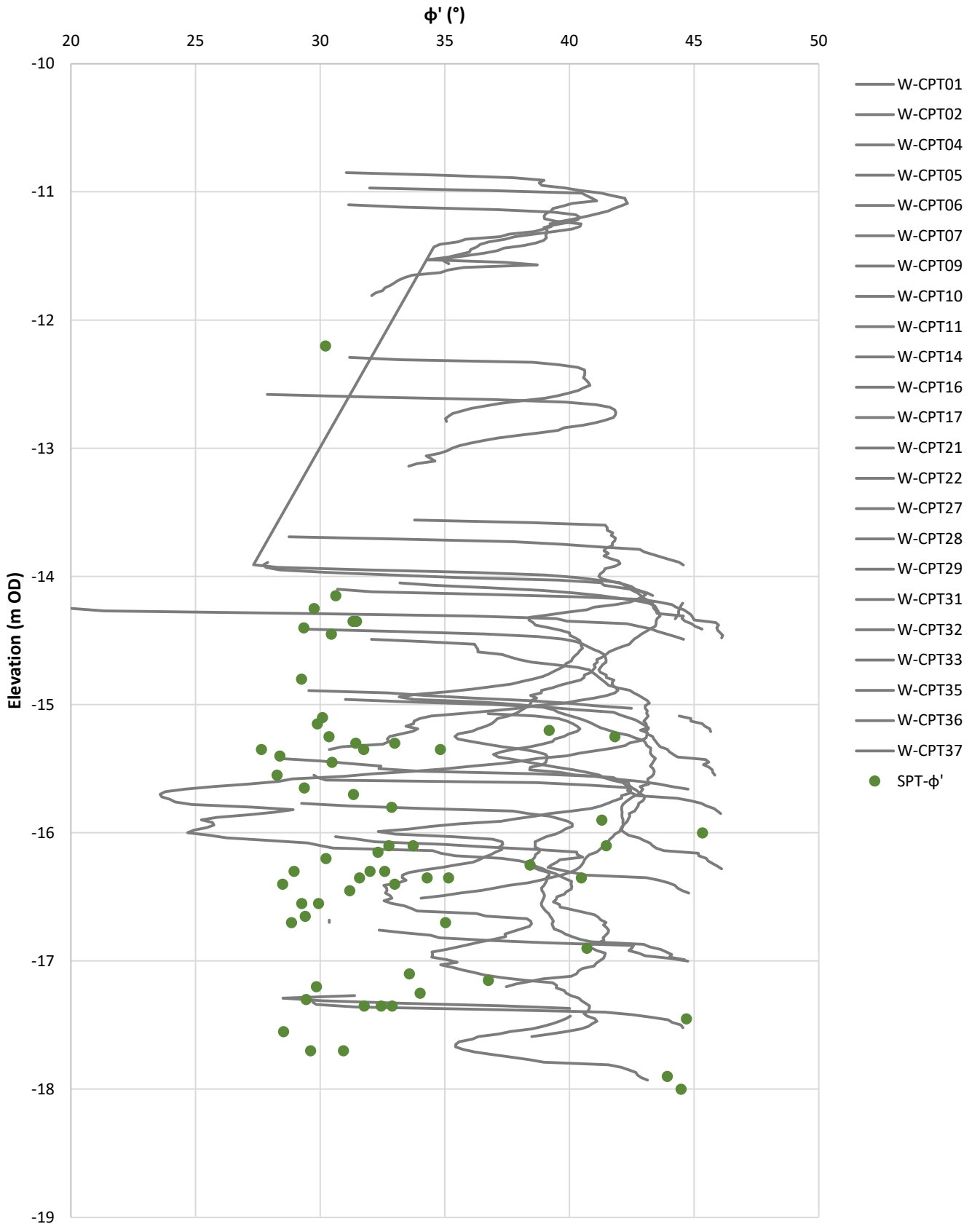
Title	East Site - Ammonia Storage - GGTD - ϕ' angle (CPT - R. and C. - K. and M., SPT) vs Elevation	**Figure No.:** D.187	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author**	AL
Proj. No	60687114	**Date**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

AECOM



Title	West Site - GGTD - ϕ' angle (CPT - Robertson and Campanella, SPT) vs Elevation	**Figure No.:** D.188	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

AECOM



Title	West Site - GGTD - ϕ' angle (CPT - Kulhawy and Mayne, SPT) vs Elevation	**Figure No.:** D.189	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

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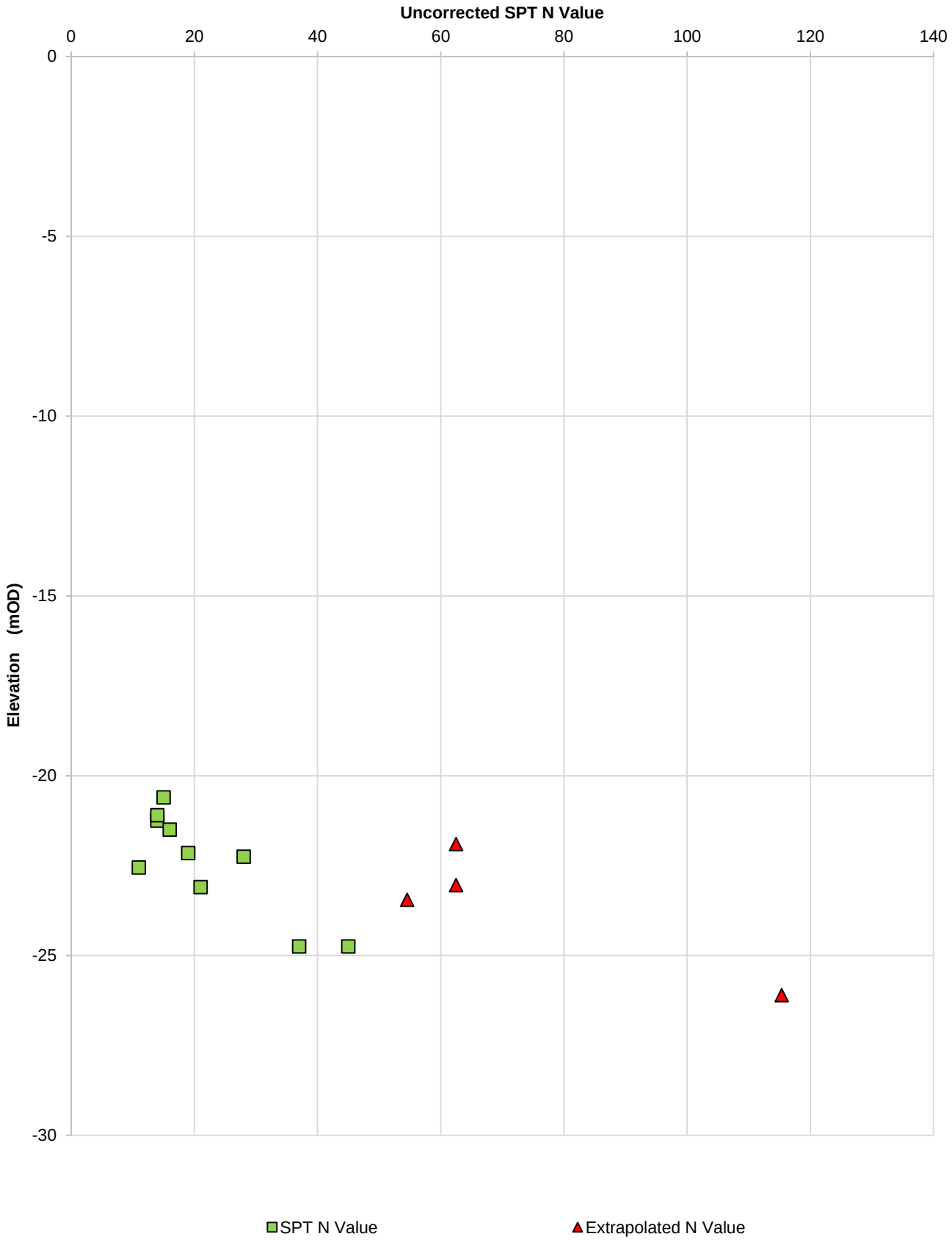

Title:	East Site Hydrogen Production: Uncorrected SPT N Value by Elevation for Weathered Flamborough Chalk Formation	**Figure No.:**	D.190
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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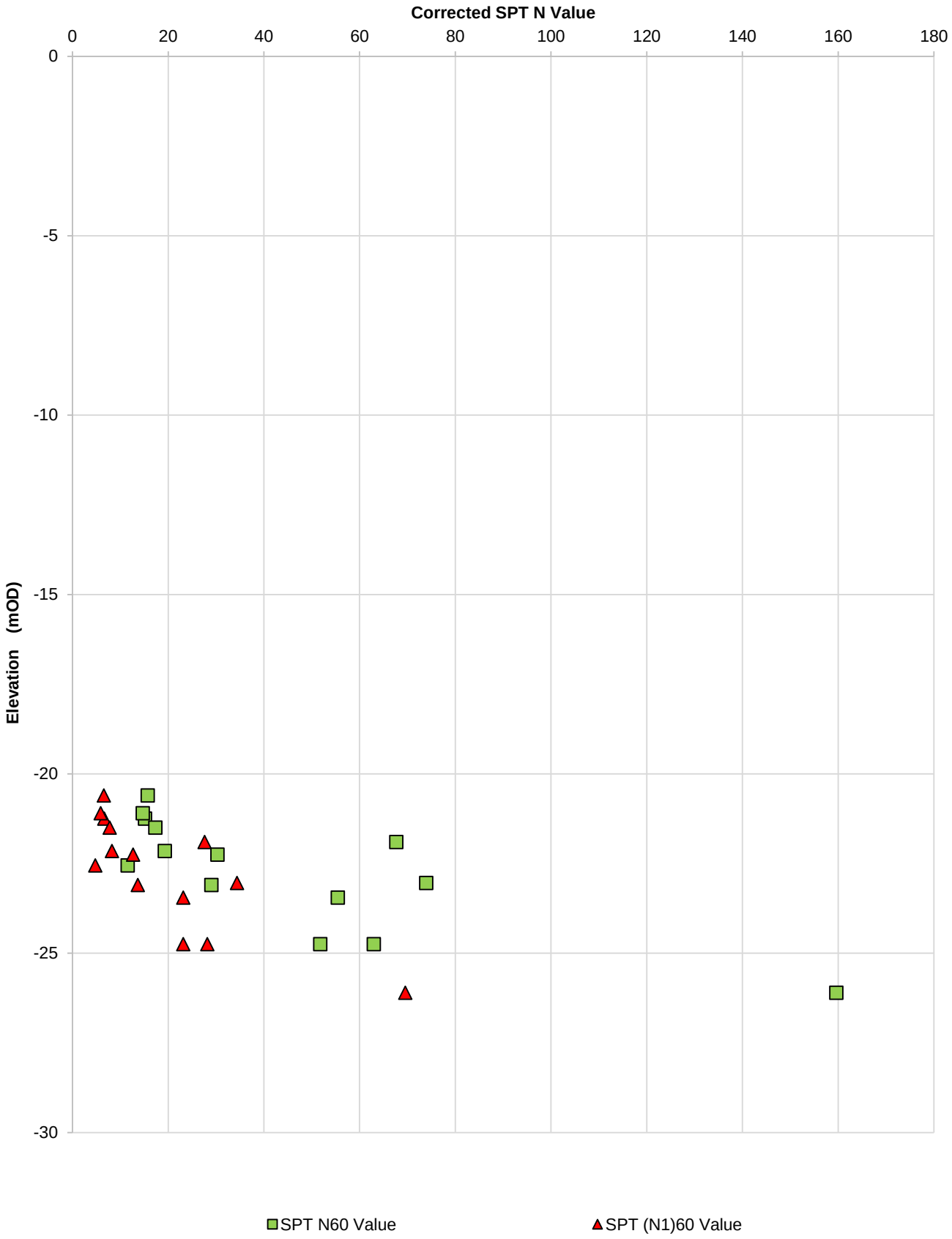
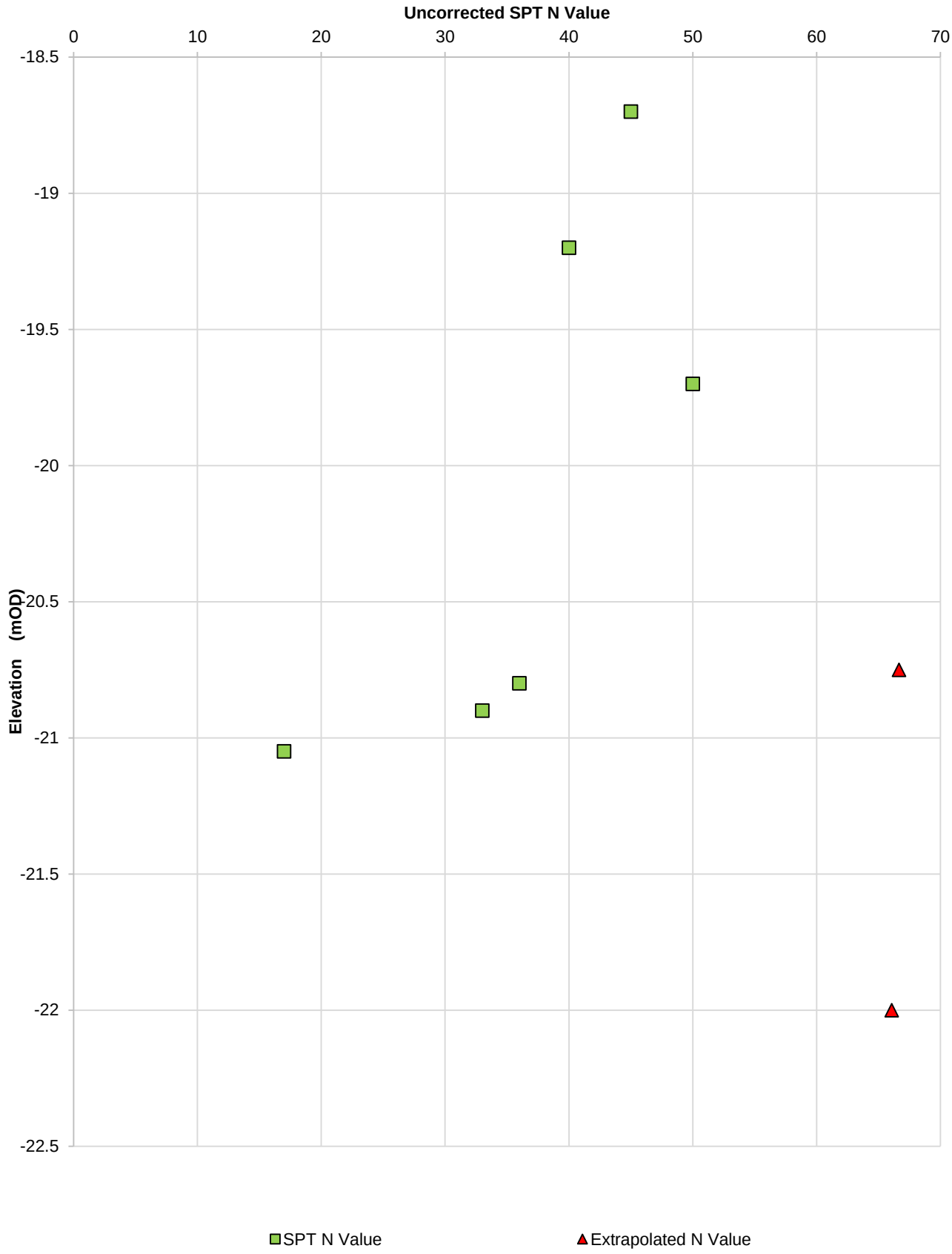


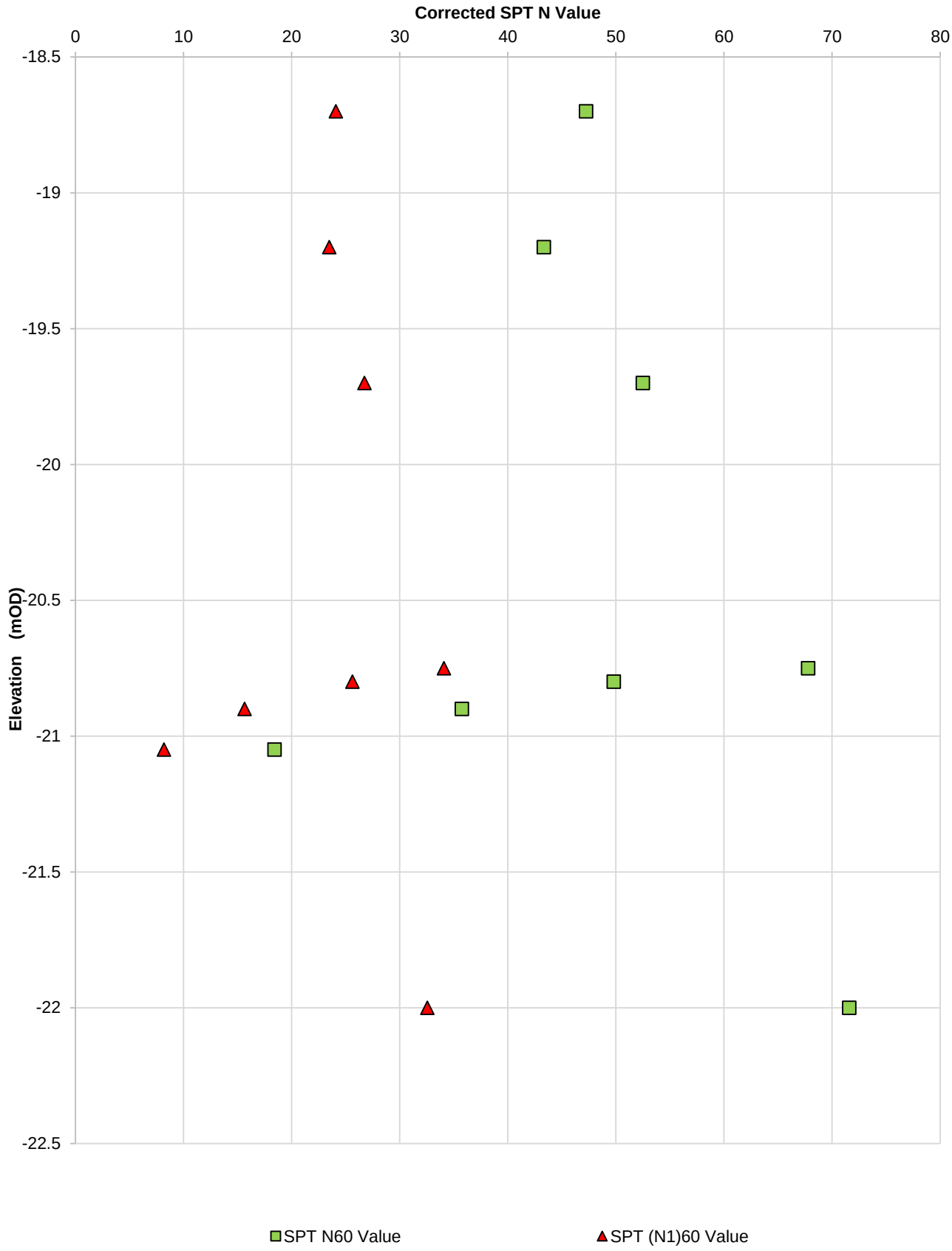
Title:	East Site Hydrogen Production: Corrected SPT N Value by Elevation for Weathered Flamborough Chalk Formation	**Figure No.:**	D.191
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

AECOM



Title:	East Site Ammonia Storage: Uncorrected SPT N Value by Elevation for Weathered Flamborough Chalk Formation	**Figure No.:**	D.192
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

AECOM



Title:	East Site Ammonia Storage: Corrected SPT N Value by Elevation for Weathered Flamborough Chalk Formation	**Figure No.:**	D.193
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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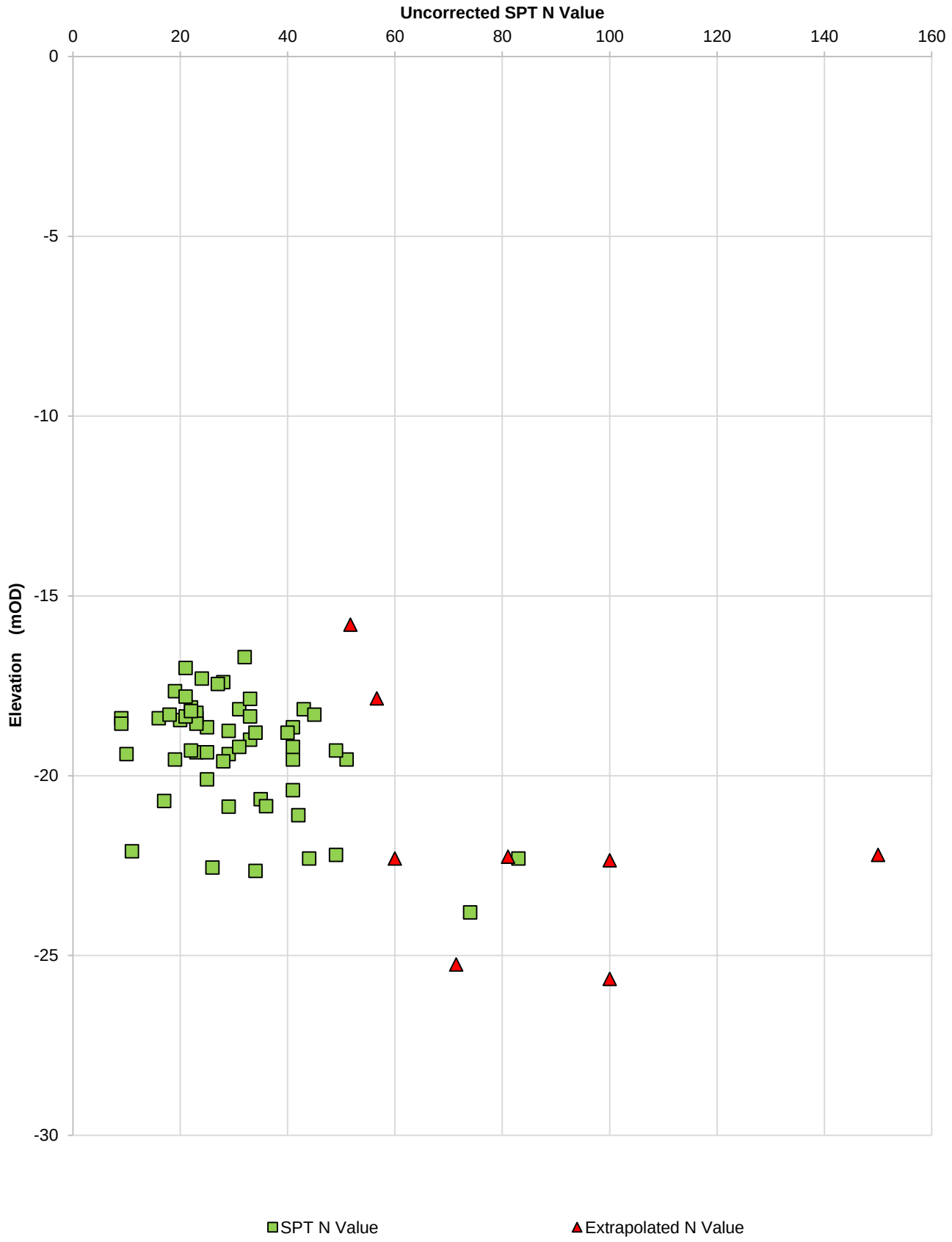

Title:	West Site: Uncorrected SPT N Value by Elevation for Weathered Flamborough Chalk Formation	**Figure No.:**	D.194
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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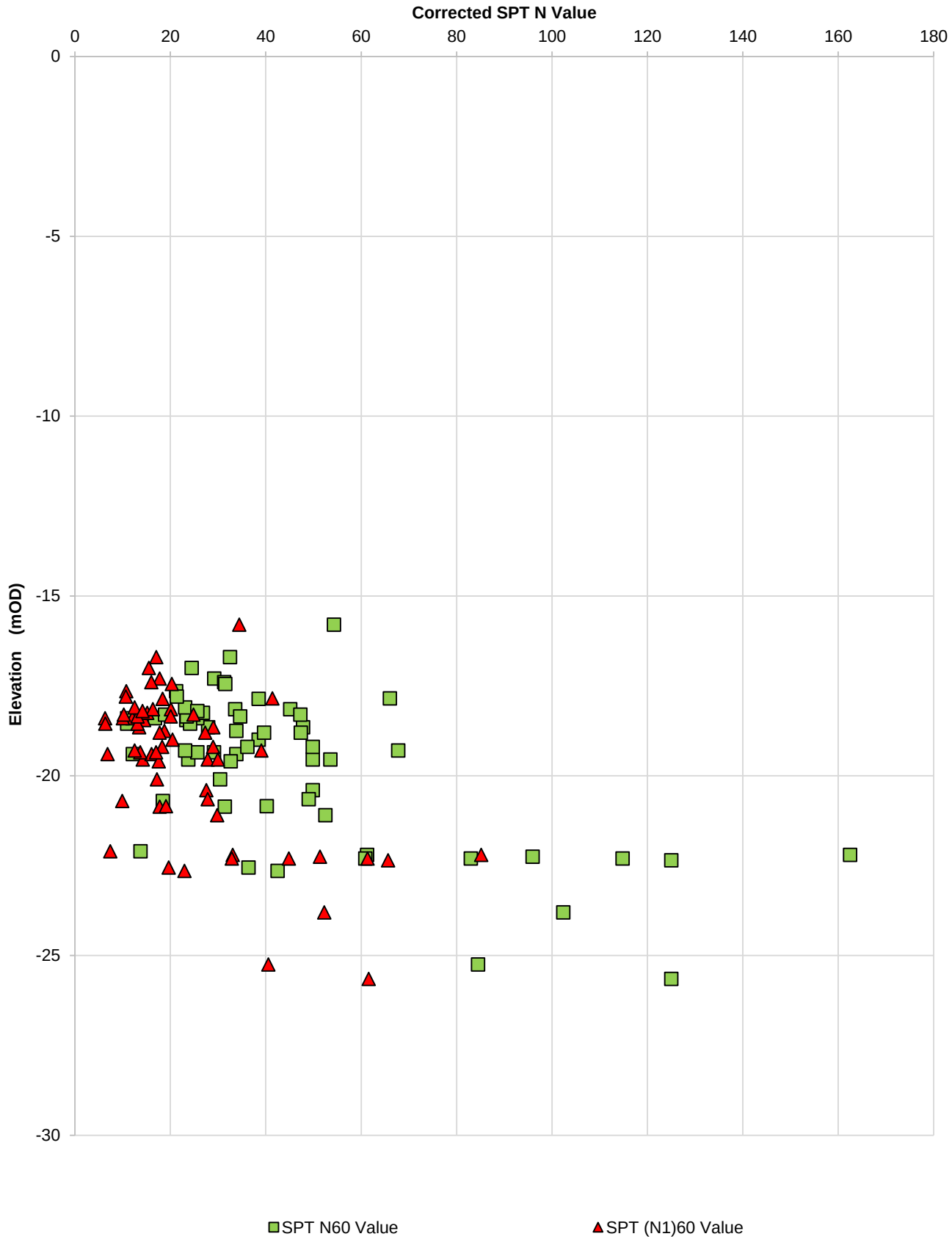

Title:	West Site: Corrected SPT N Value by Elevation for Weathered Flamborough Chalk Formation	**Figure No.:**	D.195
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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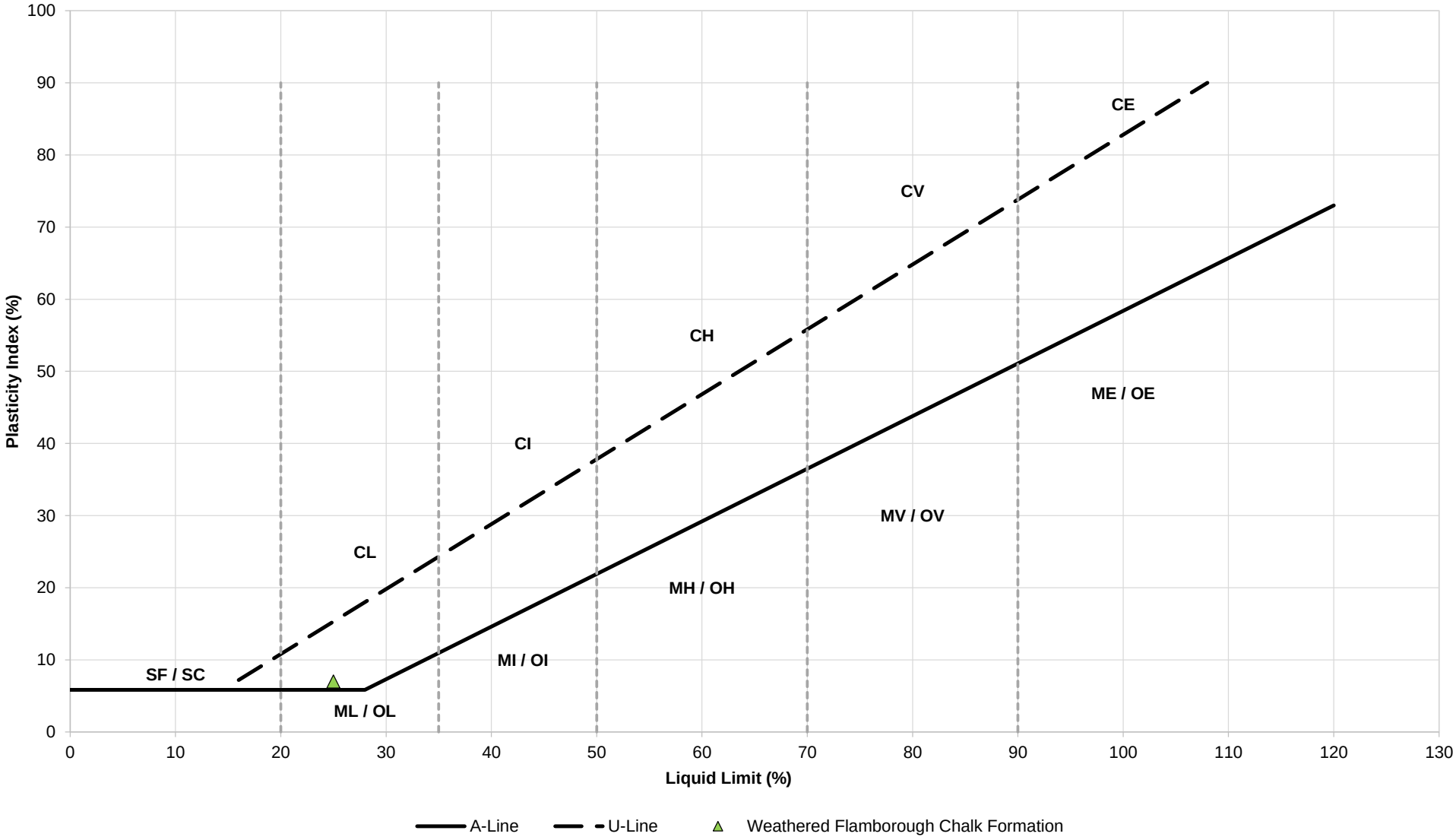
Soil type labels: C = Clay, M = Silt, O = Organic, SF / SC = Very silty or clayey sand
Plasticity labels: L = Low, I = Intermediate, H = High, V = Very high, E = Extremely high



Title:	West Site - Plasticity chart - Weathered Flamborough Chalk Formation					**Project:**	Immingham Green Energy Terminal
						Project No.:	60687114
Figure No.:	D.196	**Author:**	CC	**Date:**	June-23	**Location:**	Immingham
Revision:	P01	**Checker:**	DW	**Date:**	June-23	**Client:**	Air Products

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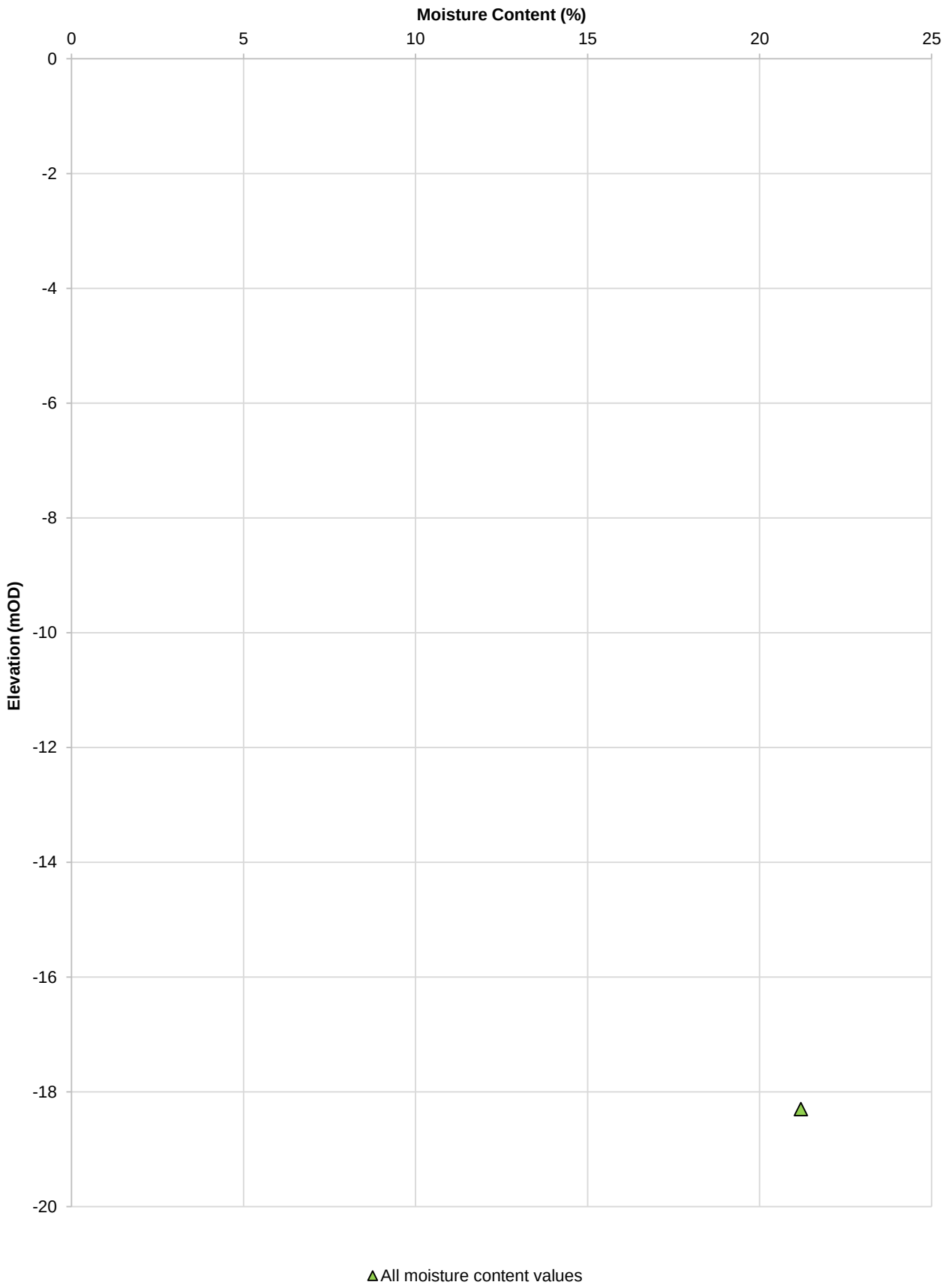
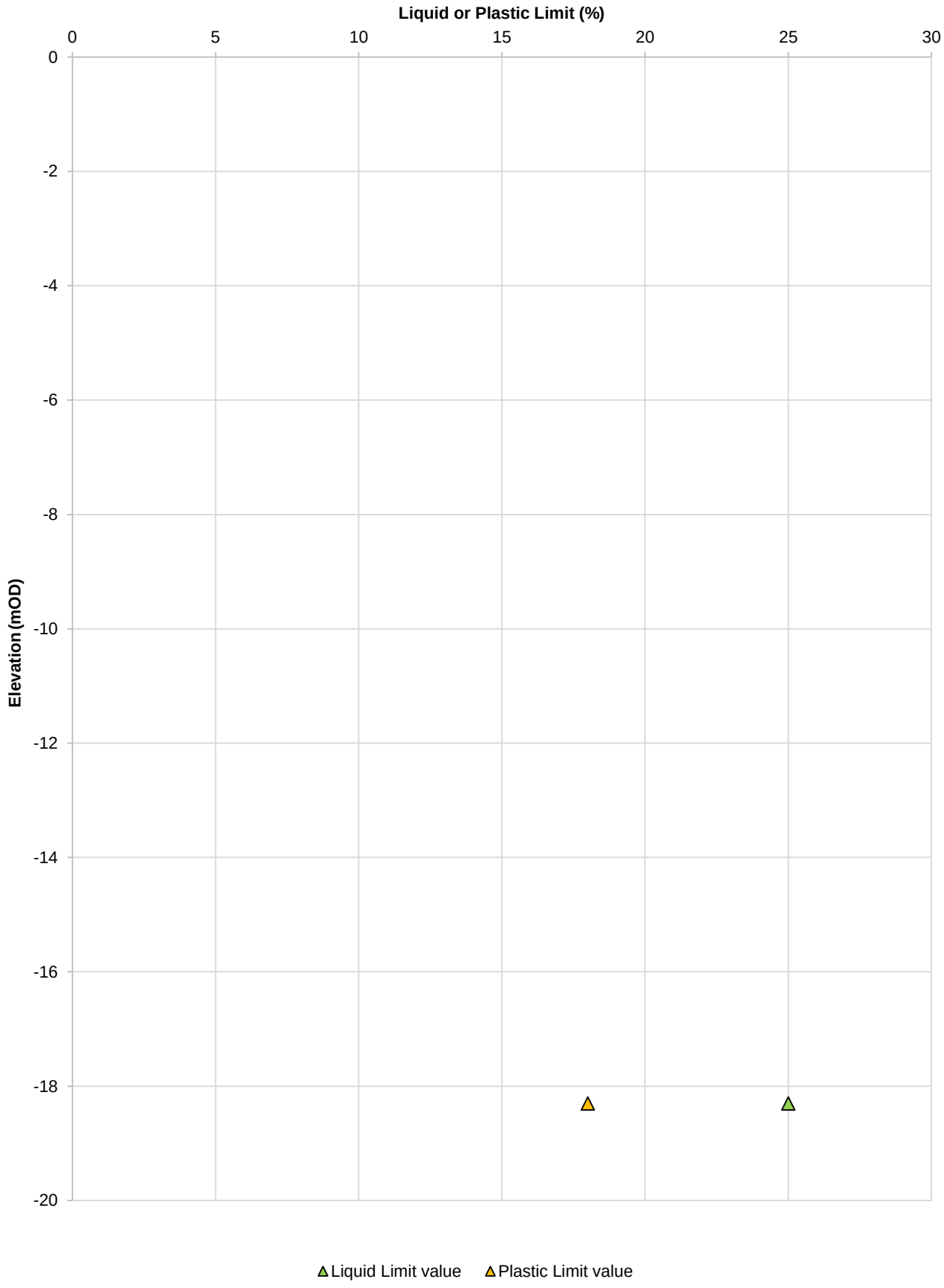


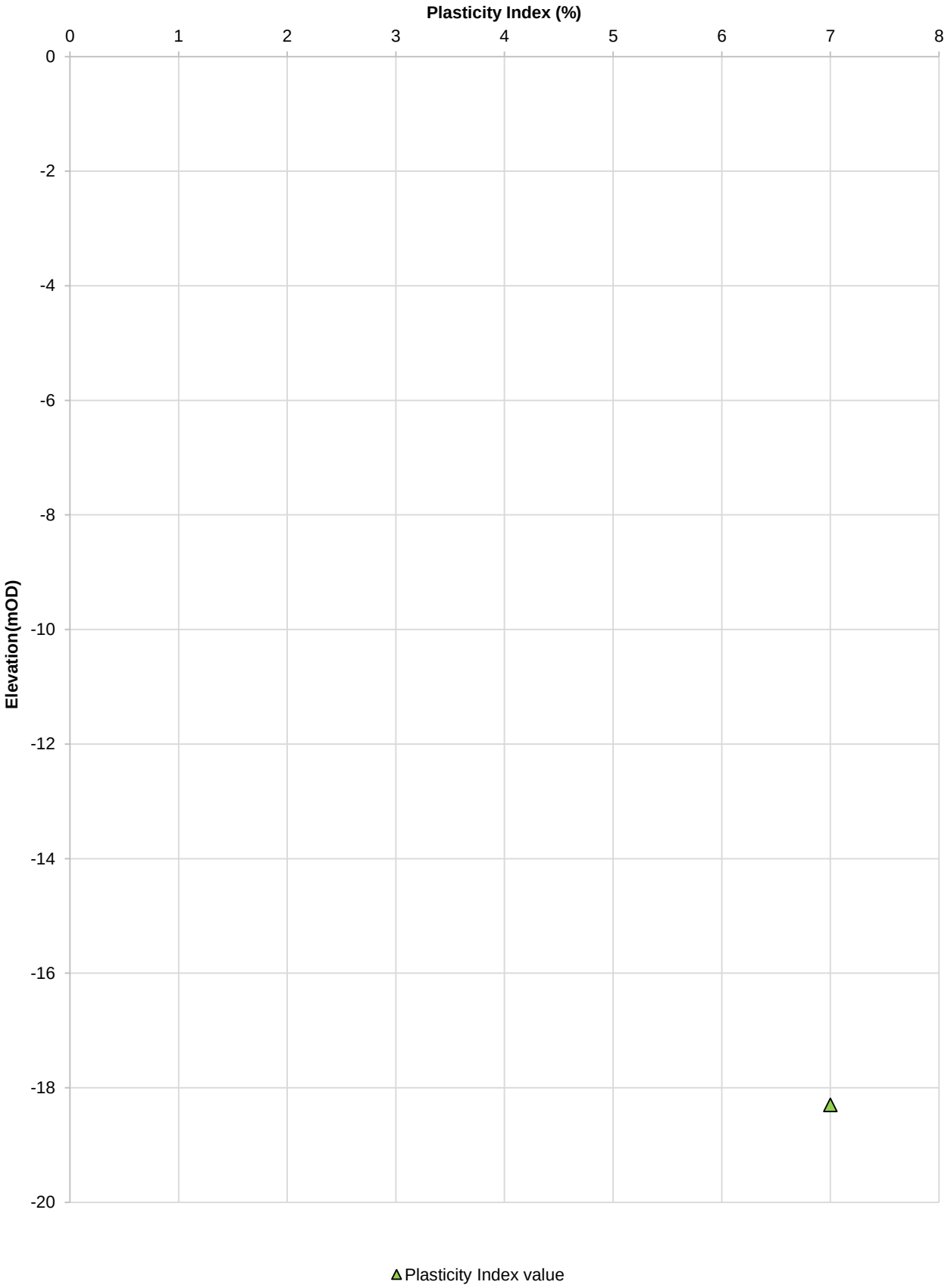
Title:	West Site - Moisture content by Elevation for Weathered Flamborough Chalk Formation	**Fig No.:**	D.197
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



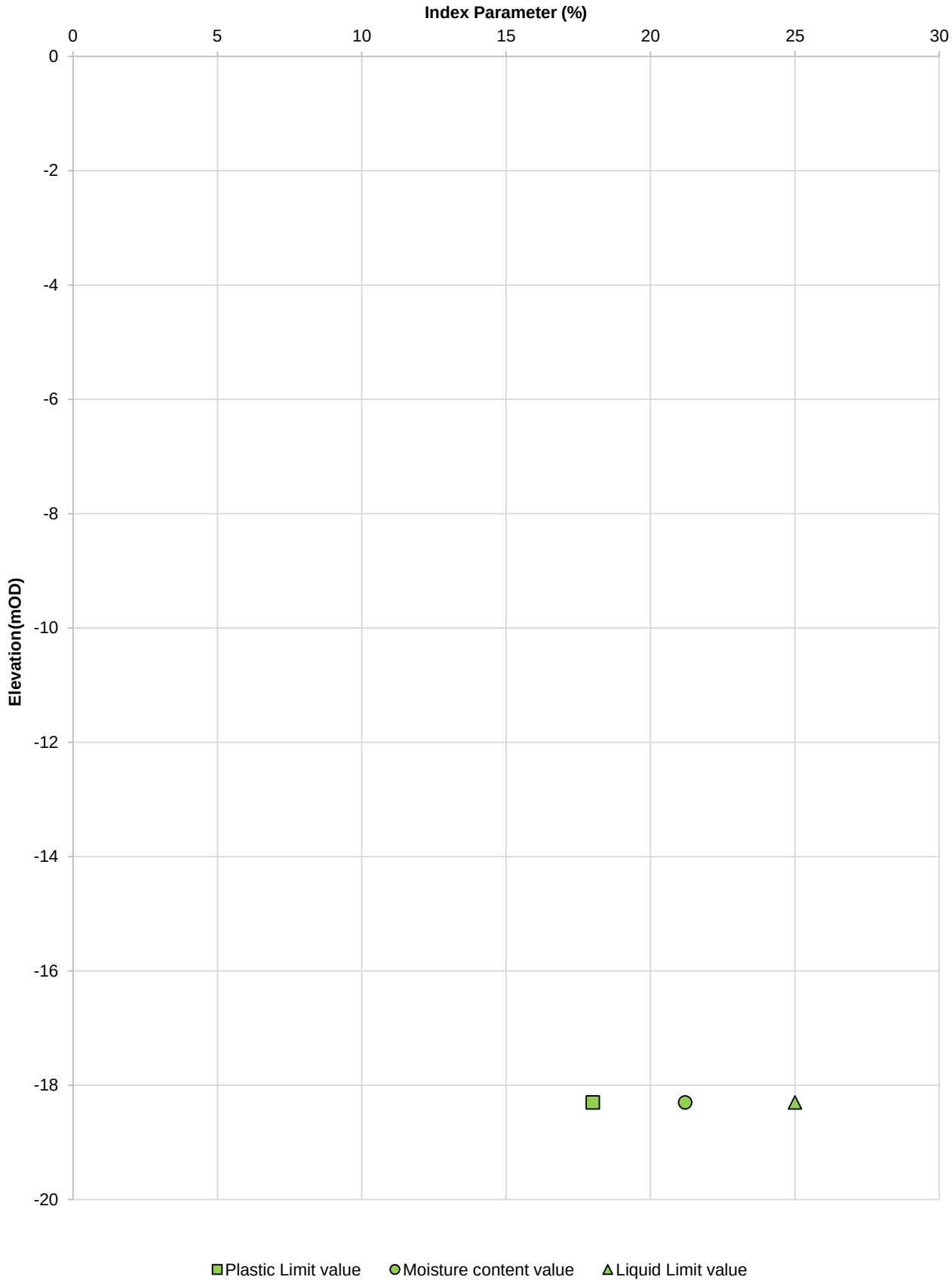
Title:	West Site - Liquid Limit and Plastic Limit by Elevation for Weathered Flamborough Chalk Formation	**Fig No.:**	D.198
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



Title:	West Site - Plasticity Index by Elevation for Weathered Flamborough Chalk Formation	**Fig No.:**	D.199
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



Title:	West Site - Moisture content & Atterberg Limits by Elevation - Weathered Flamborough Chalk Formation	**Fig No.:**	D.200
		Revision:	0
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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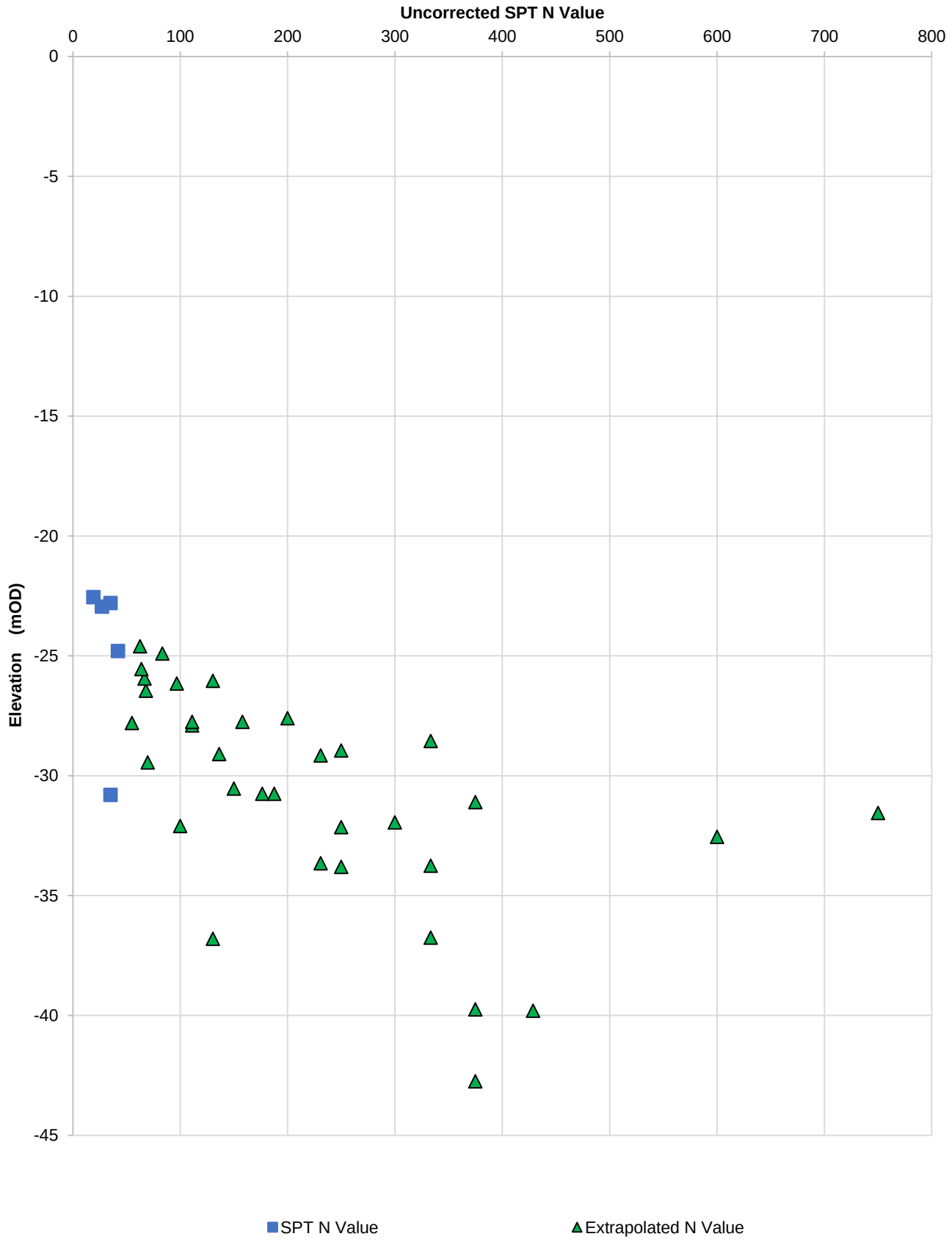

Title:	East Site Hydrogen Production: Uncorrected SPT N Value by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.201
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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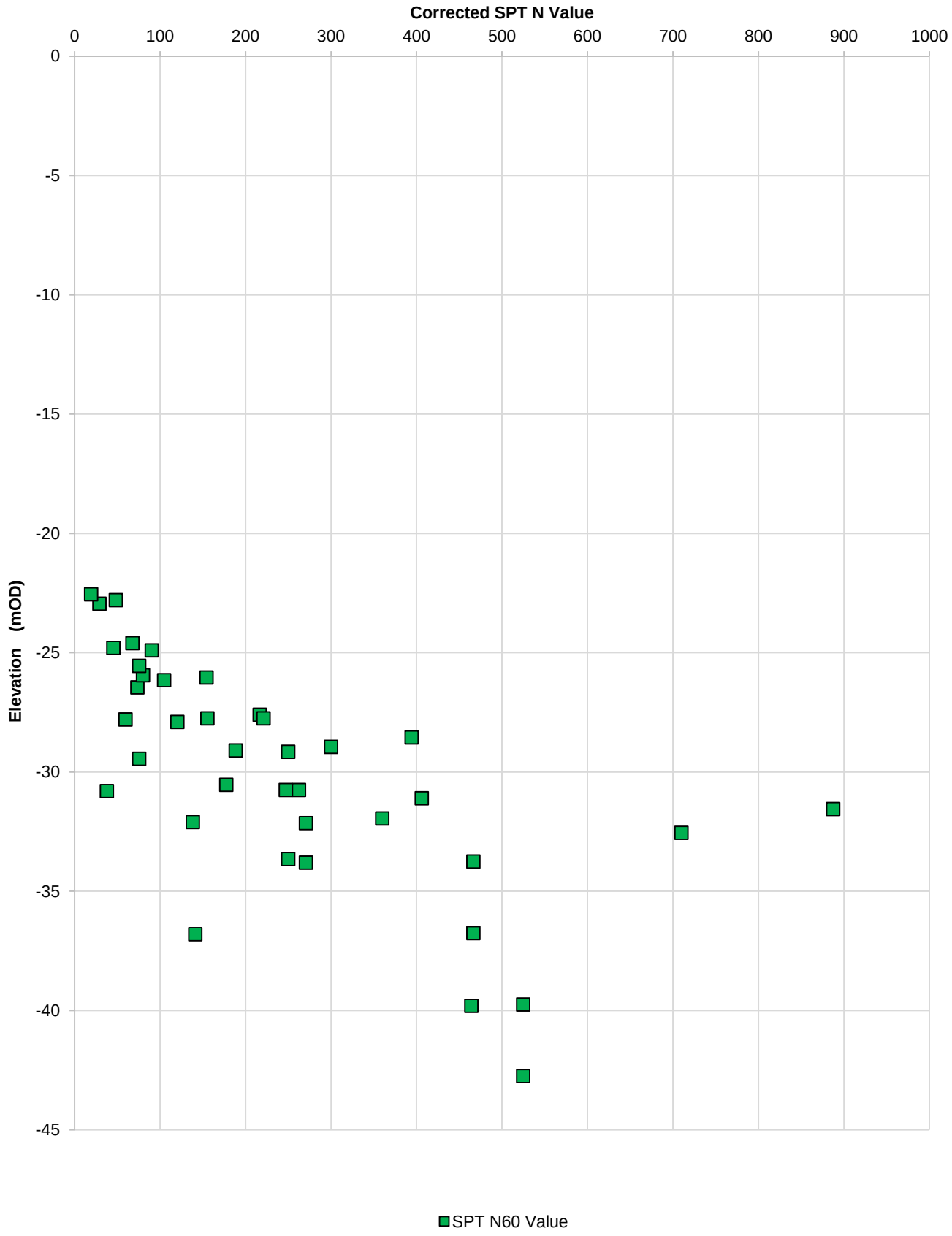

Title:	East Site Hydrogen Production: Corrected SPT N Value by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.202
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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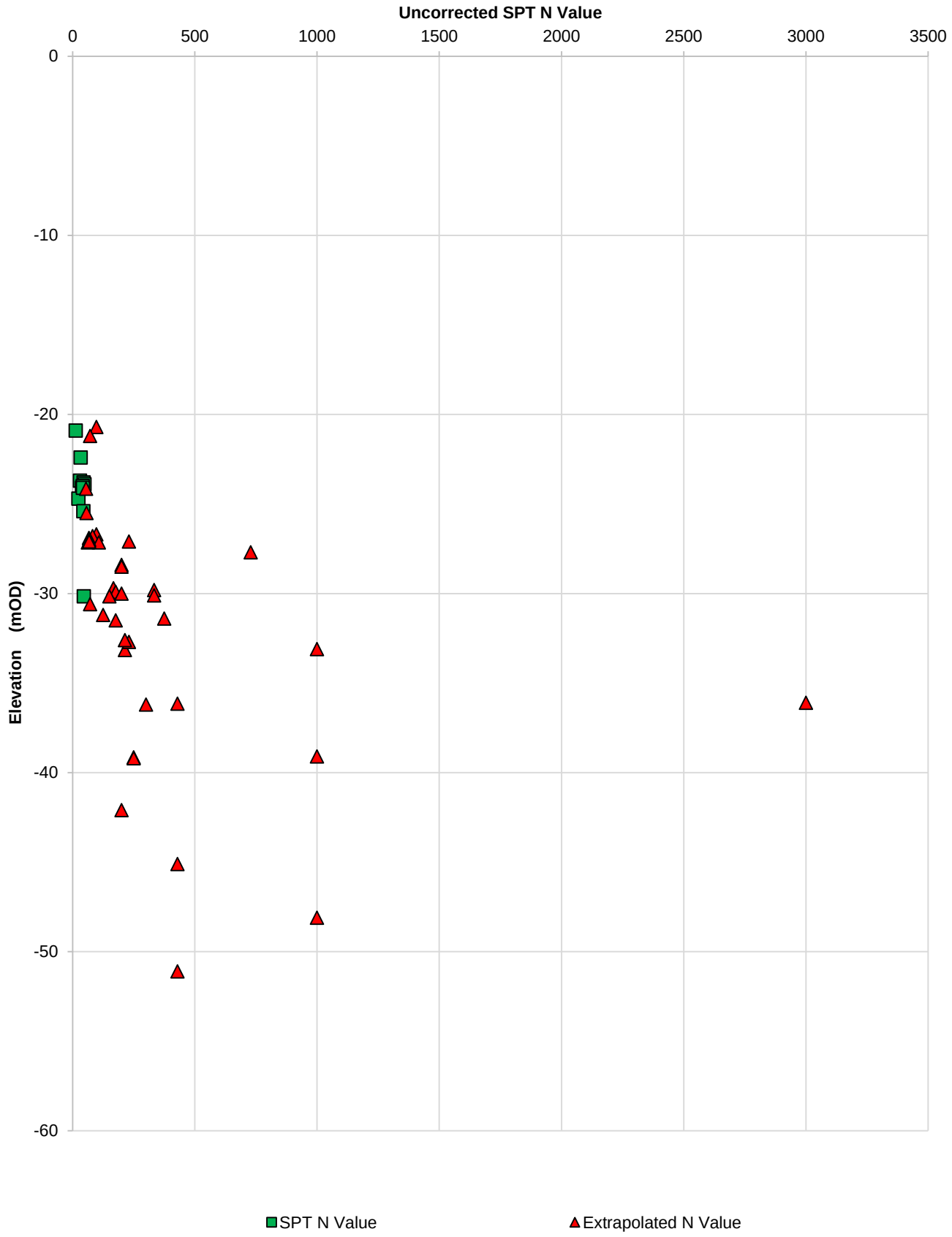

Title:	East Site Ammonia Storage: Uncorrected SPT N Value by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.203
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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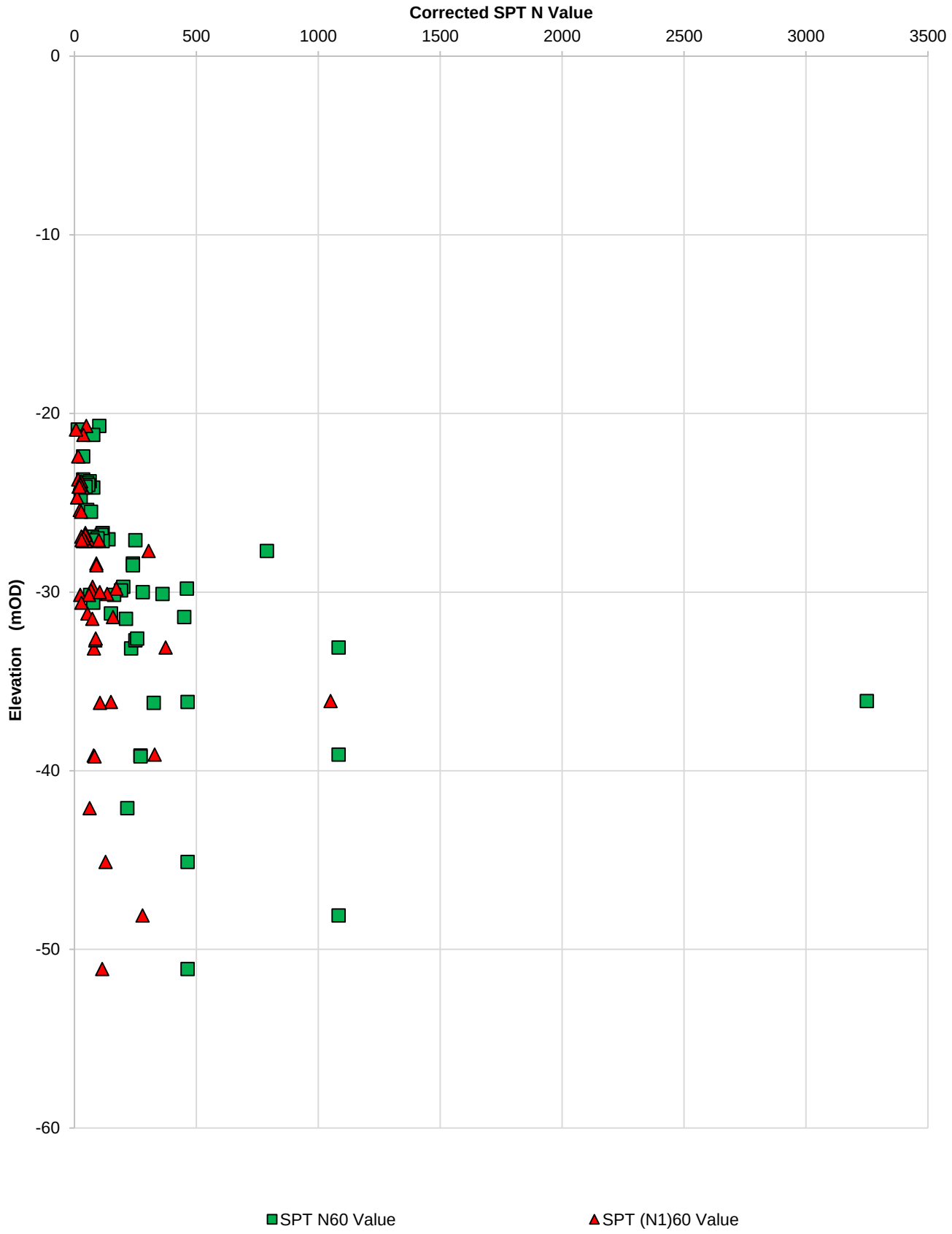

Title:	East Site Ammonia Storage: Corrected SPT N Value by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.204
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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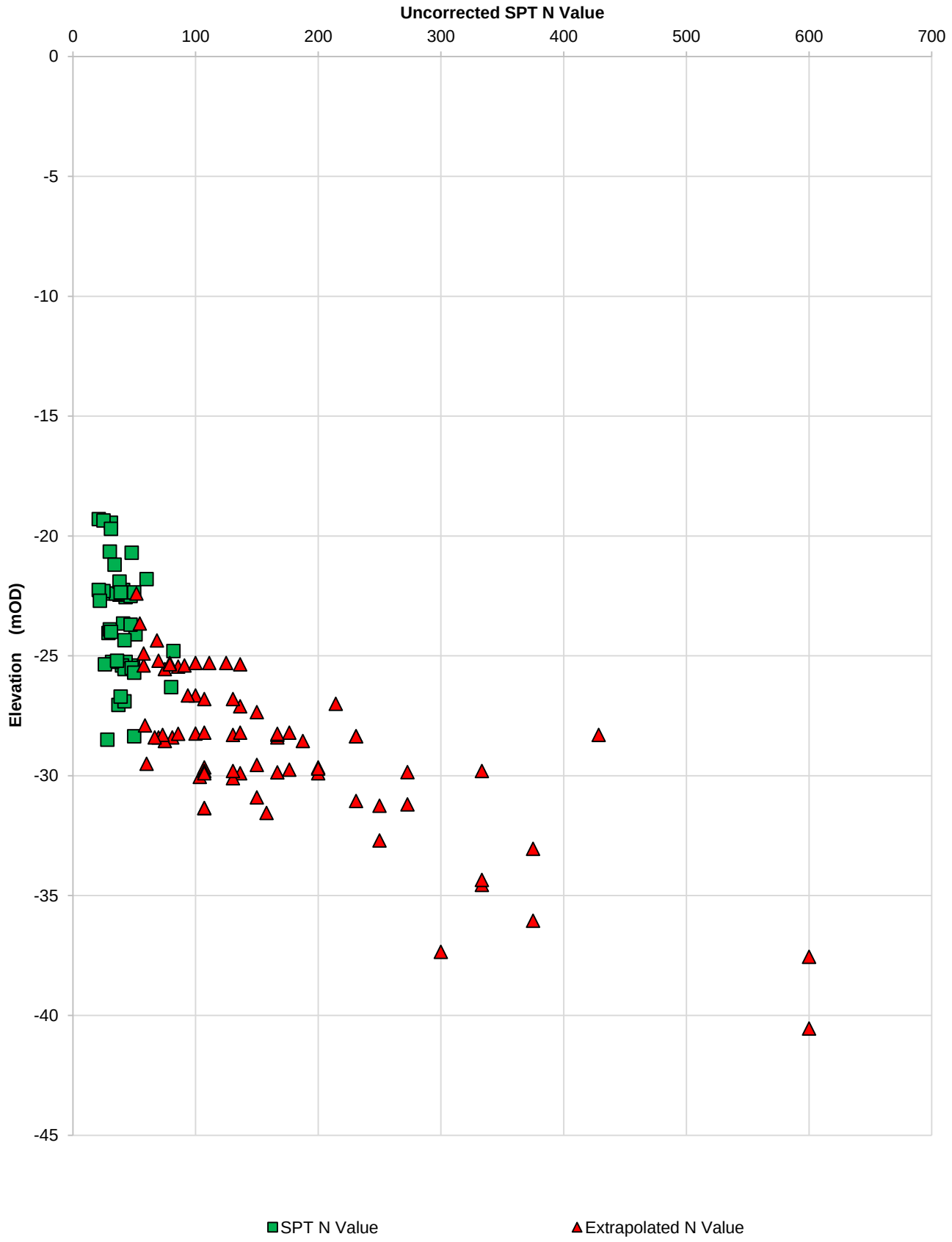

Title:	West Site: Uncorrected SPT N Value by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.205
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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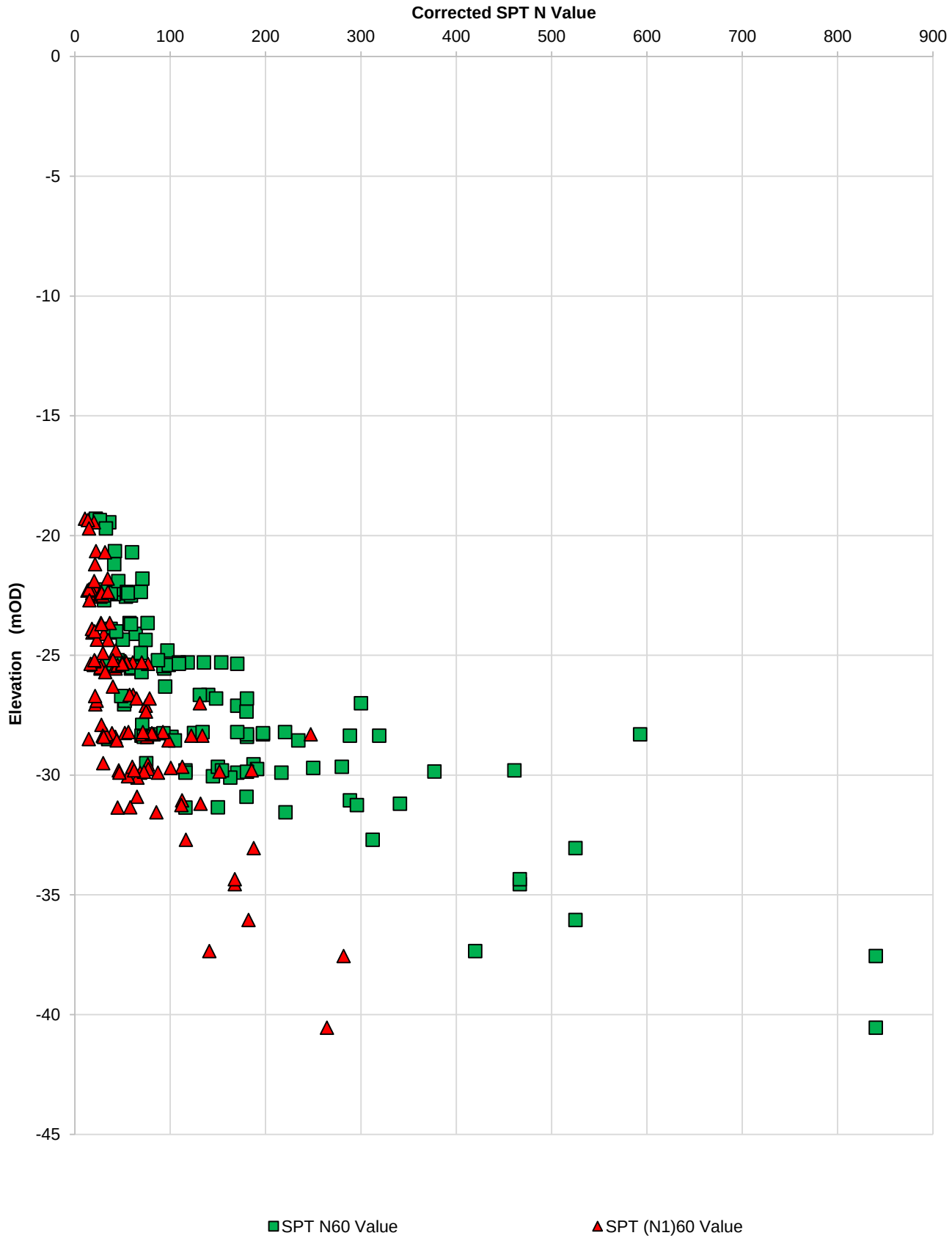

Title:	West Site: Corrected SPT N Value by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.206
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Air Products	**Checker:**	DW
Client:	Immingham	**Date:**	June-23

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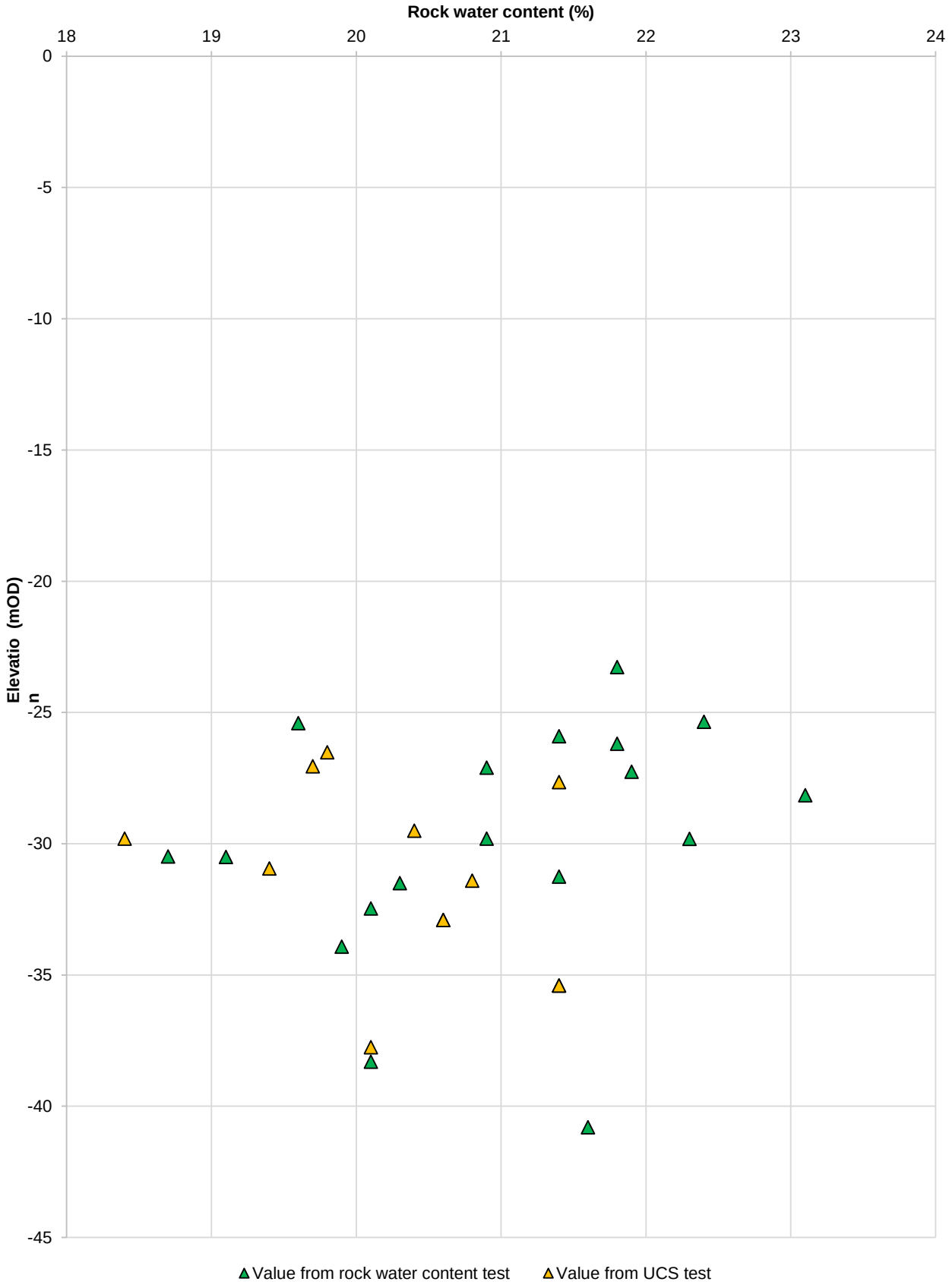

Title:	East Site Hydrogen Production: Rock water content by Elevation for Flamborough Chalk Formation	**Fig No.:**	D.207
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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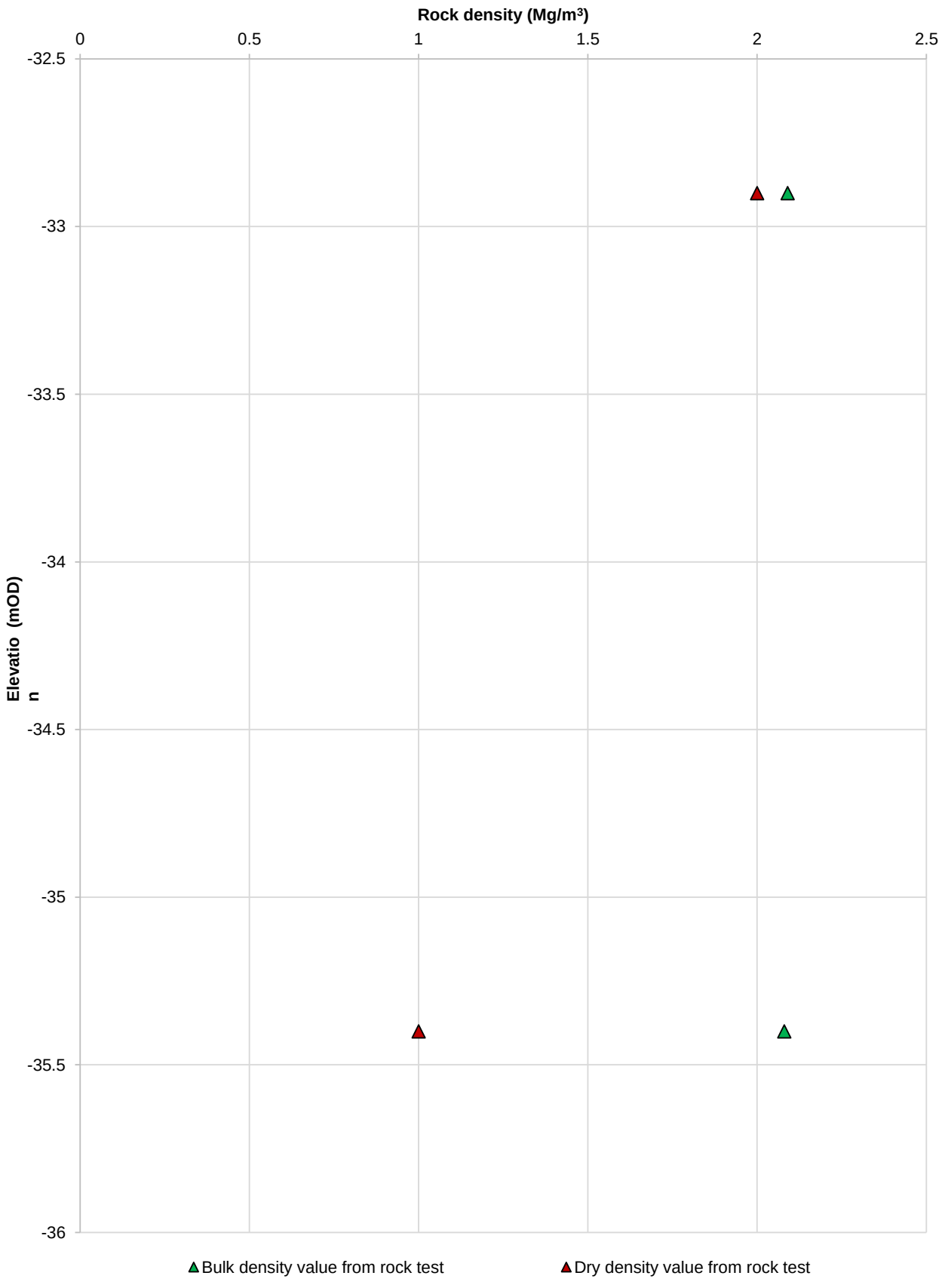

Title:	East Site Hydrogen Production: Rock density by Elevation for Flamborough Chalk Formation	**Fig No.:**	D.208
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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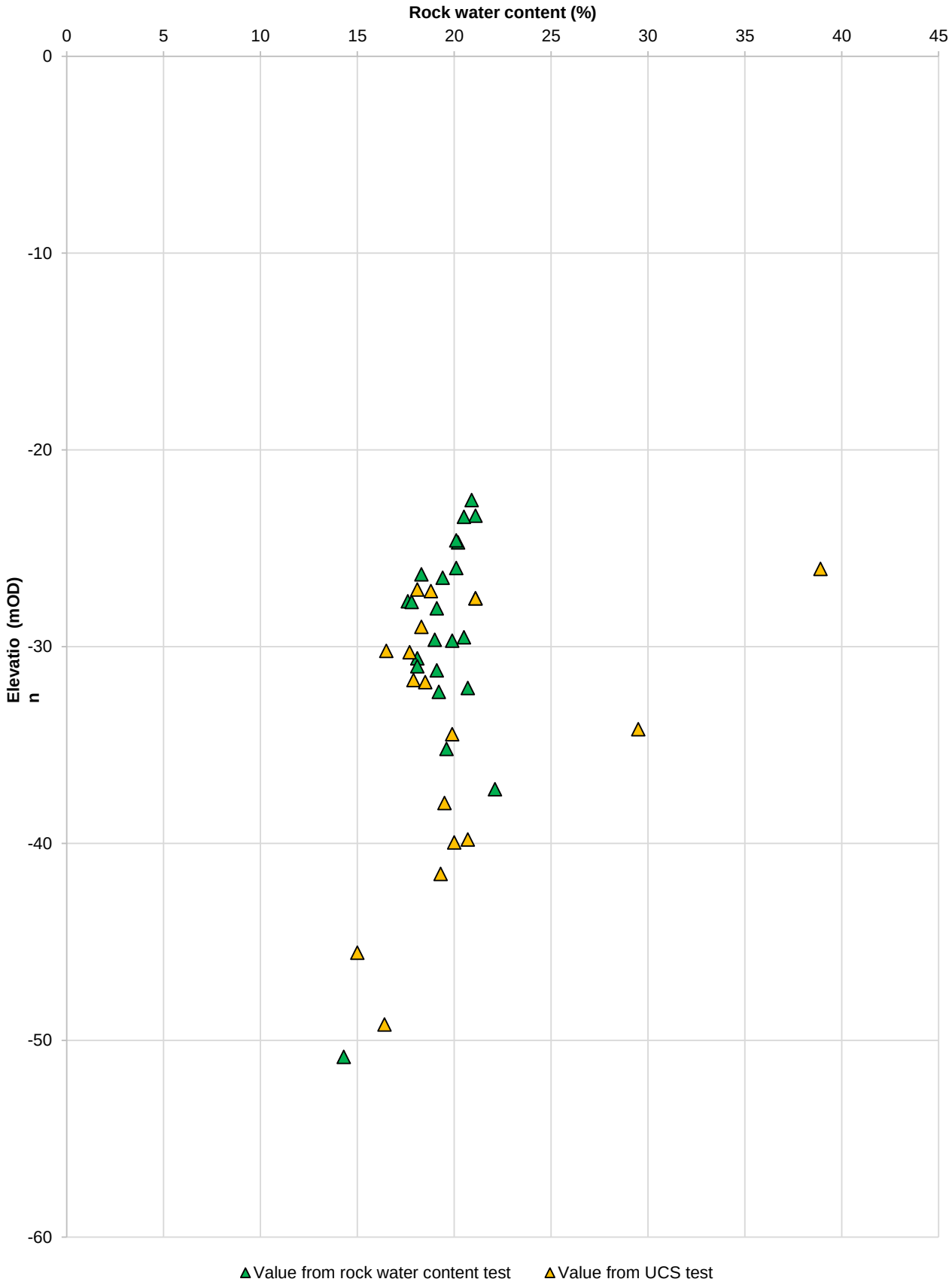
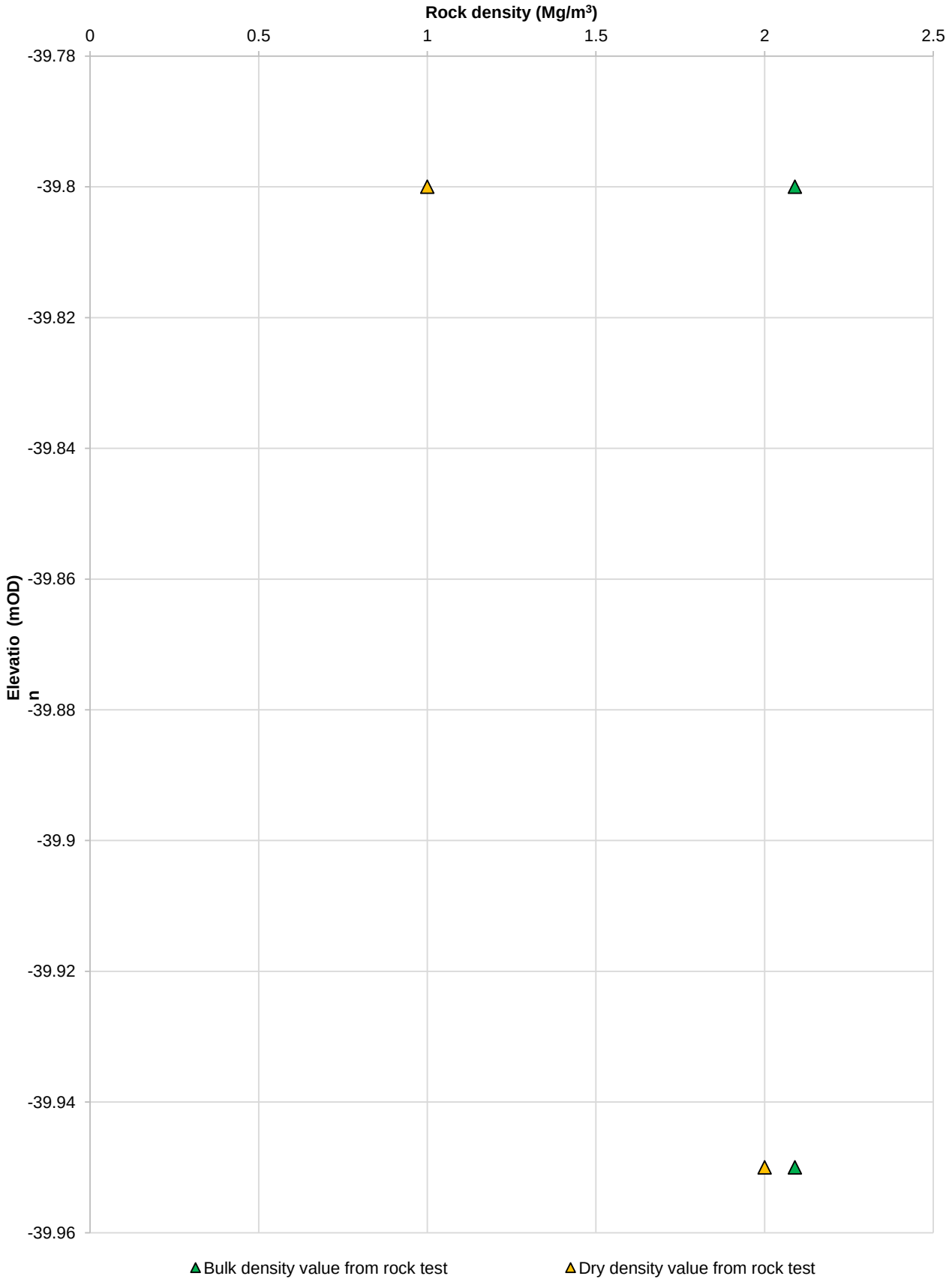


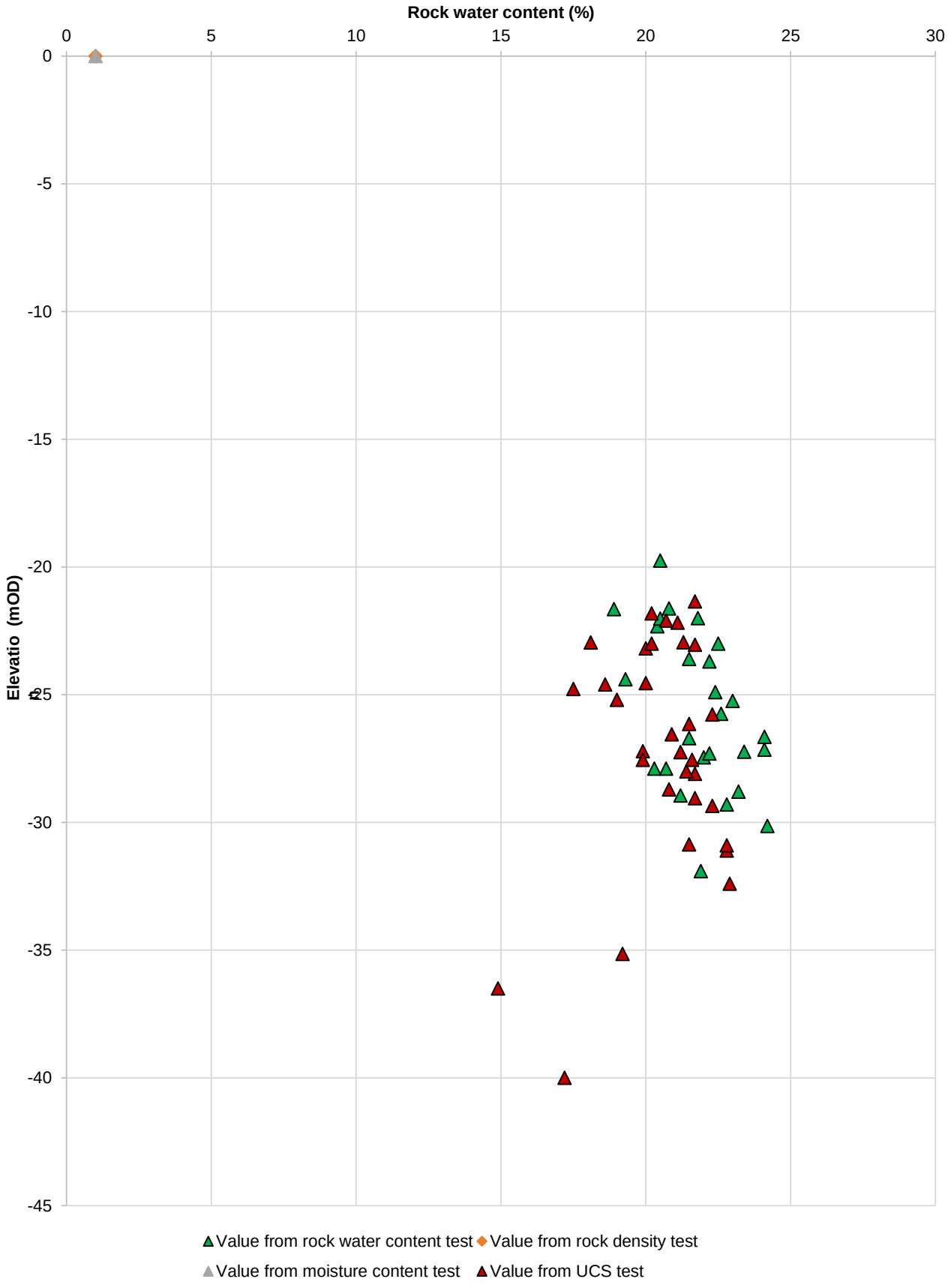
Title:	East Site Ammonia Storage: Rock water content by Elevation for Flamborough Chalk Formation	**Fig. No.**	D.209
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

AECOM



Title:	East Site Ammonia Storage: Rock density by Elevation for Flamborough Chalk Formation	**Fig. No.**	D.210
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

AECOM



Title:	West Site: Rock water content by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.211
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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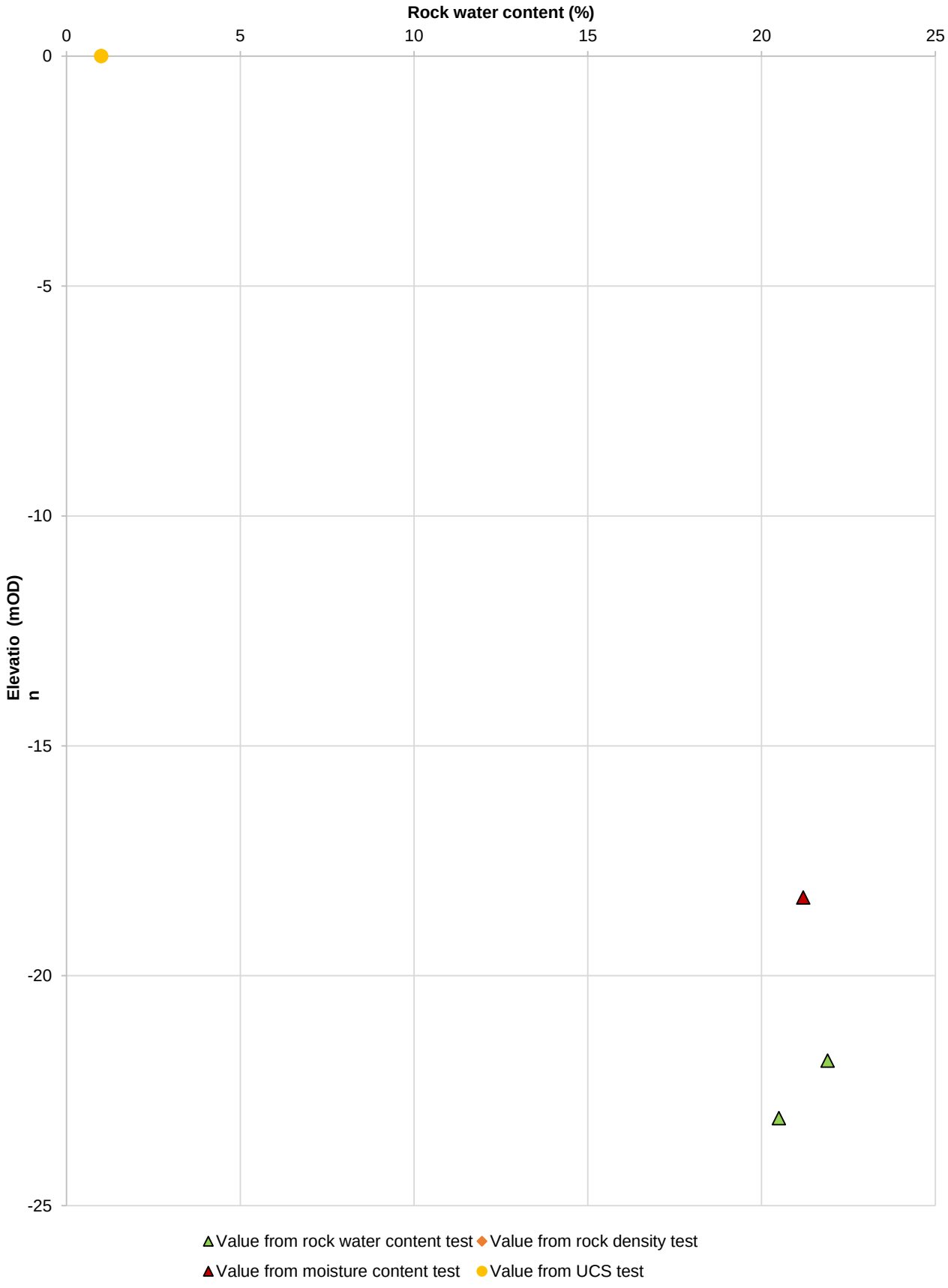

Title:	West Site: Rock water content by Elevation for Weathered Flamborough Chalk Formation	**Figure No.:**	D.212
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

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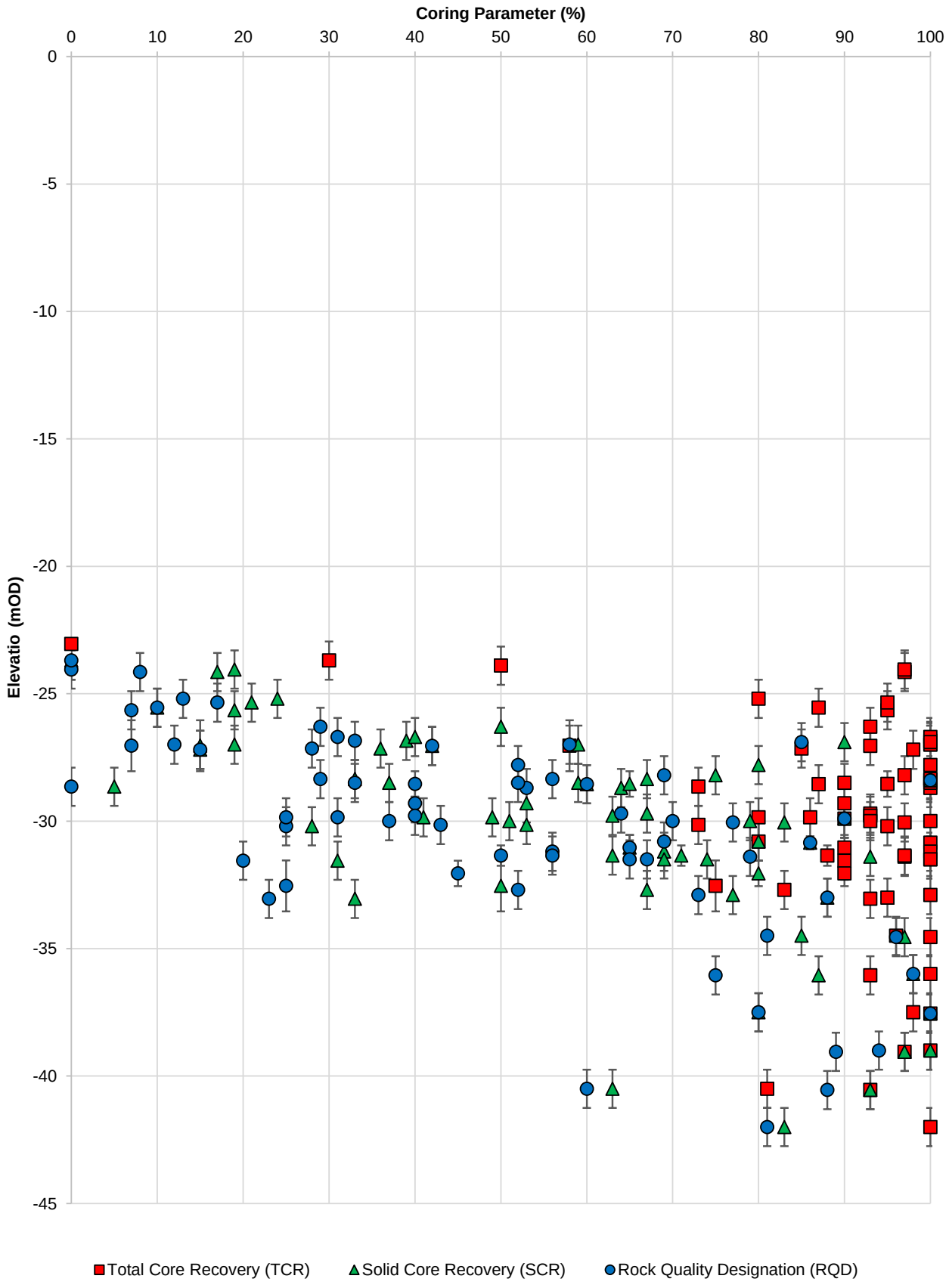

Title:	East Site Hydrogen Production: Coring information (TCR, SCR & RQD) by Elevation for Flamborough Chalk Formation	**Fig. No.**	D.213
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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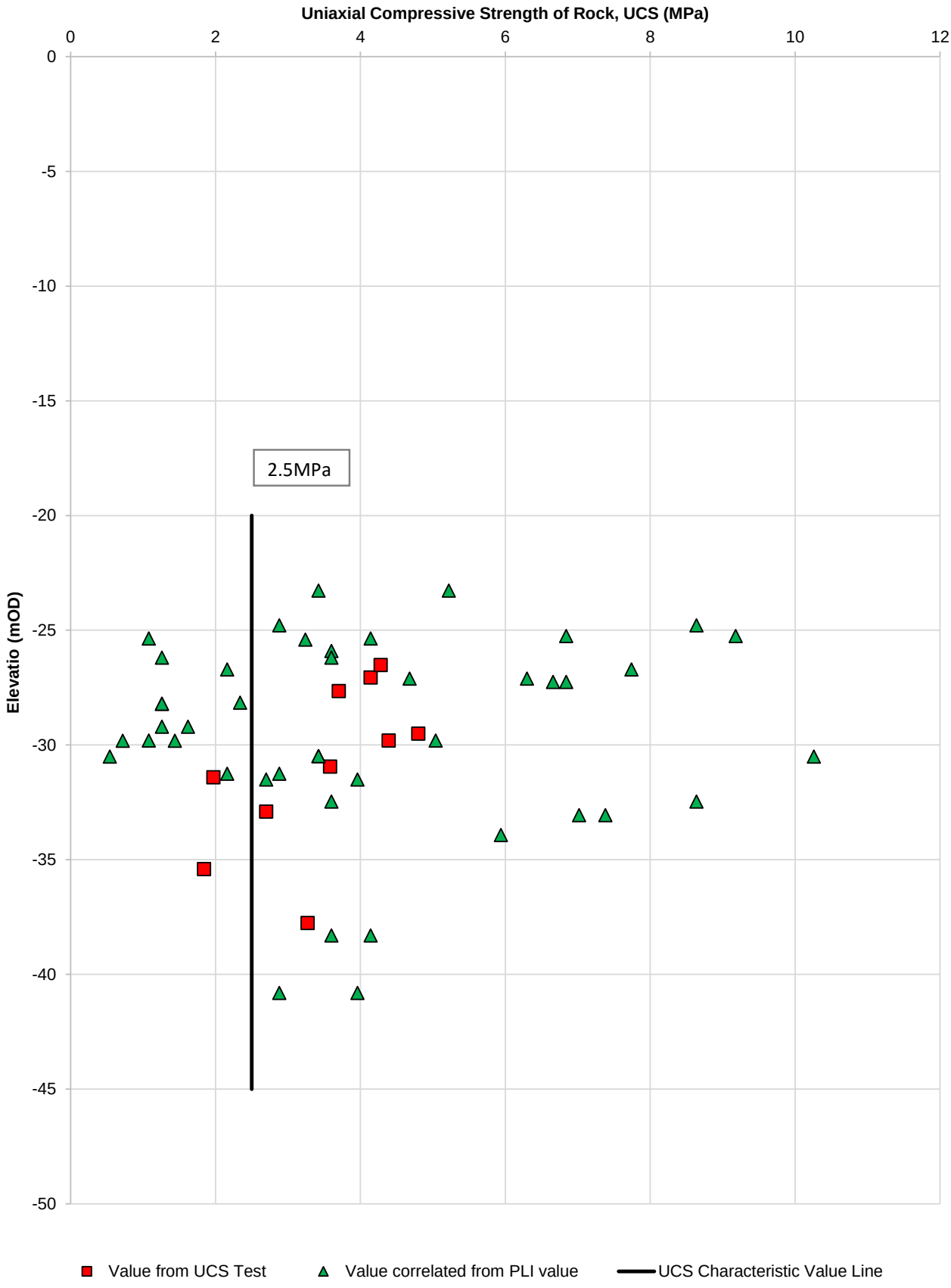

Title:	East Site Hydrogen Production: Uniaxial Compressive Strength (UCS) of Rock by Elevation for Flamborough Chalk Formation	**Fig. No.**	D.214
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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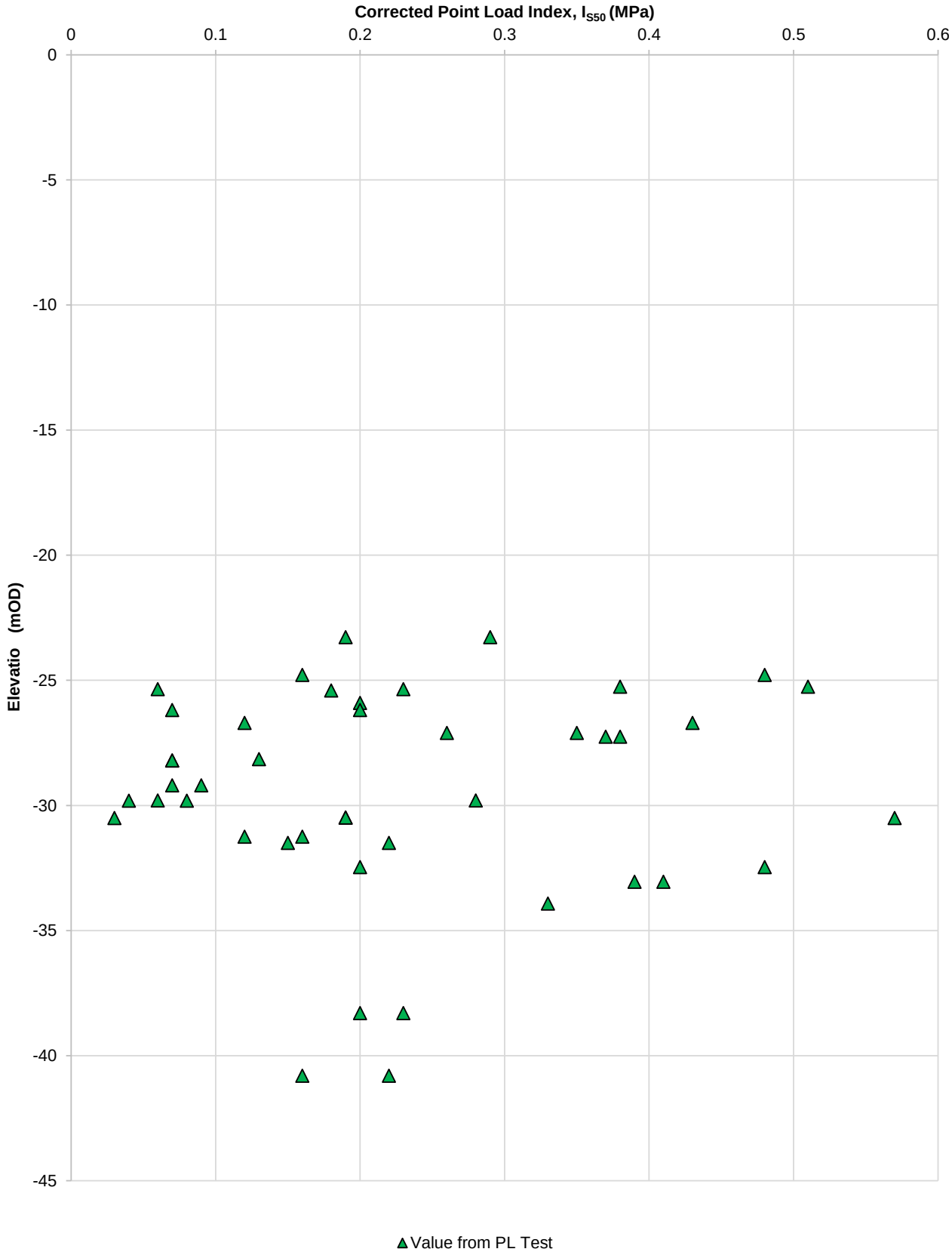

Title:	East Site Hydrogen Production: Corrected Point Load Index (PLI) by Elevation for Flamborough Chalk Formation	**Fig. No.**	D.215
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	June-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	June-23

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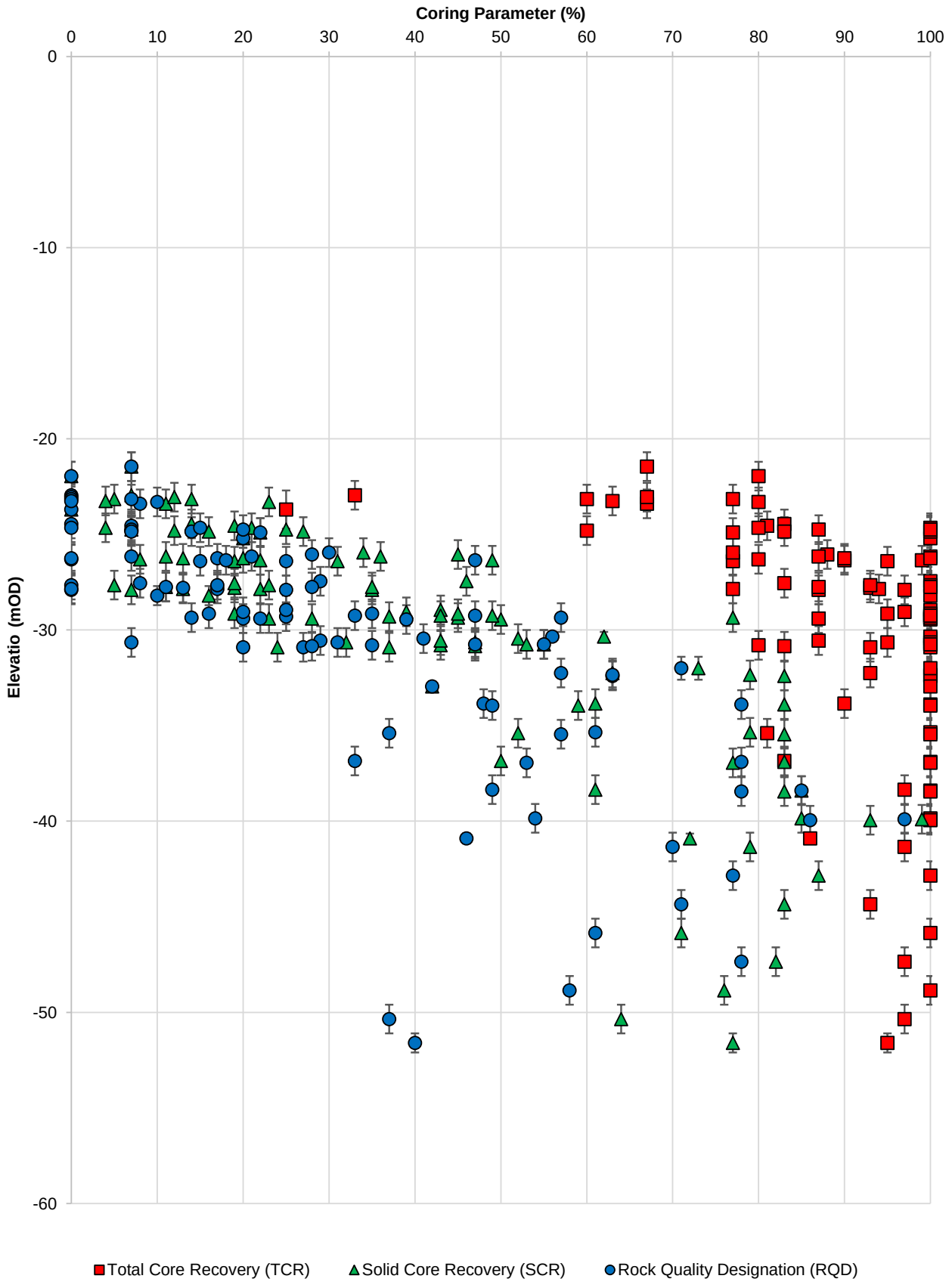
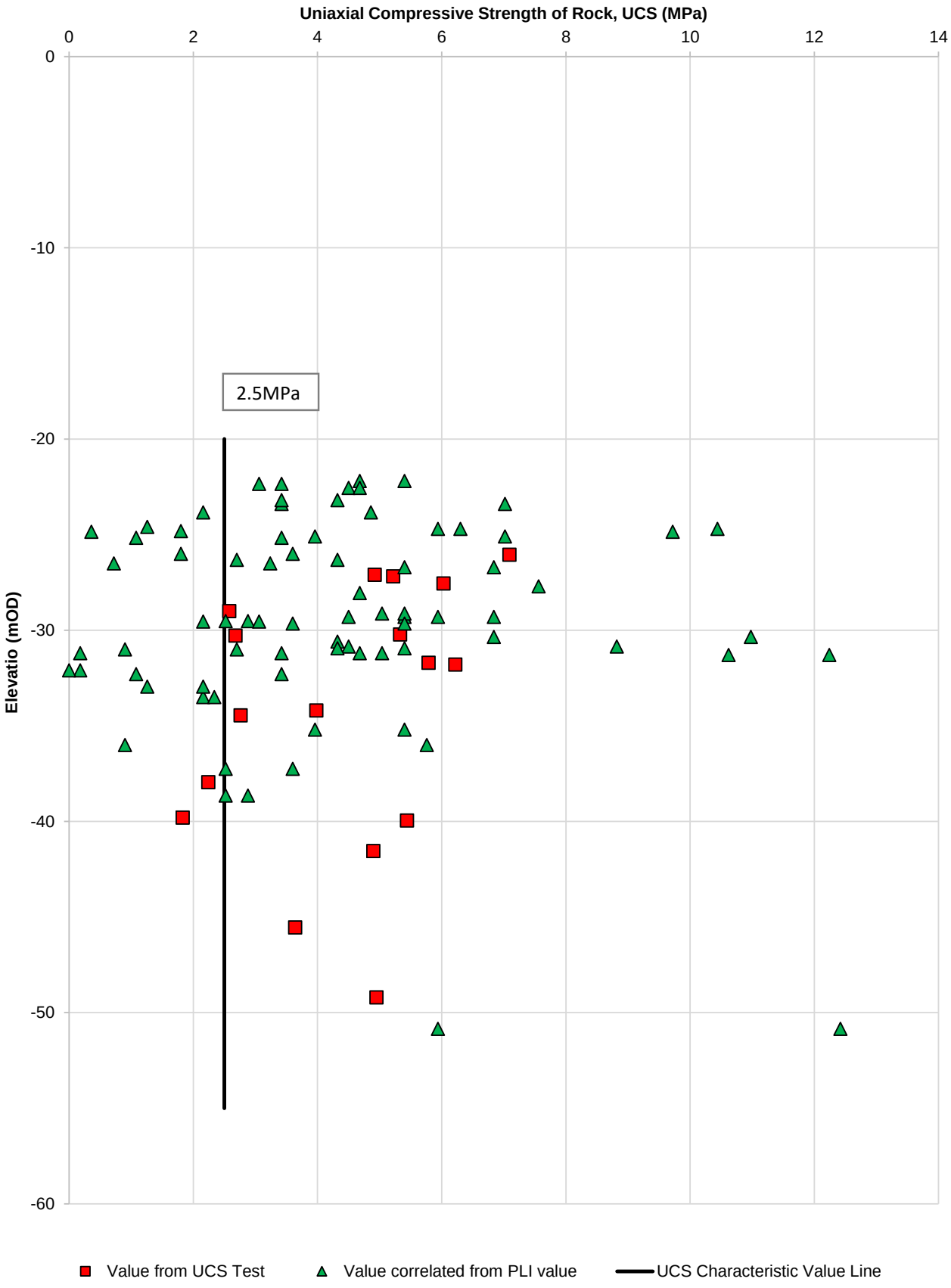


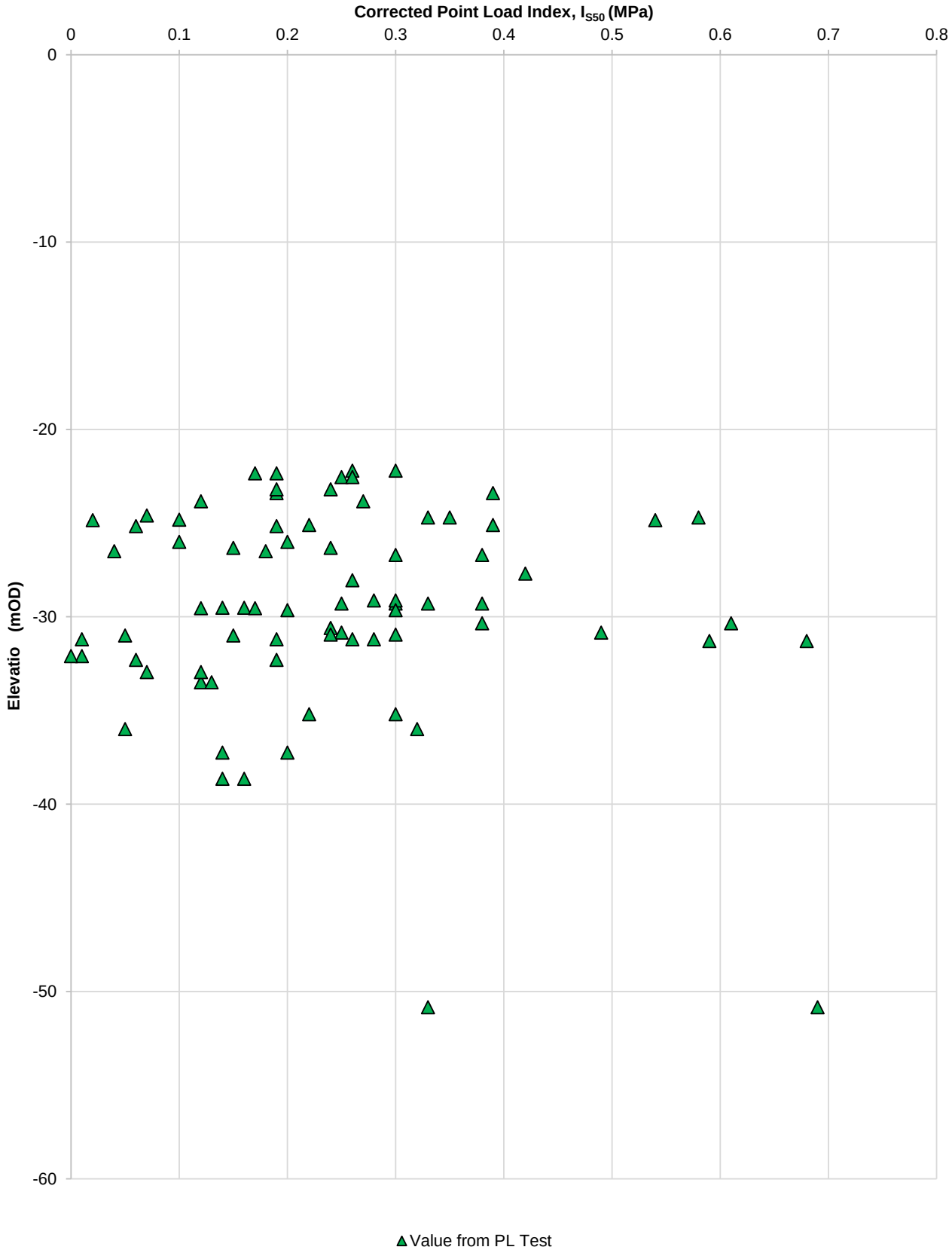
Title:	East Site Ammonia Storage: Coring information (TCR, SCR & RQD) by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.216
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



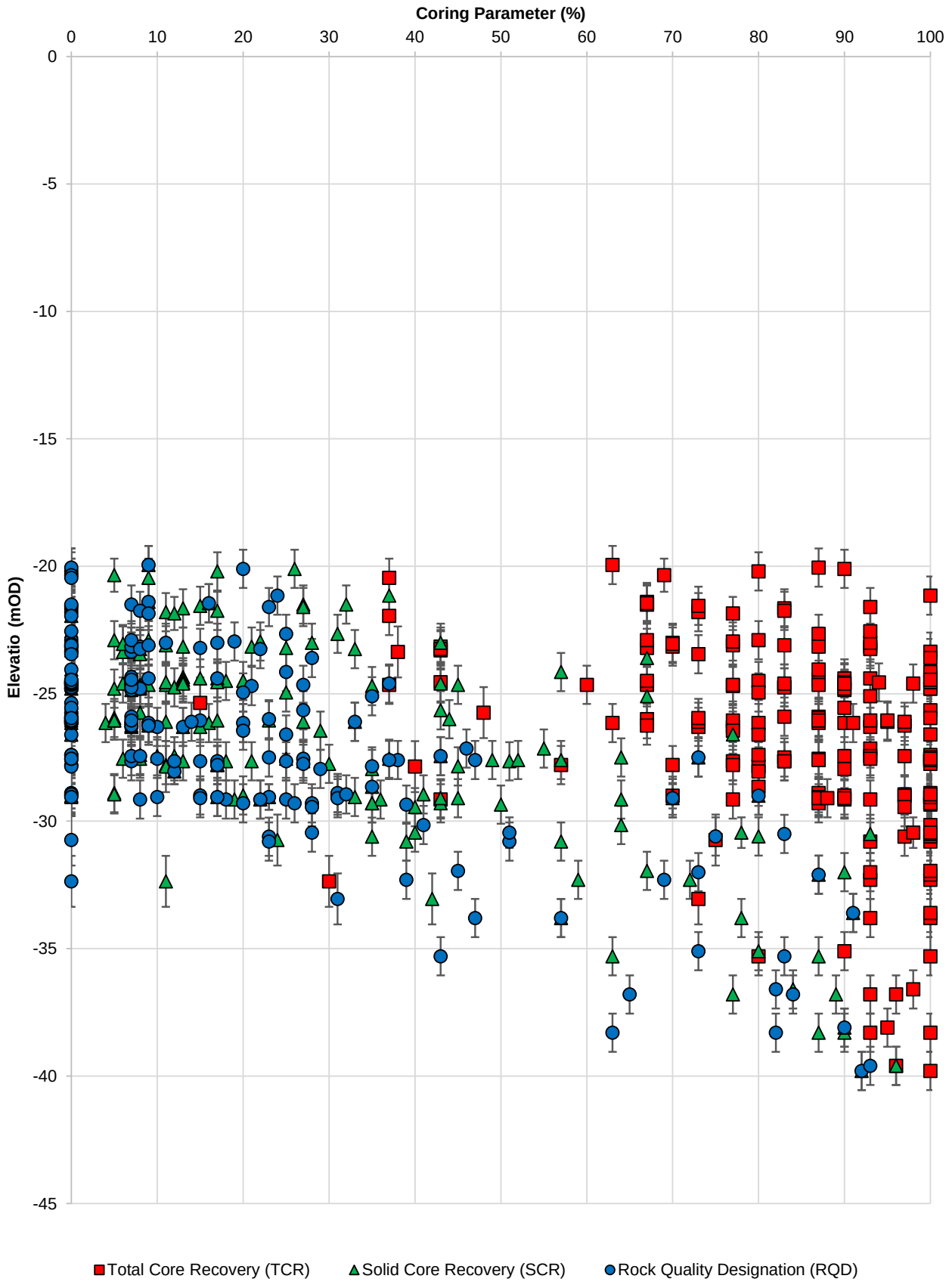
Title:	East Site Ammonia Storage: Uniaxial Compressive Strength (UCS) of Rock by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.217
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



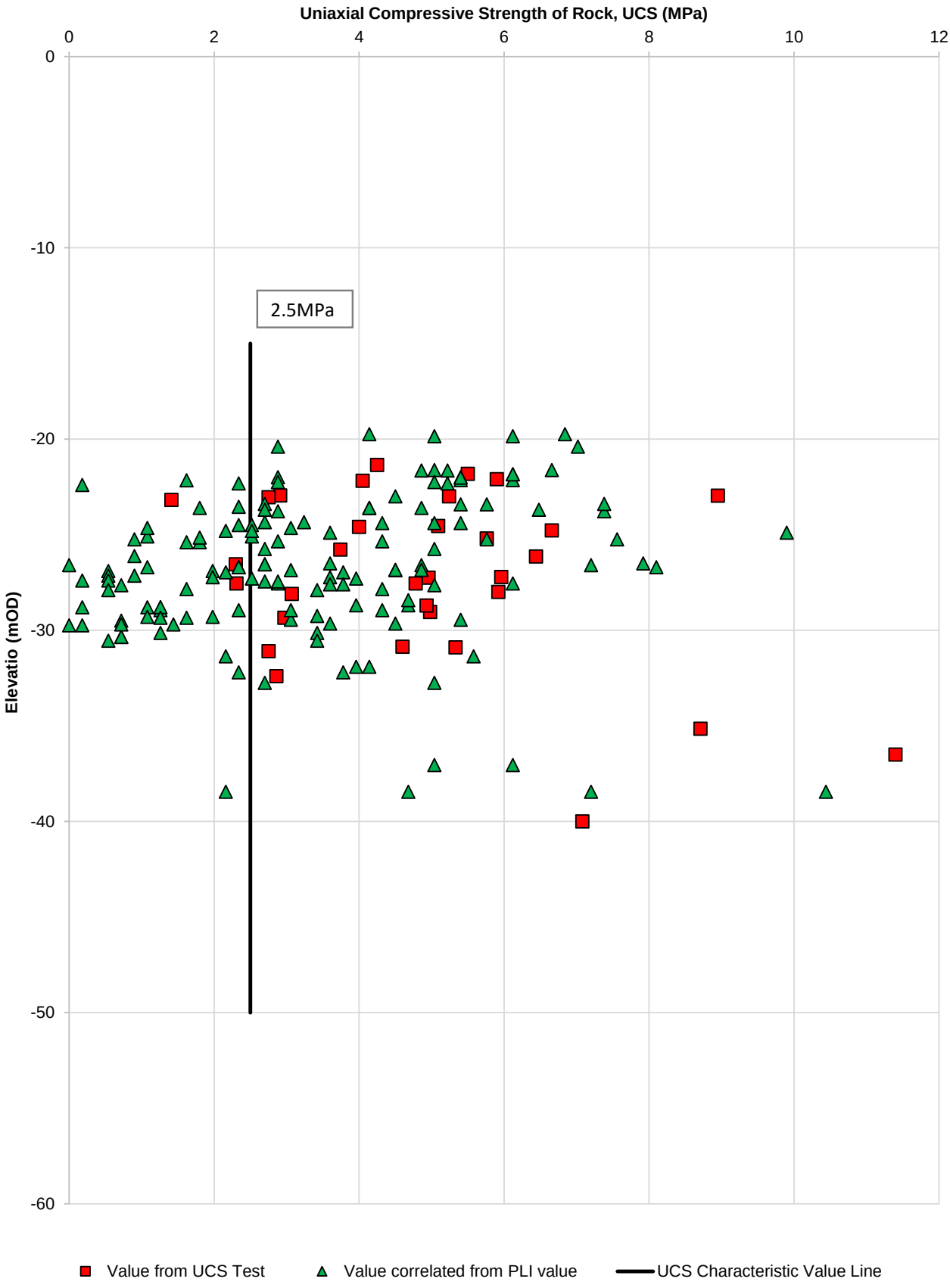
Title:	East Site Ammonia Storage: Corrected Point Load Index (PLI) by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.218
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



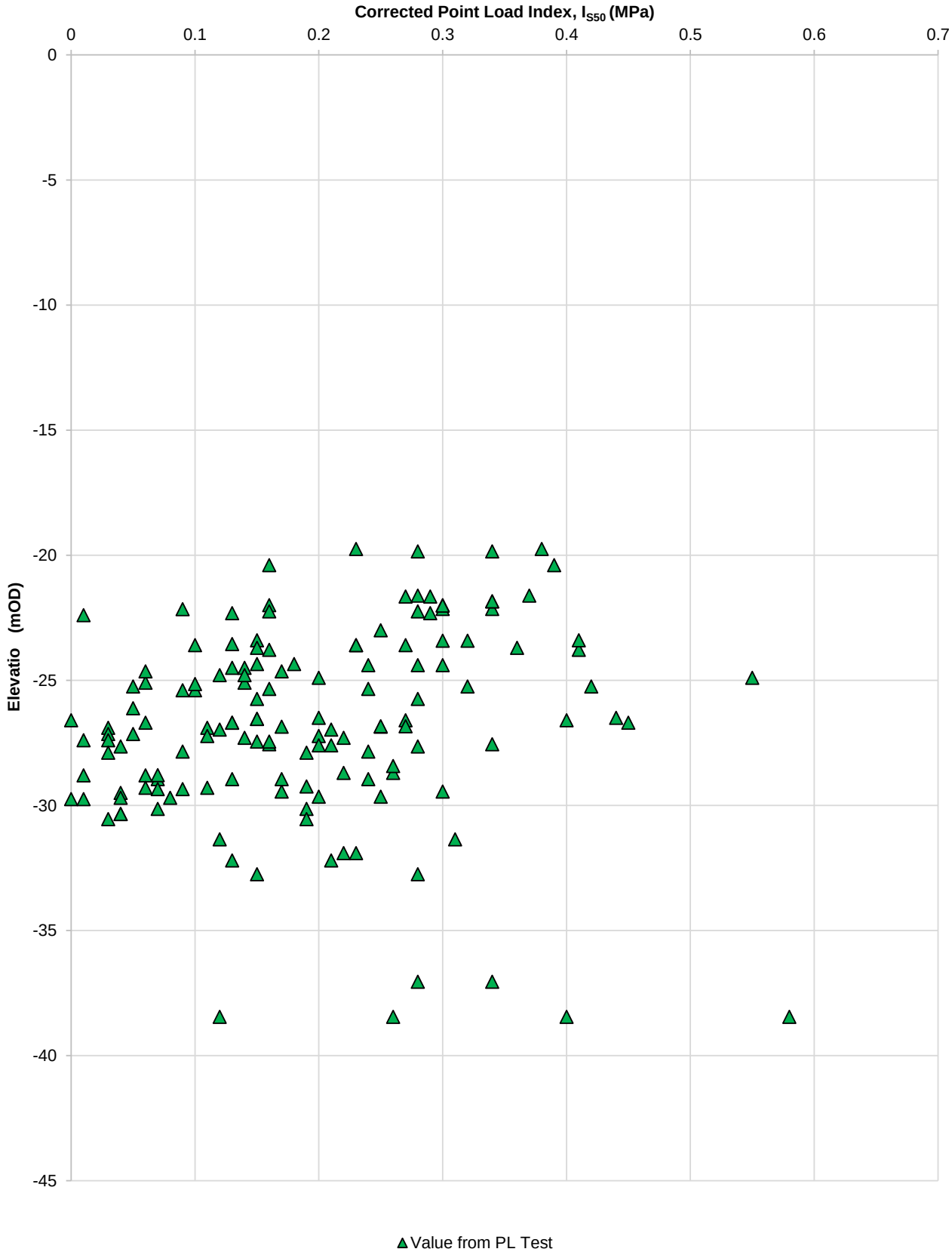
Title:	West Site: Coring information (TCR, SCR & RQD) by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.219
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



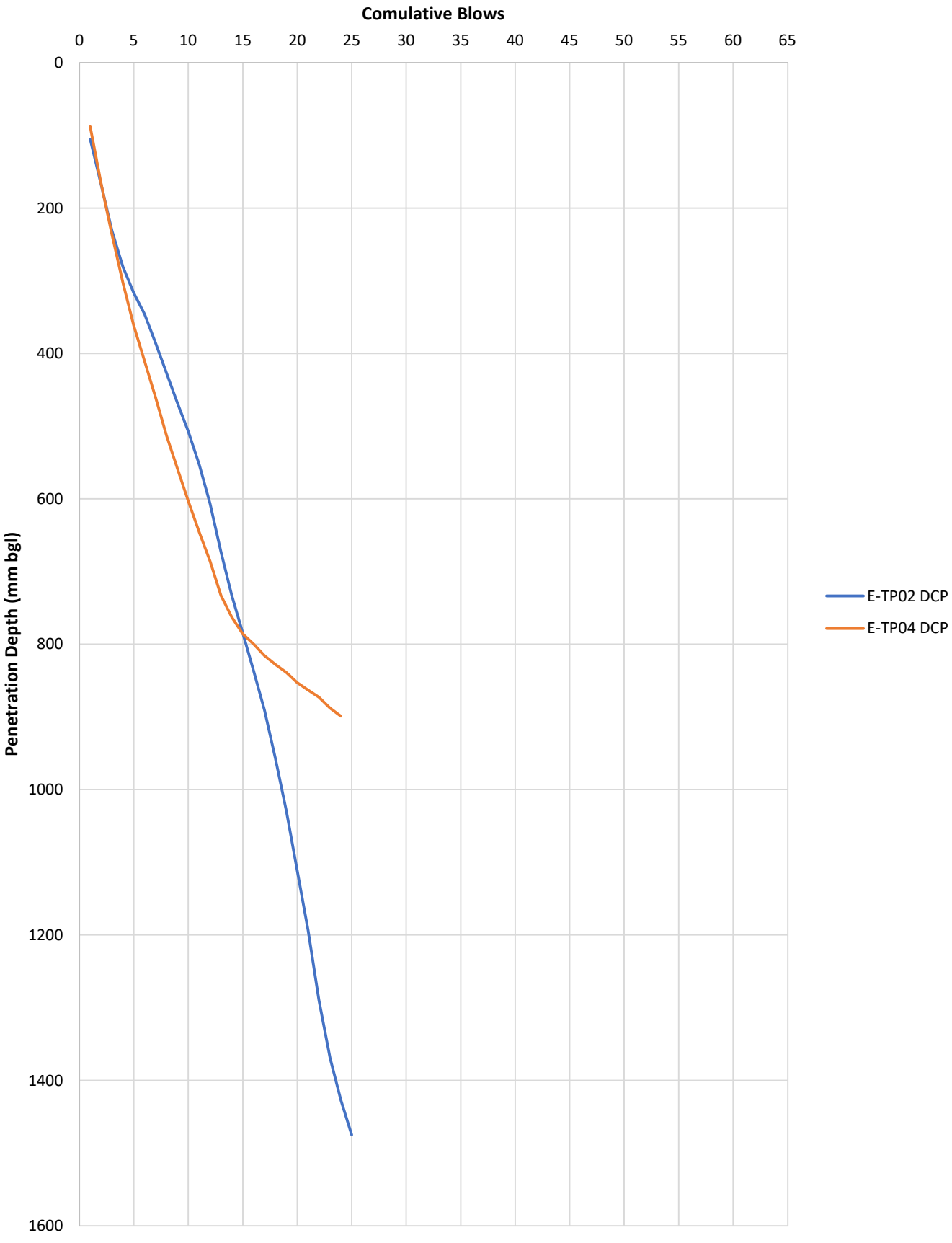
Title:	West Site: Uniaxial Compressive Strength (UCS) of Rock by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.220
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



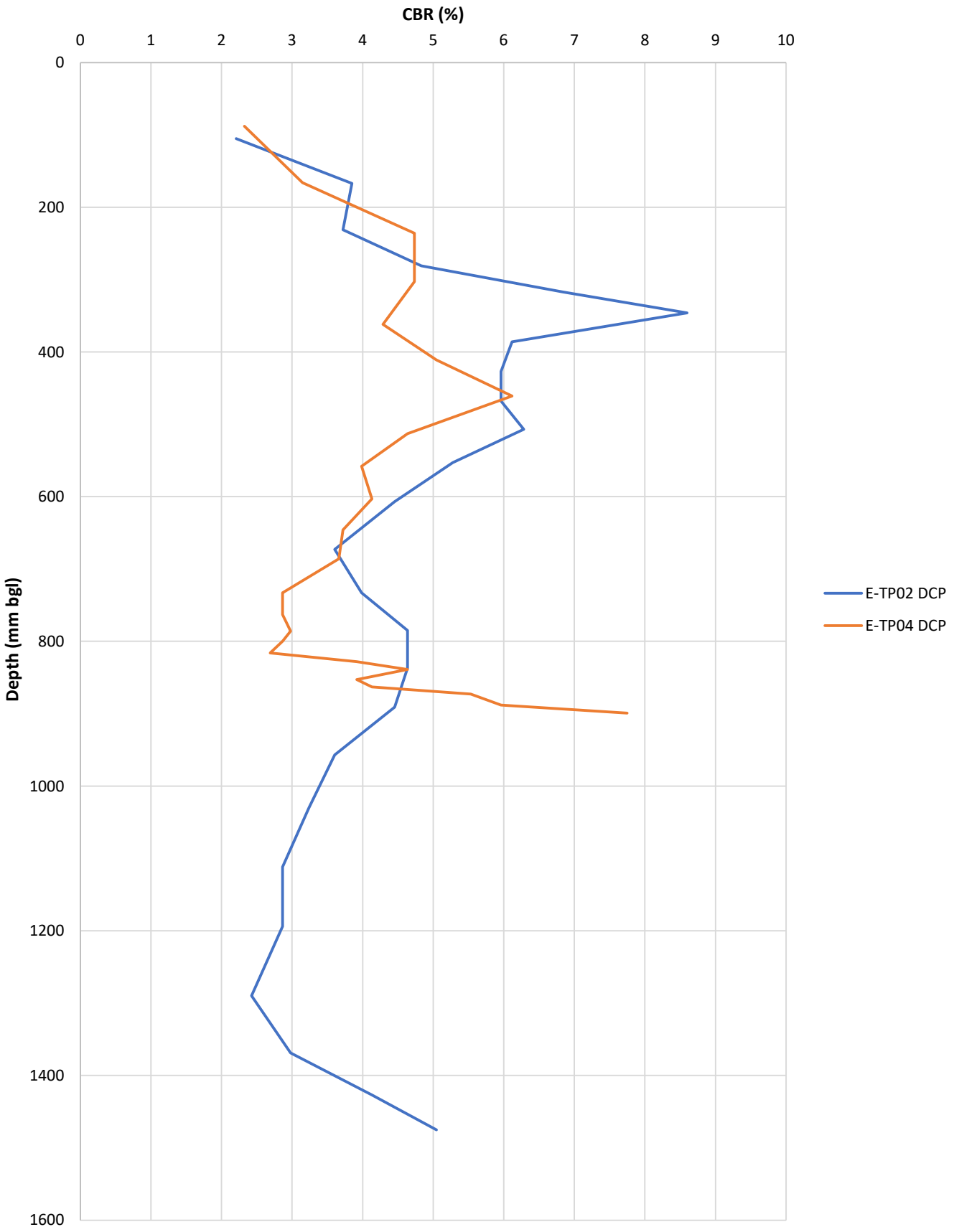
Title:	West Site: Corrected Point Load Index (PLI) by Elevation for Flamborough Chalk Formation	**Figure No.:**	D.221
		Revision:	P01
Project:	Immingham Green Energy Terminal	**Author:**	CC
Project No.:	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker:**	DW
Client:	Air Products	**Date:**	Jun-23

AECOM



Title:	East Site - Hydrogen Production - Commulative Blows vs Penetration (mm bgl)	**Figure No.:** D.222	
		Revision:	P01
Project:	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker**	DW
Client:	Air Products PLC	**Date:**	Jun-23

AECOM



Title:	East Site - Hydrogen Production - CBR (%) vs Depth (mm bgl)	**Figure No.:** D.223	
		Revision:	P01
Project:	Immingham Ammonia Import Terminal	**Author:**	AL
Proj. No	60687114	**Date:**	Jun-23
Location:	Immingham	**Checker**	DW
Client:	Air Products PLC	**Date:**	Jun-23

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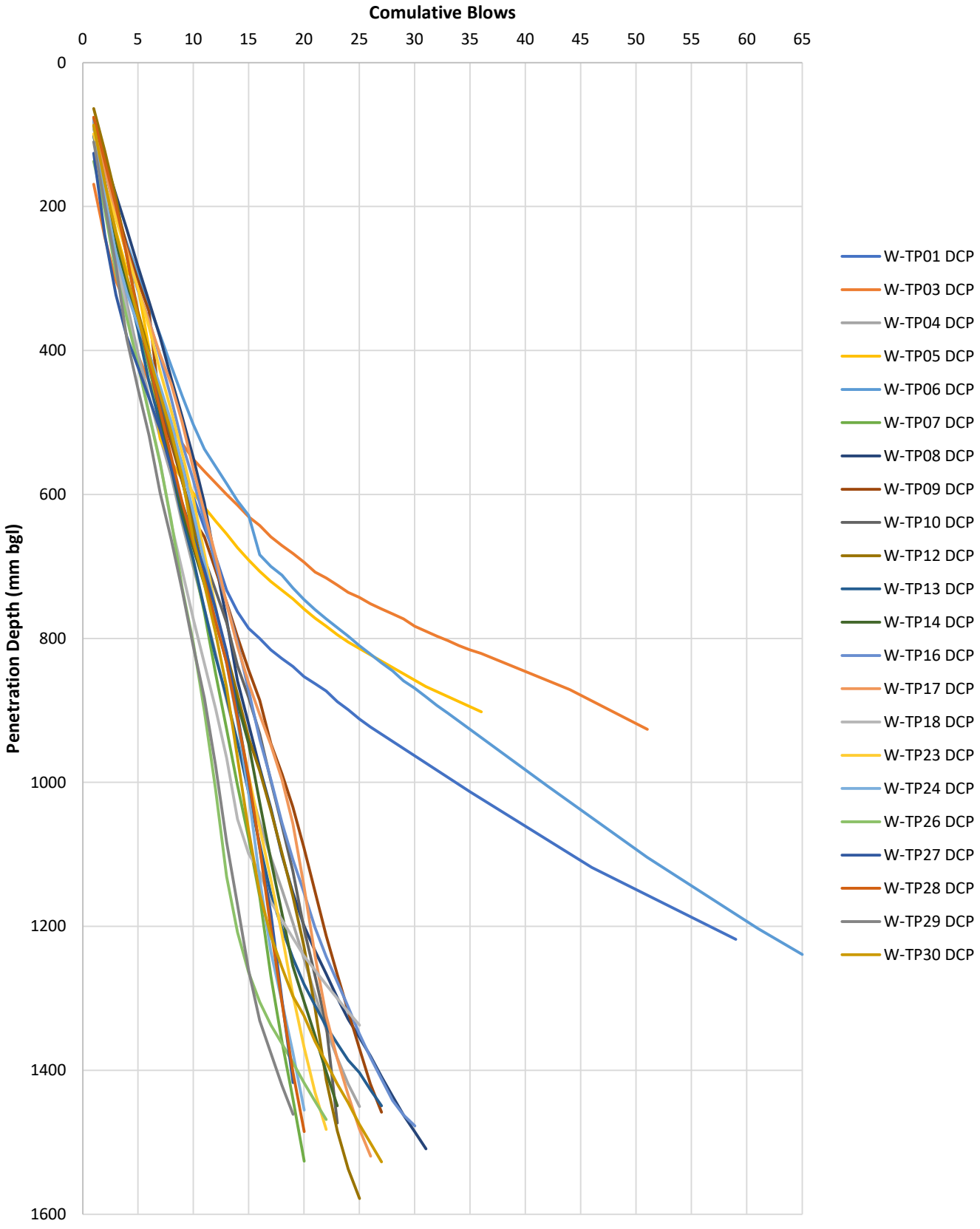
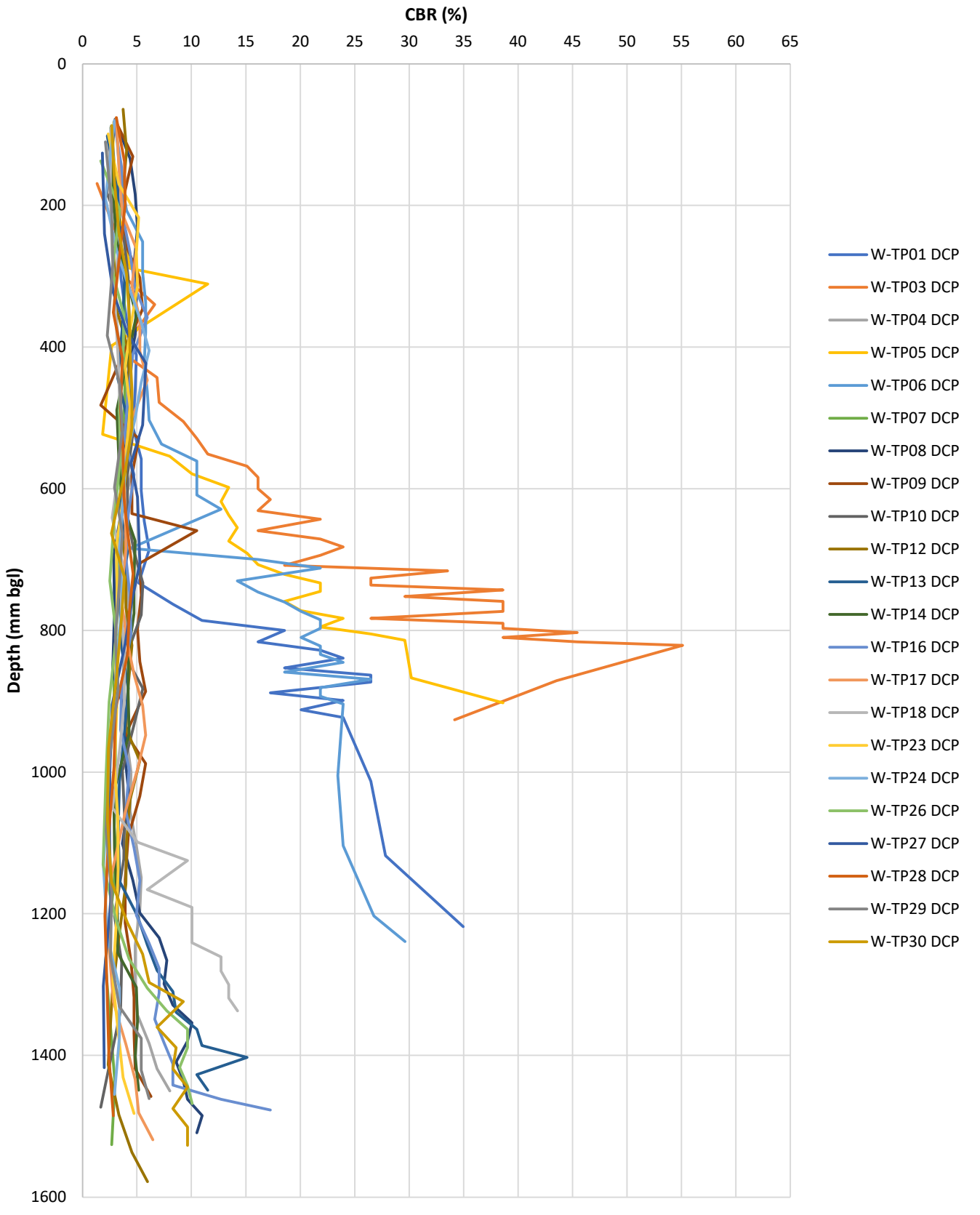


Title	West Site - Commulative Blows vs Penetration (mm bgl)	**Figure No.:** D.224	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author**	AL
Proj. No	60687114	**Date**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

AECOM



Title	West Site - CBR (%) vs Depth (mm bgl)	**Figure No.:** D.225	
		Revision:	P01
Project	Immingham Ammonia Import Terminal	**Author**	AL
Proj. No	60687114	**Date**	Jun-23
Location	Immingham	**Checker**	DW
Client	Air Products PLC	**Date:**	Jun-23

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Appendix E Contamination Assessment

9.1 Conceptual Site Model and Risk Assessment

A preliminary conceptual site model (CSM) was undertaken by AECOM as part of the AECOM Desk Study (AECOM, 2022). Full details of the preliminary CSM are provided within the AECOM desk study report (AECOM, 2022). The following sections provide an updated summary of the CSM based on the recent AECOM GI.

The assessment methodology for the preliminary CSM was based on guidance provided in CIRIA C552 - Contamination Land Risk Assessment, A Guide to Good Practice. The risk assessment was preliminary in nature as further site-specific ground investigation and laboratory testing of environmental samples were required to confirm site conditions.

Potential sources, pathways and receptors were identified. This included a review of the previous ground investigations undertaken within an area encroaching on the pipeline corridor undertaken by RSK 2020. The CSM has been refined based on the recent AECOM GI.

9.1.1 Potential Sources

The potential sources are considered to be:

Made Ground –asbestos and corrosive soils associated with high pH. Ground gases such as ammonia, carbon dioxide and methane which have resulted in a CS5 classification for the site;

Soil leachate – metals and inorganics

Groundwater– metals, PAHs, TPH C12-C16 aromatics, inorganics and chloroform.

Pipelines on and off-site – metals, PCBs, PAHs, oils, inorganics, sulphuric acid, hydrochloric acid, sodium hydroxide, hydrocarbons and asbestos;

Agricultural land – herbicides, pesticides and fertilisers;

Railway lines on and off-site – PCBs, PAHs, herbicides, metals, sulphates, asbestos;

Landfills adjacent to / encroaching on the site boundary and within 1km from the site – Organics such as phenols and polyaromatic hydrocarbons, inorganics, metals. Gases including methane, carbon dioxide, hydrogen and hydrogen sulfide;

Gypsum disposal beds encroaching on the West Site boundary – metals, hydrogen sulphide, Hydrated Calcium Sulphate (Gypsum);

Sewage works located 127m southeast – metals, PAH, TPH, PCBs, SVOCs, VOCs, ACM, inorganic ions, organics, pesticides (potential PFAS, PFOS). Treatment chemicals (alum, lime, polyelectrolytes, hydrochloric acid, sodium hydroxide, ferric chloride). Ground gases including carbon dioxide and methane and hydrogen sulphide;

Works, warehouses and oil storage depots between 57m and 154m from the site – heavy metals, asbestos, sulphate (water soluble), sulphate (acid soluble), easily liberated sulphide, sulphur, pH, TPH, SVOCs including PAHs and VOCs. Hydrocarbons, organic compounds (e.g., MTBE, PCBs, TAME) and asbestos; and

Electrical infrastructure (electric sub stations) between 5m and 234m from the site – PCBs.

9.1.2 Potential Pathways

The potentially viable pathways are:

Dermal contact;

Direct contact;

Ingestion;

Inhalation;

Plant uptake (in landscape areas);

Rainfall infiltration and vertical / lateral migration via permeable strata and drainage networks;

Lateral migration through aquifers;

Vertical / lateral migration via permeable strata; and

Surface run-off and surface water drainage.

9.1.3 Potential Receptors

The potential receptors are:

Construction workers;

Future site users;

Development infrastructure;

Flora and fauna;

Off-site workers and residents comprising occupiers of off-sire commercial / industrial properties and residential buildings; and

Controlled waters comprising the Secondary Undifferentiated Aquifer (Beach and Tidal Flat Deposits), Principal Aquifer (Flamborough and Burnham Chalk Formation), North Beck Drain catchment (including unidentified inland rivers within the site boundary) and the Humber Estuary.

9.1.4 Environmental Risk Assessment

9.1.4.1 Risk Assessment Principles and Framework

Current best practice recommends that the determination of hazards due to contaminated land is based on the principle of risk assessment, as outlined in the Environment Agency guidance on Land Contamination Risk Management (LCRM) (2021).

For a risk to be present, there must be a viable contaminant linkage; i.e., a mechanism whereby a source impacts on a sensitive receptor via a pathway. The potential contaminant linkages that have been identified for this site are presented in Section 8.

Assessments of risks associated with each of these contaminant linkages, following review of available information for the site is discussed in the following sections.

Using criteria broadly based on those presented in the Construction Industry Research and Information Association publication Research & Development (R&D) Publication 66, National House Building Council (NHBC)/Environment Agency/Chartered Institute of Environmental Health (CIEH) 2008, the magnitude of the risk associated with potential contamination at the site has been assessed. To do this an estimate is made of:

The potential severity of the risk; and

The likelihood of the risk occurring.

The severity of the risk is classified according to the criteria in Table 9-5.

Table 9-5. Severity of Risk

Severity	Description
High	• Acute risks to human health likely to result in “significant harm” (e.g., very high concentrations of contaminants/ground gases); • Catastrophic damage to buildings/property (e.g., by explosion, sites with high gassing potential, extensive VOC contamination); • Major pollution of controlled waters (e.g., surface watercourses or Principal Aquifers / Source Protection Zones); and • Short term risk to a particular ecosystem.
Medium	• Chronic (long-term) risk to human health likely to result in “significant harm” (e.g., elevated concentration of contaminants/ground gases); • Pollution of sensitive controlled waters (e.g., surface watercourses or principal/secondary A aquifers); and • Significant effects on sensitive ecosystems or species.
Mild	• Pollution of non-sensitive waters (e.g., smaller surface watercourses or secondary B aquifers or unproductive strata); and • Significant damage to crops, buildings, structures or services (e.g., by explosion, sites with medium gassing potential, elevated concentrations of contaminants).

Severity	Description
Minor	• Non-permanent human health effects (requirement for protective equipment during site works to mitigate health effects); • Damage to non-sensitive ecosystems or species; and • Minor (easily repairable) damage to buildings, structures or services (e.g., by explosion, sites with low gassing potential).

The probability of the risk occurring is classified according to the criteria given in Table .

Table 9-6. Probability of Risk Occurring

Probability	Explanation
High Likelihood	Contaminant linkage may be present that appears very likely in the short term and risk is almost certain to occur in the long term, or there is evidence of harm to the receptor.
Likely	Contaminant linkage may be present, and it is probable that the risk will occur over the long term.
Low Likelihood	Contaminant linkage may be present and there is a possibility of the risk occurring, although there is no certainty that it will do so.
Unlikely	Contaminant linkage may be present but the circumstances under which harm would occur even in the long term are improbable.

An overall evaluation of the level of risk is gained from a comparison of the severity and probability, as shown in Table 9-7.

Table 9-7. Level of Risk

Probability	Severity			
	Severe	Medium	Mild	Minor
High Likelihood	Very High	High	Moderate	Moderate / Low
Likely	High	Moderate	Moderate / Low	Low
Low Likelihood	Moderate	Moderate / Low	Low	Very Low
Unlikely	Moderate / Low	Low	Very Low	Very low

9.1.4.2 Evaluation of Risk

In October 2020 (updated April 2021), the UK government issued new guidance on the evaluation and management of contaminated land; LCRM. Current contaminated land guidance LCRM (Environment Agency, 2021) categorises risk at Stage 1 Tier 1 as follows:

Acceptable; and

Unacceptable.

However, no framework for assessing the risk has been published to accompany the guidance, so the CIEH & NHBC R&D Publication 66 assessment framework constitutes best practice in this regard. To align the risk rankings in Section 89.1 with the LCRM rankings and with the Part 2A definitions, the following matrix has been utilised. This conversion is presented in Table .

Table 9-8. Conversion of LCRM Risk Categories

	Acceptable	Unacceptable
Very Low		
Low		
Moderate/Low		
Moderate*		
High		
Very High		

**This risk category spans both acceptable and unacceptable. This is intentional as it is this risk band that tends to have the greatest level of uncertainty associated with it. Acceptability will be dependent on site-specific circumstances and level of confidence in the available evidence.*

For a risk to be unacceptable, the contaminant linkage should be associated with at least a "medium" severity as defined in Table A4.3 in Annex 4 of R&D66 and the probability should (in the majority of cases) be at least "likely" as defined in Table A4.4 of R&D66.

These risk categories represent the level of risk as it is currently understood from the information available at this time. An updated assessment of the risks associated with the potential contamination linkages are presented in Table 9-9. .

Table 9-9. Updated Evaluation of Risk

Source	Pathway	Receptor		Potential Contaminant Linkage	Severity	Probability	Risk	Potential LC:RM	Risk
Contaminants of potential concern within soil in Made Ground and natural strata	Direct Contact / Ingestion / Inhalation of vapours & dust	Human Health	Future Site Users	Y	Mild	Low Likelihood	Low	Acceptable	
	Direct Contact / Ingestion / Inhalation of vapours & dust	Human Health	Construction Workers	Y	Mild	Likely	Moderate / Low	Acceptable	
	Surface run-off / Migration via site drainage	Controlled Waters	Surface Water: North Beck Darin catchment (including unidentified inland rivers) and the Humber Estuary	Y	Medium	Unlikely	Low	Acceptable	
	Infiltration / Vertical Migration	Controlled Waters	Groundwater: Superficial Secondary Undifferentiated Aquifer (Beach and Tidal Flat Deposits)	Y	Mild	Unlikely	Very Low	Acceptable	
			Groundwater: Principal Aquifer of the Flamborough Chalk Formation and Burnham Chalk Formation	Y	Medium	Unlikely	Low	Acceptable	
	Direct Contact	Development Infrastructure	Buildings to be constructed on site and associated foundations and infrastructure	Y	Mild	Likely	Moderate / Low	Acceptable	
	Inhalation of vapours / dusts	Off-Site Receptors	Human Health: Occupiers of nearby properties / workers	Y	Mild	Low Likelihood	Low	Acceptable	
	Direct Contact / Uptake	Flora and Fauna	Onsite flora and fauna	Y	Minor	Low Likelihood	Very Low	Acceptable	
Leachate and Groundwater contaminants from Made Ground and Natural Strata	Direct Contact / Ingestion / Inhalation of vapours	Human Health	Future Site Users	Y	Mild	Low Likelihood	Low	Acceptable	
			Construction Workers	Y	Medium	Likely	Moderate	Acceptable*	
	Lateral Migration	Controlled Waters	Surface Water: North Beck Darin catchment (including unidentified inland rivers) and the Humber Estuary	Y	Medium	Likely	Moderate	Acceptable*	
	Preferential Migration Through Surface Water Drainage			Y	Medium	Likely	Moderate	Acceptable*	
	Vertical Migration		Groundwater: Superficial Secondary Undifferentiated	Y	Mild	Likely	Moderate / Low	Acceptable	

Source	Pathway	Receptor		Potential Contaminant Linkage	Severity	Probability	Risk	Potential LC:RM	Risk
			Aquifer (Beach and Tidal Flat Deposits)						
	Vertical Migration		Groundwater: Principal Aquifer of the Flamborough Chalk Formation and Burnham Chalk Formation	Y	Medium	Likely	Moderate	Acceptable*	
	Direct Contact	Development Infrastructure	Buildings to be constructed on site and associated foundations and infrastructure	Y	Mild	Likely	Moderate / Low	Acceptable	
	Infiltration / Off-site Migration	Off Site Receptors	Human Health: Occupiers of nearby properties / workers		Mild	Low Likelihood	Low	Acceptable	
	Direct Contact / Uptake	Flora & Fauna	Any onsite flora and fauna	Y	Minor	Likely	Low	Acceptable	
Ground Gas potentially produced by Made Ground and naturally from organic content within the underlying deposits	Inhalation	Human Health	Future Site Users	Y	Mild	Likely	Moderate / Low	Acceptable	
	Inhalation / Migration & Explosion		Construction Workers	Y	Medium	Likely	Moderate	Acceptable	
	Migration & Explosion	Development Infrastructure	Buildings to be constructed on site and associated foundations and infrastructure	Y	Medium	Likely	Moderate	Acceptable	
	Inhalation / Migration & Explosion	Off-Site Receptors	Human Health: Occupiers of nearby properties / workers	Y	Mild	Low Likelihood	Low	Acceptable	
Off Site Sources	Rainfall infiltration / migration of contaminants via permeable strata / surface water / groundwater and / or migration of gases leading to direct contact / ingestion / inhalation / explosion	Human Health	Future Site Users	Y	Mild	Low Likelihood	Low	Acceptable	
			Construction Workers	Y	Medium	Low Likelihood	Moderate / Low	Acceptable	
	Rainfall Infiltration & Vertical / Lateral Migration of Contaminants via permeable strata	Controlled Waters	Surface Waters: North Beck Drain catchment (including unidentified inland rivers) and the Humber Estuary	Y	Medium	Likely	Moderate	Acceptable	
			Groundwater: Groundwater: Superficial Secondary Undifferentiated Aquifer (Beach and Tidal Flat Deposits)	Y	Mild	Likely	Moderate / Low	Acceptable	

Source	Pathway	Receptor		Potential Contaminant Linkage	Severity	Probability	Risk	Potential LC:RM	Risk
			Groundwater: Principal Aquifer of the Flamborough Chalk Formation and Burnham Chalk Formation	Y	Medium	Low Likelihood	Moderate / Low	Acceptable	
	Rainfall infiltration/migration of contaminants via permeable strata / surface water / groundwater and / or migration of gases leading to direct contact / Explosion	Development Infrastructure	Buildings to be constructed on site and associated foundations and infrastructure	Y	Mild	Low Likelihood	Moderate / Low	Acceptable	
		Off-Site Receptors	Human Health: Occupiers of nearby properties / workers	Y	Mild	Low Likelihood	Low	Acceptable	
		Flora and Fauna	Any onsite flora and fauna	Y	Minor	Likely	Low	Acceptable	

**The LC:RM risk is considered acceptable. However, this is subject to further rounds of groundwater monitoring which are recommended to be undertaken.*

Appendix F Human Health Generic Quantitative Risk Assessment

9.2 General

The findings of the ground investigations and chemical analysis undertaken, together with the CSM presented in Appendix E, have been used as the basis for undertaking a human health Generic Quantitative Risk Assessment (GQRA). The GQRA aims to quantify the potential risks identified in relation to the potential sources and linkages previously summarised in the CSM through the screening of chemical soil sample data.

The CSM identifies potential source-pathway-receptor contaminant linkages that may require further assessment. This is consistent with the tiered approach advocated by the Environment Agency's online guidance for the management of land contamination, LCRM (Environment Agency, 2021).

An assessment of the potential significance of the concentrations detected in soil during the ground investigations conducted to date has been undertaken against GAC that are intended to be protective of human health based on a proposed future commercial/industrial end use.

The GAC provide a conservative means of initial assessment and provide the basis for screening out potential contaminants that do not warrant further consideration or action (i.e. the level of risk associated with the determinand is acceptable and not of concern).

9.2.1 Human Health Assumptions and Criteria Used

Risks to human health have been primarily assessed in accordance with the Contaminated Land Exposure Assessment (CLEA) methodology.

Risks to potential future site users (commercial/industrial users) and off-site receptors from potential contamination within the soils at the site have been assessed. Risk to construction workers are considered separately.

Soil GAChave been published for numerous contaminants by both regulatory and industry recognised bodies. Where GAC have not been published, AECOM has derived its own GAC values using industry recommended and accepted methods.

EC have been derived for a commercial/industrial land use in order to assess the risk from soils to future site users. The assessment serves to quantify the available soils data and provide an understanding of the overall baseline condition of the soil quality within the site boundary.

It is noted that the commercial/industrial human health GAC are not based on any aesthetic consideration of soil quality, nor suitability for plant health (re: any proposed landscaping), nor suitability for subsurface utilities.

The derivation of the GAC for human health includes the following assumptions:

- Contaminants are present in the top 1m of the ground profile and there is a viable pathway to the surface;
- Contaminants are present at depths below 1m of the ground profile which may be exposed during excavation/construction works/ final formation levels.
- Soil at the site has a total organic carbon (TOC) geometric mean content of 1.1% (1.9% soil organic matter (SOM)); varying between 0.2% to 6.7% (0.34% to 11.5% SOM). Therefore, a TOC range of 0.58% to <1.45% has been used in selecting the appropriate GAC; and
- Soils are deemed to be most representative of a 'sandy loam' type soil.

The following hierarchy has been adopted in selecting the appropriate GAC to use for the potential contaminants of concern to screen as part of this assessment:

- Defra (2014) SP1010: Development of Category 4 Screening Levels for Assessment of Land Contamination - Policy Companion Document, December 2014. Commercial/industrial. 1% Soil Organic Matter (SOM);
- CL:AIRE (2021) CL:AIRE Category 4 Screening Levels: Vinyl chloride, trichloroethene (TCE), tetrachloroethene (PCE) 1% SOM;
- LQM/CIEH Suitable 4 Use Levels (2015). Commercial/industrial. 1% SOM; and

USEPA RSL (May 2020).

The Hazardous Waste value of 11.5 (HP8 – corrosive) as per the Environment Agency "Guidance on the Classification and Assessment of Waste (1st Edition v1.2.GB), Technical Guidance WM3A, has been used for pH to assess acute human health risk from the alkaline soils at the site.

The Environment Agency Report 'The UK Approach for Evaluating Human Health Risk from Petroleum Hydrocarbons in Soils' SR: P5-080/TR3 (Environment Agency, 2005) states that even where guideline values for the individual TPH fractions are not exceeded, potential additive toxicological effects between the fractions may result in a potential risk to human health. The suggested approach to address this issue is to calculate Hazard Quotients (HQ) for each fraction by dividing the recorded concentration of the fraction by the corresponding guideline value. These HQ are then summed to form an overall Hazard Index (HI). Where the HI exceeds 1, further risk assessment or an appraisal of remedial works should be undertaken; where HI is less than one, no further action is required.

The calculated HQ and HI from the soil samples obtained across the site have been calculated in respect to assessment criteria for commercial/industrial end use and are presented in Appendix I.

The methodology and assumptions presented for human health in this assessment are not applicable to the short-term, and typically high frequency of exposure experienced by construction/maintenance workers. It has been assumed that the risk to this receptor group will be appropriately managed through construction health and safety legislation and practice including for groundworkers to assess site specific risk to health and incorporate appropriate mitigation.

Personal protective equipment will also be a minimum requirement for site workers. The main potential contamination linkages applicable to construction/maintenance workers are:

Direct contact with, or ingestion of, contaminants within soils, groundwater, and soil derived dust;

Inhalation of organic vapours from soils, groundwater, and soil derived dust (primarily asbestos); and

Ground gas inhalation/explosion risk.

However, AECOM has derived its own construction worker GAC values for chronic exposure, based on the assumptions made in SoBRA (2020) Development of Acute Generic Assessment Criteria for Assessing Risks to Human Health from Contaminants in Soil, Version 2.0, Society of Brownfield Risk Assessment, July 2020 and in accordance with UK Environment Agency (EA) guidance and the methodology set out within the Contaminated Land Exposure Assessment (CLEA) Model framework. Therefore, a quantitative assessment of the potential risks to human health for construction workers has been included as part of this assessment.

9.2.2 Human Health – Soil Results

Soil samples obtained during the recent ground investigation were analysed for a range of determinands and the results were screened against the GAC for a commercial/industrial end use. This included results from 65 Made Ground samples and 157 natural stratum samples.

There were no exceedances of the GAC from the soil samples obtained from the AECOM 2023 ground investigation with regard to chronic risks to human health.

9.2.2.1 pH

A total of two samples recorded pH in the soil in excess of pH 11.5. Although not directly applicable to human health, this is a value taken from Environment Agency "Guidance on the Classification and Assessment of Waste (1st Edition v1.2.GB), Technical Guidance WM3A" (Environment Agency, Natural Resources Wales and Scottish Environmental Protection Agency, 2021), where waste with a pH ≤ 2 or ≥ 11.5 should be considered HP8 Corrosive. Therefore, with regard to protection of groundworkers this is considered to be an arbitrary value on which to screen the soil data. The exceedances are presented in the Table below and Figure 9-1and Figure 9-2.

Table 9-10. Summary of pH greater than 11.5 pH value identified within the site boundary

Location	Sample Depth	pH Value	Geology
E-BH04	0.1	11.9	Made Ground
E-CPT06	0.1	11.7	Made Ground

9.2.2.2

Figure 9-1. pH values exceeding pH 11.5 (corrosive)

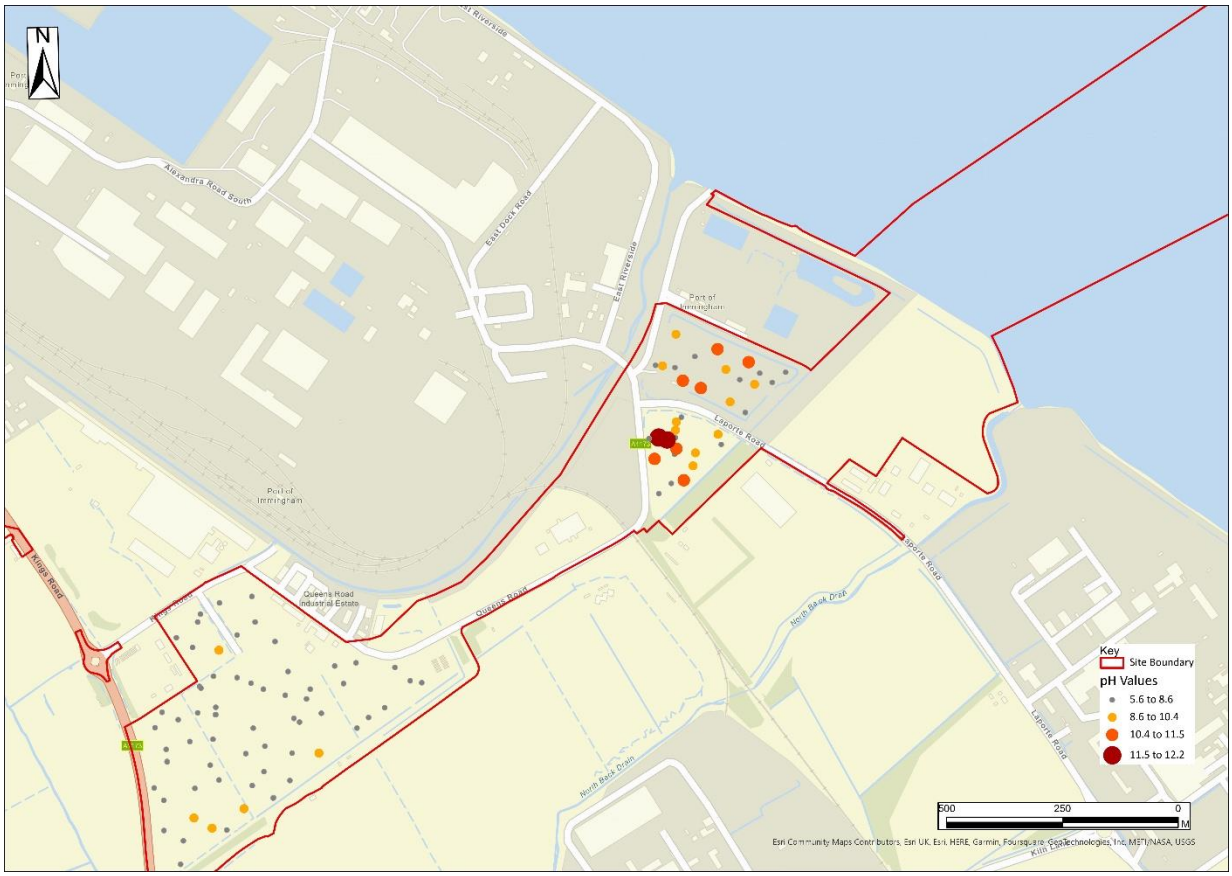

Figure 9-2. Distribution of pH values

The elevated pH values were recorded in samples within the central area of the East Site-Ammonia Storage at shallow depths of 0.1 m bgl. E-BH04 and E-CPT06 are located in close proximity, suggesting a localised source of elevated pH. High pH in dust in soils is a hazard for construction workers therefore control of dust will be particularly important during groundworks. Control measures during ground works should be considered such as minimisation of simultaneously open cut areas, damping down and water spraying as part of a managed system of dust control.

9.2.2.3 Hazard Quotient for TPH Assessment

The Environment Agency Report "The UK Approach for Evaluating Human Health Risk from Petroleum Hydrocarbons in Soils" (Environment Agency, 2005) states that even where guideline values for the individual TPH fractions are not exceeded potential additive toxicological effects between the fractions may result in a potential risk to human health.

The suggested approach to address this issue is to calculate Hazard Quotients (HQs) for each fraction by dividing the recorded concentration of the fraction by the corresponding guideline value. These HQs are then summed to form an overall Hazard Index (HI). Where the HI exceeds 1, further risk assessment or an appraisal of remedial works should be undertaken; where the HI is less than 1 no further action is required.

The calculated Hazard Quotients (HQs) from locations across the site have been calculated in respect to assessment criteria for Commercial Industrial use and are presented in Appendix I. All samples analysed for speciated TPH recorded the Hazard Index (HI) below 1. The HI ranged from 0.06 to 0.3. Therefore, the risks associated with the cumulative toxicological effects from the combined TPH species are considered to be low and thus no further assessment is required.

9.2.2.4 Asbestos Analysis and Assessment

Thirty samples were analysed for the presence of asbestos. Of the thirty samples, twenty-six were scheduled in Made Ground and four were scheduled within clays of the Tidal Flat Deposits. Of these, two samples of Made Ground were identified as containing asbestos material, of which one was scheduled for asbestos quantification analysis.

The exceedances are presented in Table 9-11 below and presented within Figure 9-3 and Figure 9-4.

Table 9-11. Summary of asbestos identified within the site boundary

Location	Asbestos Type	Asbestos Containing Material Types Detected	Quantification
E-BH10 @ 0mbgl	Chrysotile		<0.001 (mass %)
E-BH25 @ 0mbgl	Chrysotile	Loose fibres	-

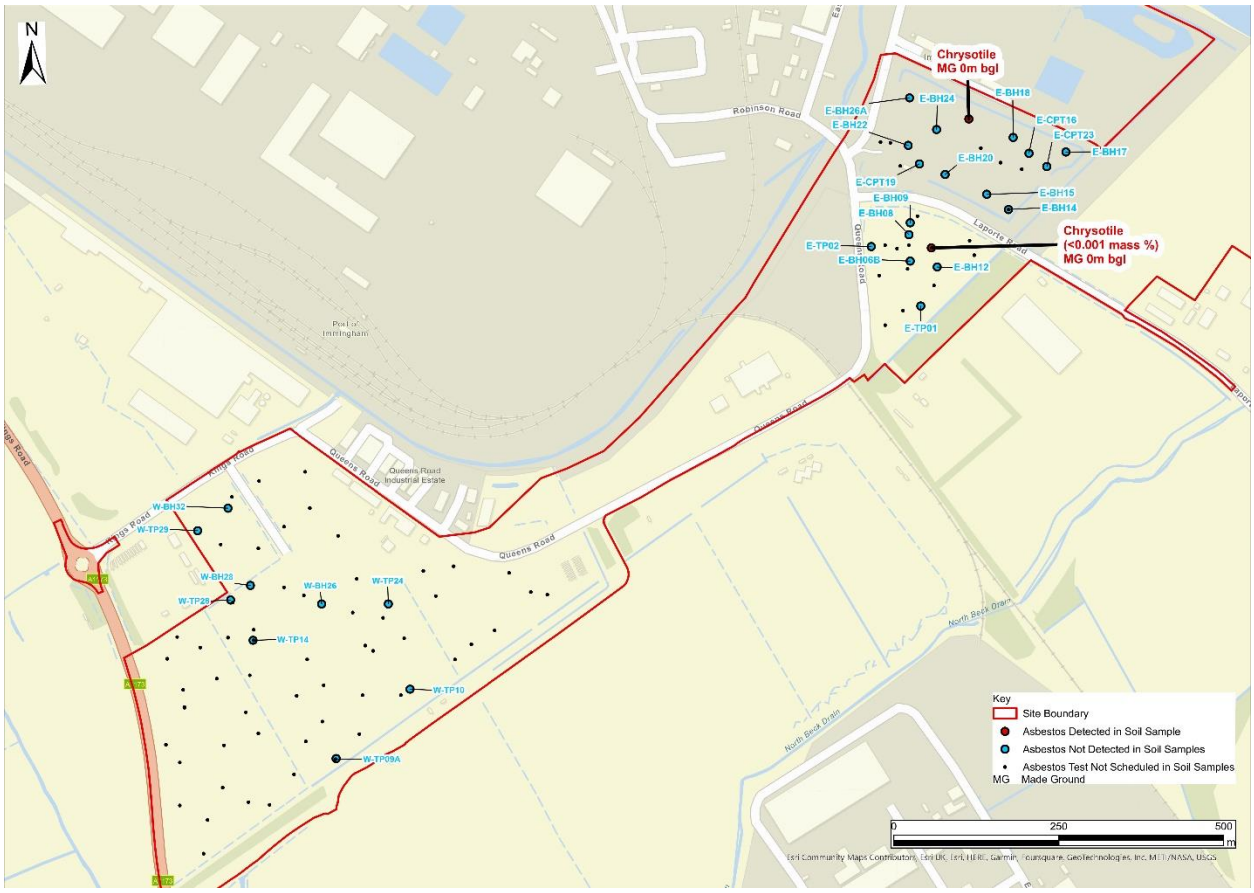

Figure 9-3. Distribution of asbestos within Made Ground

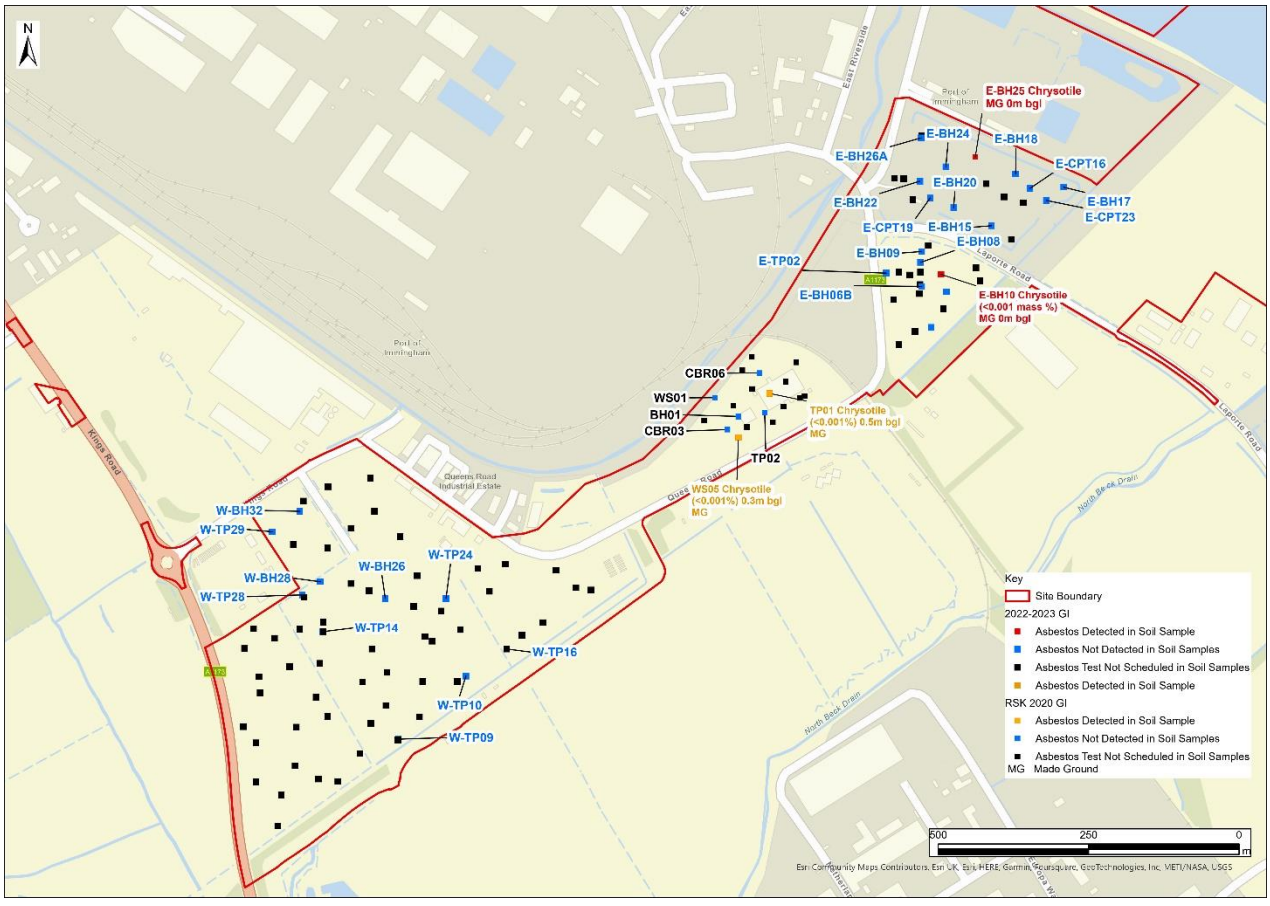

Figure 9-4. Distribution of asbestos within Made Ground in historical investigations and the 2022 – 2023 investigation

Given that asbestos is a key contaminant of concern with regards to human health and should be a fundamental part of any remedial works being undertaken at the site, it is considered prudent to assess the AECOM 2023 data in context with the previous investigations undertaken at the site. Two positive identifications of chrysotile (<0.001%) were recorded within Made Ground at 0.3m bgl and 0.5m bgl in the RSK (2020) GI out of seven samples tested for asbestos. The exploratory holes where asbestos was detected encroaches within the pipeline corridor. However, RSK concluded that the asbestos presented a low risk as the concentrations were recorded below the laboratory limit of detection and due to the presence of hardstanding as part of the proposed development. A watching brief was recommended by RSK during the development of the site. It should be noted that no investigation was undertaken as part of the AECOM 2023 GI within the area of the pipeline corridors.

The exceedances recorded in the AECOM (2023) GI are located in isolated areas of the northern extent of the East Site-Hydrogen Production (E-BH25) and the East Site-Ammonia Storage site (E-BH10) at ground level. However, given the limited number positive identifications of asbestos combined with the low quantification, there is not considered to be a significant risk to human health associated with asbestos in soils. Furthermore, it is anticipated that the East Site (Hydrogen Production and Ammonia Storage Areas) will be covered in hardstanding as part of the proposed development which will provide a barrier to the potential inhalation of fibres.

9.2.3 Construction Worker Assessment

It is considered, based on the proposed development / end use of the site as a multi-user liquid bulk jetty and the redevelopment / earthworks taking place, that a quantitative assessment should be made of the potential risks to human health for construction workers. The commercial GAC used in the previous sections to assess risks to human health are not considered appropriate as a reliable indicator of risk to construction workers as the GAC for this scenario are based on different assumptions about viable exposure pathways, and the frequency, duration and rates of exposure.

It should be noted, the risks from asbestos is specifically excluded from this methodology.
The construction worker assessment details both acute and chronic exposure risk. Acute risk is associated with one-off or short-term exposure to relatively high contaminant concentrations (e.g. “hotspots”) whereas chronic exposure is associated with frequently repeated long-term exposure to average concentrations.

Acute risks can be assessed by comparison to the Acute Evaluation Criteria (AEC) derived by the Society of Brownfield Risk Assessment (SoBRA) in 2020. These were derived for seven contaminants: arsenic, benzene, cadmium, free cyanide, phenol, trichloroethene (TCE) and vinyl chloride (VC). These were derived for two groups of receptors: members of the public and workers involved with excavations. Exposure scenarios considered for the latter are:

Oral exposure – short-term exposure via direct contact with outdoor soil on the assumption that personal protective equipment (PPE) is not worn;

Dermal exposure – short-term exposure via direct contact with outdoor soil on the assumption that PPE is not worn; and

Inhalation exposure – short-term exposure via inhalation of dusts or vapours released from excavation activities without the use of PPE. Note that the exposure is assumed to occur for a worker at ground level at the top of the excavation. It does not apply to construction workers entering excavations.

A summary of the specified determinands assessed against the SoBRA AEC is presened in Table .

Table 9-12. Summary of determinand concentrations against acute construction worker AEC

Determinand	Number. of samples Exceeding AGAC / Number. of samples analysed	Construction Worker AEC (mg/kg)	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)
Arsenic	0/196	7000	<1	97
Cadmium	0/196	1200	<0.2	2.8
Benzene	0/209	370	<0.001	0.025
Phenol	0/84	175000	<0.2	<0.2
Trichloroethene	0/84	33000	<0.001	<0.005

Determinand	Number. of samples Exceeding AGAC / Number. of samples analysed	Construction Worker AEC (mg/kg)	Minimum Concentration (mg/kg)	Maximum Concentration (mg/kg)
Vinyl Chloride	0/84	220	<0.001	<0.005
Cyanide (free)	0/198	1400	<1	<1

The SoBRA 2020 AEC guidance, although only for seven substances, indicates that acute risks are unlikely to be of concern for most contaminants if concentrations do not exceed AEC.
AECOM has derived its own construction worker GAC values for chronic exposure, based on the assumptions made in the above SoBRA report and in accordance with UK Environment Agency (EA) guidance and the methodology set out within the Contaminated Land Exposure Assessment (CLEA) Model framework.
Construction worker GAC have been derived for chronic exposure, as previously stated due to different assumptions about viable exposure pathways, and the frequency, duration and rates of exposure compared to the commercial / industrial EC. Commercial / Industrial GAC are based on a worker in an office / other commercial building, where the majority of the site is covered by hardstanding or vegetation, and direct soil contact is minimal. Compared to the construction worker scenario the commercial / industrial scenario considers a lower inhalation rate, lower soil ingestion rate and lower soil to skin adherence factor. As a result of the increase in the soil ingestion rate for construction workers, the construction worker GAC for substances where the ingestion route dominates are lower than the standard commercial land-use GAC. Where ingestion does not dominate for the standard commercial land use scenario the construction worker GAC can be the higher GAC – this is typically the case for volatile substances or substances with particularly low toxicity thresholds in air and therefore where indoor air exposure dominates.

The soil chemical results were screened against the AECOM construction worker GAC. No exceedances of the AECOM construction worker GAC were identified. The GAC used in this assessment were derived based on the assumption that personal protective equipment (PPE) is **not worn** and no methods of work are adopted to prevent or control exposure to soil. Therefore, they are considered conservative.

9.3 Human Health GQRA Findings and Conclusions

The risk to ground workers from inhalation of asbestos fibres during ground disturbance has been assessed as Low, with two identifications of chysotile recorded in the East Site (Hydrogen Production and Ammonia Storage Areas). It is advised that unless proven otherwise, mitigation will be required to avoid an unacceptable risk during development. A survey by a specialist in asbestos identification in soils is advised to ensure appropriate samples are taken for testing as part of the remedial works. Asbestos control measures will be required during development/construction works. Mitigation and monitoring will be required to eliminate, reduce, control or manage the risk, or in the last resort provide suitable personal protective equipment (PPE)/respiratory protective equipment (RPE) for ground workers. Mitigation will also be required to minimise the risk of off-site migration.

A Low risk from exposure by inhalation of asbestos fibres has been assessed for future site users of the Site assuming Made Ground is exposed within landscaped areas. This risk could be mitigated by evaluation of “releasability” of fibres during soil disturbance (activity based testing). However, in practice it is expected that most of the development will comprise hardstanding and therefore provision of a designed cover layer, marker layer / anti dig layer is advised in areas of soft landscaping thereby reducing the risks to future site users. It should be noted that asbestos is not considered to pose a risk which it is present below hardstanding as there would be no exposure from inhalation of fibres; therefore, the principal risks occur for exposure during construction and to future site users from asbestos in landscaped areas, and the risk for maintenance workers coming in contact with contaminated soils within service corridors. Mitigation of the potential risk to maintenance workers could include placing services in “clean” corridors.

pH levels within two samples of Made Ground soils have been identified at levels which are considered to be corrosive and thus may pose harm. High pH in dust in soil is a hazard for construction workers therefore control of dust will be particularly important during groundworks. Control measures during ground works should be considered such as minimisation of simultaneously open cut areas, damping down and water spraying as part of a managed system of dust control.

Other than asbestos and pH, based on the results of the screening assessment of the AECOM 2023 chemical data no contaminants exceeded the GAC for the proposed commercial / industrial end use. Therefore, the risk to future

users is deemed negligible and thus acceptable with regard to other contaminants identified within the CSM. However, it should also be noted that proposed pipeline area of the site has not yet been investigated.

Appendix G Contamination Assessment Controlled Waters

9.4 Controlled Waters Assumptions and Criteria Used

Risks to controlled waters have been assessed using a tiered approach based on that described in the Environment Agency's Remedial Targets Methodology (RTM).

Soil leachate data has been screened against controlled waters Generic Assessment Criteria (GAC) that are designed to be protective of surface water (North Beck Drain catchment including Habrough Marsh Drain and the Humber Estuary) and groundwater (Secondary (undifferentiated) aquifer associated with Beach and Tidal Flat Deposits and Glacial Till Deposits and the Principal Aquifer associated with the Flamborough Chalk Formation and Burnham Chalk Formation). The Tidal Flat Deposits are designated as an Unproductive Aquifer.

Controlled waters GAC selected for soils and groundwater are primarily Environmental Quality Standards (EQS) for protection of the surface water and England & Wales Drinking Water Standards (DWS) for aquifer protection. However, these are not published for certain determinands and so, in the absence of an EQS or DWS, reference has been made to the following in order of preference:

EQS (coastal) criteria:

- The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015 – AA-EQS / MAC-EQS Transitional/Coastal;
- The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015 - Saltwater Standards;
- The Water Environment (River Basin Management Planning etc.) (Miscellaneous Amendments) (Scotland) Regulations 2015. Scottish SI 2015 211. 1AA-EQS / MAC-EQS Transitional/Coast;
- SEPA - Supporting Guidance (WAT-SG-53) Environmental Quality Standards for Discharges to Surface Waters. v6. Dec 2015. Marine EQS – AA / MAC;
- The Water Framework Directive (Classification, Priority Substances and Shellfish Waters) Regulations (Northern Ireland) 2015. AA-EQS / MAC EQS Transitional/Coast;
- The Water Framework Directive (Classification, Priority Substances and Shellfish Waters) Regulations (Northern Ireland) 2015 - Saltwater Standards;
- European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2015. S.I. 386 of 2015. Ireland - AA-EQS / MAC-EQS Transitional/Coast;
- PNEC derived for EU REACH registration dossiers – Coastal;

DWS criteria:

- Water, England & Wales - Water Supply (Water Quality) Regulations, 2016 614;
- Guidelines for Drinking-water Quality (4th Edition inc. the First Addendum). World Health Organisation. 2017;
- World Health Organisation (WHO), Petroleum Products in Drinking-water. Background document for development of WHO Guidelines for Drinking-water Quality WHO/SDE/WSH/05.08/123, 2008;
- Drinking Water Guidelines Calculated (AECOM) using WHO Methodology; and
- US Environmental Protection Agency (USEPA), Risk Screening Levels, May 2020. Tap water.

A conservative Tier 2 Risk Assessment was undertaken to compare the soil leachate, groundwater and surface waters datasets to the criteria detailed above to identify whether any of the samples had recorded elevated concentrations of metals, inorganic or organic determinands compared to the above hierarchy of criteria. The dataset assessed comprised the soil leachate results from the AECOM 2023 ground investigation. The soils selected for soil leachate analysis were selected based on observations of contamination within the soils during the fieldwork, together with obtaining a lateral and vertical spread across the site, primarily within the Made Ground soils. It is noted on this basis therefore, that not necessarily all those soils with the greatest concentrations of contaminants recorded will have a corresponding soil leachate analysis. Therefore, there is the potential that the soil leachate results may not fully represent the potential leachable concentrations of contaminants across the site.

Laboratory chemical analysis data for soil leachate, groundwater and surface waters from the recent AECOM 2023 ground investigation has been used in the analysis of risk to controlled waters. The chemical analysis comprised

metals, PAH, TPH, VOC, SVOC, phenols, PCB 7 congeners, PCB WHO 12 congeners and PFAS (surface water samples only).

It should be noted that for a risk to be present then a viable contaminant linkage should be identified between the source and receptor. It is possible that a risk to controlled waters may be identified which is not a direct impediment to the development and this will be stated in the conclusions of the report.

The Environment Agency Remedial Targets Methodology sets out a hierarchy of data relevant to controlled waters risk assessment, namely groundwater or surface water data, soil leachate data, and lastly soil data.

In the absence of soil leachate data, an assessment can be undertaken on the soil sample data to evaluate potential risks to controlled waters from reported contaminant concentrations in soil. This references calculated soil GAC that represent theoretical soil concentrations that could partition at equilibrium to give a concentration in soil pore water equivalent to the applicable GAC in the above list (as described in Section 5 of the RTM). As soil leachate data is available, this exercise has not been undertaken at this level of assessment as the actual soil leachate sample data provides a more accurate reflection of site conditions.

9.5 Critical Receptors

9.5.1.1 Surface Waters

The main surface water receptors are the North Beck Drain Catchment (including the Habrough Marsh Drain, unidentified drains and unidentified surface water features on site) and the Humber Estuary. A proportion of precipitation falling on the current site is expected to seep into the ground and enter preferential pathways such as drains and unidentified surface water features and migrate towards the Humber Estuary. Due to the appreciable distance of travel by ground or by watercourse there is likely to be some attenuation for most contaminants before drainage reaches the receiving water, as well as upon entering the Humber Estuary.

9.5.1.2 Groundwater

The Beach and Tidal Flat Deposits located within the north eastern boundary of the East Site are designated as a Secondary Undifferentiated Aquifer. The Environment Agency (2017) define Secondary Undifferentiated Aquifers "*aquifers where it is not possible to apply either a Secondary A or B definition because of the variable characteristics of the rock type. These have only a minor value*". The Tidal Flat Deposits underlying entire Project site, apart from the bank of the Humber Estuary, are designated as an Unproductive Aquifer. The Environment Agency (2017) define Unproductive Aquifers as "*largely unable to provide usable water supplies and are unlikely to have surface water and wetland ecosystems dependent on them*". Glacial Till Deposits underlie the Tidal Flat Deposits across the entire Project site and are designated as a Secondary Undifferentiated Aquifer. The Flamborough Chalk Formation and Burnham Chalk Formation underlying the Glacial Till Deposits are designated as a Principal Aquifer. The Environment Agency (2017) define Principal Aquifers as aquifers that "*provide significant quantities of drinking water, and water for business needs. They may also support rivers, lakes and wetlands*". As stated in Section 5, the groundwater data indicates that the groundwater flows in a north-easterly direction towards the Humber Estuary. There is possible hydraulic continuity between groundwater in the Made Ground and Tidal Flat Deposits. The groundwater data also indicates that the Glacial Till is not in hydraulic continuity with the Tidal Flat Deposits or the Flamborough Chalk Formation.

Source Protection Zones (SPZ) are located within the site boundary. An SPZ 1 is located within the southern half of the site within the West Site and proposed pipeline route. The Environment Agency (2019) describe an SPZ 1 as a "*50-day travel time of pollutant to source with a 50 metres default minimum radius*". An SPZ 2 radiates out from the SPZ 1 and encompasses the southern half of the site and the pipeline route. The Environment Agency (2019) describe an SPZ 2 as a "*400-day travel time of pollutant to source. This has a 250 or 500 metres minimum radius around the source depending on the amount of water taken*". The remainder of the site is designated as an SPZ 3. The Environment Agency (2019) describe an SPZ 3 as "*the area around a supply source within which all the groundwater ends up at the abstraction point. This is the point from where the water is taken. This could extend some distance from the source point*". As the Flamborough Chalk Formation is designated as a Principal Aquifer, it is assumed that the SPZ is associated with an abstraction within the Chalk. However, this information has not been confirmed. Therefore, the use of Drinking Water Standards (DWS) criteria in this assessment is considered appropriate.

9.6 Previous Investigations

The RSK (2020) GI recorded exceedances of nickel in two exploratory holes (26µg/l in BH01 and 42µg/l in BH02within the Flamborough Chalk Formation). Zinc exceedances were also recorded in groundwater in BH01 (151µg/l) and BH02 (228µg/l) within the Flamborough Chalk Formation. However, RSK concluded that it is unlikely

that the dissolved phase contaminants in groundwater would pose a risk to the drainage ditch due to the lack of hydraulic continuity and the presence of hardstanding on the site.

9.7 Groundwater Sampling Locations

Groundwater samples during one monitoring round (February to March 2023) were obtained from 15 locations. The details of the screened strata of the monitoring wells and the groundwater samples taken are provided in Table below.

Table 9-13. Groundwater Sampling Locations

Exploratory Hole Location / Screened Strata	Groundwater Sample Collected
Made Ground	
E-BH15	Yes
E-BH20	Yes
E-BH22*	Yes
Tidal Flat Deposits	
E-BH14A	Yes
W-BH26**	Yes
Glacial Till Deposits	
E-BH07	Yes
E-BH11	Yes
E-BH25	Yes
W-BH14	Yes
W-BH18	Yes
W-BH24	Yes
W-BH31	Yes
W-BH34	Yes
Flamborough Chalk Formation	
E-BH01	Yes
E-BH02	Yes
E-BH04	Yes
E-BH10	Yes
E-BH18	Yes
E-BH21	Yes
W-BH01	Yes
W-BH09	Yes
W-BH17	Yes
W-BH20	Yes
W-BH21	Yes
W-BH22	Yes
W-BH30	Yes
W-BH35	

**E-BH22 is screened acrossMade Ground and Tidal Flat Deposits*

***W-BH26 is screened within clay deposits. It is assumed that it is within Tidal Flat Deposits.*

9.8 Risk to Surface Water

9.8.1 Groundwater Sampling Test Results (Tier 2 Screening)

The Tier 2 Screening Table for groundwater samples for risks to surface waters are presented in Appendix I and the results are discussed in the following sections. The certificates of chemical analysis are presented in the Geotechnical Engineering Limited Factual Report, Appendix A.

Table and Table detail the summary of the determinands in groundwater within all strata that exceeded the EQS protective of surface water.

Table 9-14. Summary Groundwater Exceedances

Chemical Group	Determinand	Units	EQS (Coastal) Screening Value	Number of Results	Number of Detects	Minimum Concentration	Maximum Concentration	Number of Guideline Exceedances
Chlorinated Hydrocarbons	Chloroform	µg/l	2.5	13	3	<3	33.8	3
PAH	Naphthalene (Filtered)	µg/l	2	23	1	<0.01	7.5	1
	Anthracene (Filtered)	µg/l	0.1	23	1	<0.01	0.13	1
Metals	Copper (Filtered)	µg/l	3.76	23	18	<0.5	17	4
	Nickel (Filtered)	µg/l	8.6	23	21	<0.5	38	8
	Zinc (Filtered)	µg/l	6.8	23	23	0.7	41	9
Inorganics	Cyanide Total	mg/l	0.001	23	1	<0.01	0.13	1
	Ammoniacal Nitrogen	mg/l	0.021	23	20	<0.015	870	19
	Ammonium	mg/l	0.021	16	15	<0.015	1100	13

Table 9-15. Summary Groundwater Exceedance Determinands Stratum Comparison (EQS)

	Determinand	Naphthalene (Filtered)	Anthracene (Filtered)	Copper (Filtered)	Nickel (Filtered)	Zinc (Filtered)	Cyanide Total*	Ammonium as NH_4*	Ammoniacal Nitrogen as N	Chloroform
Min concentration	MG	<0.01	<0.01	<0.5	6.3	-	<0.01	1	0.8	-
	TFD	-	-	<0.5	19	5.6	-	12	0.12	-
	GTD	-	-	<0.5	<0.5	0.7	-	0.025	0.019	<3
	FCF	-	-		0.9	2.2	-	<0.015	<0.015	<3
Max concentration	MG	7.5	0.13	17	36	-	0.13	1100	870	-
	TFD	-	-	4.4	38	41	-	12	9.4	-
	GTD	-	-	4.8	13	13	-	0.2	0.72	27.3
	FCF	-	-	-	21	21	-	1.2	0.48	33.8
Average Concentration	MG	2.5	0.05	6.2	19	-	0.05	368	291	-
	TFD	-	-	-	-	-	-	-	-	-
	GTD	-	-	1.7	3.4	4.7	-	0.11	0.17	14

	Determinand	Naphthalene (Filtered)	Anthracene (Filtered)	Copper (Filtered)	Nickel (Filtered)	Zinc (Filtered)	Cyanide Total*	Ammonium as NH_4*	Ammoniacal Nitrogen as N	Chloroform
	FCF	-	-		5.9	8.9	-	0.21	0.086	11
Geomean	MG	0.091	0.024	2	15	-	0.024	15	12	-
	TFD	-	-	-	-	-	-	-	-	-
	GTD	-	-	1.2	1.8	3.3	-	0.085	0.096	8.6
	FCF	-	-	-	3.1	7.2	-	0.059	0.041	5.5
Median	MG	0.01	0.01	1	15	-	0.01	2.8	2.2	-
	TFD	-	-	2.45	28.5	23.3	-	12	4.76	-
	GTD	-	-	1	1.6	3.9	-	0.113	0.1	12.75
	FCF	-	-	-	2.9	7.9	-	0.037	0.03	3

9.8.1.1 Made Ground

Groundwater samples were obtained from three wells screened in the Made Ground (E-BH15, E-BH20 and E-BH22). Exceedances of the EQS were recorded within these monitoring wells (presented in Appendix I).

The key findings associated with the groundwater within the Made Ground are as follows:

PAH exceedances of the EQS were only recorded for groundwater within Made Ground for naphthalene (7.5µg/l) and anthracene (0.13µg/l) in E-BH15.

The highest concentrations of ammonium and ammoniacal nitrogen were recorded in E-BH15 at 1,100mg/l and870mg/l respectively. The concentrations of ammonium and ammoniacal nitrogen are five orders of magnitude and four orders of magntide above the EQS Coastal criteria (0.021mg/l) respectively. The highest concentration of ammonium and ammonical nitrogen were recorded in groundwater within Made Ground compared to groundwater within superficial deposits and bedrock. An ammonia odour was also recorded within Made Ground in E-BH15 during the GI. All Made Ground samples recorded exceedances of ammoniacal nitrogen and ammonium.

Exceedances of the EQS Coastal criteria were recorded for cyanide (total) (0.13mg/l, anthracene (0.13µg/l) and copper (17µg/l) in E-BH15 and for nickel (12µg/l) and zinc (7.9µg/l) in E-BH20. The concentration of copper and nickel were recorded one order of magnitude above the EQS criteria. The concentration of zinc was recorded at the same order of magnitude as the EQS and is therefore considered a marginal exceedance. The concentration of copper was higher in groundwater within Made Ground compared to groundwater within superficial deposits and bedrock.

9.8.1.2 Tidal Flat Deposits

Exceedances of the EQS were recorded within the Tidal Flat Deposits monitoring wells E-BH14A and W-BH26. The exceedances from the two monitoring wells are presented in Appendix I.

The key findings associated with the groundwater within the Tidal Flat Deposits are as follows:

Exceedances of metals were recorded for copper, nickel and zinc. The EQS exceedance of copper (4.4µg/l) was recorded within the same order of magnitude as the EQS criteria and is therefore considered marginal. The exceedance of the EQS criteria for nickel (19 µg/l) and zinc (41 µg/l) are one order of magnitude above the EQS criteria. The concentrations of nickel and zinc were higher in groundwater within Tidal Flat Deposits compared to Made Ground, Glacial Till Deposits and the Flamborough Chalk Formation.

Exceedances of ammoniacal nitrogen were recorded in both exploratory holes, recording concentrations one order of magnitude above the EQS in W-BH26 (0.12mg/l) and three orders of magnitude above the EQS in E-BH14A (9.4mg/l). An exceedance of ammonia was also recorded in E-BH14A at 12mg/l. During the GI, an ammonia odour was recorded within Made Ground in E-BH14A.

9.8.1.3 Glacial Till Deposits

Exceedances of the EQS were recorded within the Glacial Till Deposits monitoring wells (E-BH07, E-BH11. E-BH25, W-BH14, W-BH18, W-BH24, W-BH31 and W-BH34). The exceedances from the eight monitoring wells are presented in Appendix I.

The key findings associated with the groundwater within the Glacial Deposits are as follows:

Exceedances of chloroform and metals and inorganics were recorded in E-BH07, E-BH25 and E-BH11.

The exceedances of chloroform in E-BH07 (22.5µg/l) and E-BH25 (27.3µg/l) are one order of magnitude above the EQS Coastal criteria.

The metal exceedances were recorded for the EQS Coastal criteria for copper, nickel and zinc. E-BH11 recorded EQS exceedances of copper (4.8µg/l), nickel (13µg/l) and zinc (13µg/l). The exceedances of nickel and zinc are one order of magnitude above the EQS Coastal criteria. The exceedance of copper is within the same order of magnitude as the EQS criteria and is therefore considered marginal. One metal exceedance was recorded in E-BH25 for copper at 4.2 µg/l which is considered to be a marginal exceedance.

Exceedances of ammoniacal nitrogen were recorded in most exploratory holes, apart from E-BH11. The concentrations of the exceedances ranged between 0.041mg/l and 0.72mg/l. As the exceedances are within the same order of magnitude or one order of magnitude above the EQS Coastal criteria, they are considered marginal.

Exceedances of ammonium were recorded in E-BH07 (0.066mg/l), E-BH11 (0.025mg/l), W-BH14 (0.13mg/l) and W-BH31 (0.2mg/l). As the exceedances are within the same order of magnitude or one order of magnitude above the EQS Coastal criteria, they are considered marginal.

9.8.1.4 Flamborough Chalk Formation

Exceedances of the EQS were recorded within the Flamborough Chalk Formation monitoring wells. The exceedances from the fourteen monitoring wells is presented in Table 9-16. The monitoring wells include E-BH01, E-BH02, E-BH04, E-BH10, E-BH18, E-BH21, W-BH01, W-BH09, W-BH17, W-BH20, W-BH21, W-BH22, W-BH30 and W-BH35.

The key findings associated with the Flamborough Chalk Formation groundwater are as follows:

No exceedances were recorded in E-BH01, W-BH09, W-BH17, W-BH20, W-BH30 and W-BH35.

Exceedances were recorded for chloroform and metals in E-BH02, E-BH18, E-BH21, W-BH01, W-BH21 and W-BH22 within the East Site (Hydrogen Production and Ammonia Storage Areas) and the West Site.

The only exceedance of chlorinated hydrocarbons was recorded for chloroform in E-BH02 (33.8µg/l). The exceedance is one order of magnitude above the EQS Coastal criteria. Furthermore, the maximum concentration of chloroform is higher in the Flamborough Chalk Formation compared to the groundwater within Made Ground and Glacial Till Deposits.

Three exceedances of nickel were recorded in E-BH02 (9.4µg/l), E-BH18 (21µg/l) and E-BH21 (12µg/l). The concentration in E-BH02 is considered a marginal exceedance as it is the same order of magnitude as the EQS Coastal criteria. The concentration of nickel in E-BH21 is one order of magnitude above the EQS Coastal criteria. Exceedances of nickel were also recorded in the RSK (2020) GI in groundwater within the Flamborough Chalk Formation.

Six EQS Coastal exceedances of zinc were recorded in E-BH02 (16µg/l), E-BH18 (21µg/l), E-BH21 (7.9µg/l), W-BH01 (7.9µg/l), W-BH21 (8.8µg/l) and W-BH22 (7.6µg/l). The concentrations were within the same order of magnitude in E-BH21, W-BH01 W-BH21 and W-BH22 and therefore considered marginal. The concentrations in E-BH02 and E-BH18 are one order of magnitude above the EQS criteria. Exceedances of zinc were also recorded in the RSK (2020) GI in groundwater within the Flamborough Chalk Formation.

Exceedances of ammoniacal nitrogen were recorded in E-BH04 (0.48mg/l), E-BH18 (0.055mg/l), W-BH09 (0.03mg/l), W-BH20 (0.028mg/l), W-BH21 (0.052mg/l) and W-BH22 (0.08mg/l). However, these exceedances are considered marginal as they are within the same order of magnitude or one order of magnitude above the EQS Coastal criteria.

Exceedances of ammonium were recorded in E-BH01 (0.13mg/l), E-BH10 (1.2mg/l), W-BH17 (0.037mg/l), W-BH21 (0.067mg/l) and W-BH30 (0.026mg/l). Most exceedances are marginal as they are within the same order of magnitude or one order of magnitude above the EQS. However, the exceedance in E-BH10 is two orders of magnitude above the EQS.

9.8.2 Soil Leachate Sampling Test Results (Tier 2 Screening)

A total of twenty soil samples were analysed for soil leachate analysis. This included eight from the Made Ground, eight from the Tidal Flat Deposits three from the Glacial Till and one from the Flamborough Chalk Formation. The Made Ground samples were taken from depths ranging from ground level to 1.2m bgl. The Tidal Flat Deposits and Glacial Till samples were taken at depths between 0.6m bgl and 10m bgl and between 12.4m bgl and 16.2m bgl respectively. The sample from chalk was taken at 24.9m bgl. A summary of the EQS soil leachate exceedances are presented in Table 9-16. Summary Soil Leachate EQS Exceedances

Table 9-16. Summary Soil Leachate EQS Exceedances

Chemical Group	Determinand	Units	EQS (Coastal)	Number of Results	Number of Detects	Minimum Concentration	Maximum Concentration	Number of Guideline Exceedances
Metals	Copper	µg/l	3.76	20	19	<0.7	32	18
	Lead	µg/l	1.3	20	6	<1	5.8	4
	Zinc	µg/l	6.8	20	20	0.5	24	3

No soil leachate exceedances were recorded in W-BH32 at 16.2m bgl within sand of the Glacial Till Deposits. The remainder of the samples all recorded soil leachate EQS Coastal exceedances, notably for copper. Exceedances of the EQS Coastal criteria for copper were recorded in samples from Made Ground, Tidal Flat Deposits, Glacial Till Deposits and Chalk. The highest concentration was recorded in a sample from E-BH25 at 32µg/l within Made Ground. Similarly, a sample from E-BH24 recorded the second highest concentration of copper at 23µg/l in Made Ground. E-BH24 and E-BH25 are in close proximity, which may suggest a localised source of elevated copper within Made Ground. A sample of Made Ground (0.2m bgl) and Tidal Flat Deposits (10m bgl) recorded exceedances of copper within the same exploratory hole (E-BH15) at 9.6µg/l and 16µg/l respectively. However, samples of Made Ground (0.8m bgl) and sand within Glacial Till Deposits (15.5m bgl) within E-BH20 only recorded an EQS Coastal exceedance of copper within Made Ground at 11µg/l.

An EQS Coastal exceedance of zinc was recorded in E-BH15 within Tidal Flat Deposits at 10m bgl. A sample of overlying Made Ground was also analysed from E-BH15 at 0.2m bgl which did not record an exceedance of zinc. This may suggest that the elevated zinc within E-BH15 is confined to the natural strata. However, locations E-BH04 and W-BH35 also recorded EQS Coastal exceedances within Made Ground.

Three out of four lead EQS Coastal exceedances were recorded in Made Ground samples. The highest concentration (5.8µg/l) was recorded in E-BH04 at 0.1m bgl within Made Ground. The exceedance within W-TP09A in clay within the Tidal Flat Deposits is considered marginal at 1.3µg/l.
One soil leachate sample was analysed within the Flamborough Chalk at 24.9m bgl within E-BH06B. An exceedance of the EQS Coastal criteria was recorded for copper within the chalk. The BGS Chalk Aquifer System of Lincolnshire Research Report (Whitehead and Lawrence, 2006) indicates that within confined chalk aquifers, the maximum value of copper can be up to 40µg/l. The concentration of 4.3µg/l recorded in E-BH06B is therefore considered to be representative of natural background conditions within chalk aquifers in Lincolnshire.

9.8.3 Surface Water Monitoring

Two rounds of surface water monitoring have been undertaken. The first round of surface water monitoring was undertaken on 31st March 2023 at two surface water locations and the second round was undertaken on 18th May 2023. A surface water sample was taken from Habrough Marsh Drain along the western site boundary (SW2) and from the North Beck Drain (SW3) along the eastern site boundary during the first monitoring round. SW2 was collected from Habrough Marsh Drain to the north of West Site, accessed from Kings Road. SW3 was collected from the North Beck Drain near Laporte Road. A surface water sample from the north-eastern extent of Habrough Marsh Drain, near Laporte Road (SW1), could not be collected during the first surface water monitoring round. Samples were collected from all three sampling locations during the second monitoring round.

A summary of the surface water results exceeding the EQS Coastal screening criteria is provided in Table .

Table 9-17. Summary of Surface Water EQS Exceedances

Chemical Group	Determinand	Units	EQS (Coastal) Screening Value	Number of Results	Number of Detects	Minimum Concentration	Maximum Concentration	Number of Guideline Exceedances
Round 1 Results								
PAH	Fluoranthene	µg/l	0.0063	2	2	0.0244	0.0309	2
	Benzo(a)pyrene	µg/l	0.00017	2	1	<0.002	0.0212	1
	Benzo(g,h,i)perylene	µg/l	0.00082	2	1	<0.005	0.014	1
	Benzo(b)fluoranthene	µg/l	0.017	2	2	0.0279	0.0348	1
Metals	Copper	µg/l	3.76	2	2	2.02	3.97	1
	Lead	µg/l	1.3	2	2	1.61	1.63	2
	Phosphorus	µg/l	226	2	2	183	333	1
	Zinc	µg/l	6.8	2	2	7.66	13.7	2
Inorganics	Inorganic nitrogen*	mg/l	3.78	2	2	8.62	12.2	2
Round 2 Results								
PAH	Fluoranthene	µg/l	0.0063	3	3	0.0124	0.0263	3
	Benzo(a)pyrene	µg/l	0.00017	3	1	<0.002	0.0197	1
	Benzo(g,h,i)perylene	µg/l	0.00082	3	1	<0.005	0.0084	1
	Benzo(b)fluoranthene	µg/l	0.017	3	2	<0.005	0.0239	2
Metals	Cadmium (Filtered)	µg/l	0.2	3	1	<0.08	0.272	1
	Copper	µg/l	3.76	3	3	2.37	5.62	1
	Iron	µg/l	1000	3	3	450	1920	1
	Lead	µg/l	1.3	3	2	<1	6.27	2
	Phosphorus	µg/l	226	3	3	118	468	2
	Zinc	µg/l	6.8	3	3	8.05	33.3	3
	Zinc (Filtered)	µg/l	6.8	3	3	4.24	16.7	2
Inorganics	Ammoniacal Nitrogen	mg/L	0.021	3	3	0.202	1.3	3
	Inorganic Nitrogen*	mg/L	3.78	3	1	1.94	4.83	1

**The EQS Coastal screening value for inorganic nitrogen was derived using the moderate and turbid criteria in Table 16 of the Water Framework Directive (2015).*

During the first monitoring round several exceedances of PAHs were recorded at both locations, with most exceedances recorded within the North Beck Drain (SW3). The exceedances of benzo(b)fluoranthene and fluoranthene were recorded within the same order of magnitude and one order of magnitude above the EQS Coastal criteria, therefore, these exceedances are considered to be marginal. The maximum concentrations of benzo(a)pyrene and benzo(g,h,i)perylene are two orders of magnitude above the EQS Coastal criteria were recorded in SW3 within the North Beck Drain.

During the second monitoring round exceedances of PAHs were recorded mostly within SW2 and SW3. Exceedances of fluoranthene at one order of magnitude above the EQS (0.0063µg/l) and benzo(b)fluoranthene within the same order of magnitude as the EQS (0.017µg/l) were recorded as SW2 and SW3. The concentration of benzo(a)pyrene (0.0197µg/l) was recorded at two orders of magnitude above the EQS (0.00017µg/l) and benzo(g,h,i)perylene (0.00084µg/l) was recorded at one order of magnitude above the EQS at SW2 (0.00082µg/l). An exceedance of fluoranthene (0.0124µg/l) at one order of magnitude above the EQS (0.0063µg/l) was recorded at SW1. Compared to the first monitoring round, the maximum recorded concentration of PAHs at SW2 and SW3 has declined. Given the distance from the site to the North Beck Drain (approximately 450m east) and the prevailing historical and current industrial land use immediately adjacent to the North Beck Drain and Habrough Marsh Drain, it is considered that these exceedances are associated with off-site industrial land use, and not from the site.

Exceedances of metals were recorded at SW2 and SW3 during the first and second monitoring rounds. The maximum concentration of cadmium, copper, iron, phosphorus and lead were recorded within the same order of

magnitude as the EQS Coastal criteria and are therefore considered to be marginal. The maximum concentration of zinc was recorded one order of magnitude above the EQS Coastal criteria during both monitoring rounds. Therefore, these exceedances are considered marginal and do not indicate a risk to surface water from the site. However, the maximum concentrations of copper, lead, phosphorus and zinc were higher within samples from the second monitoring round.

The concentration of inorganic nitrogen exceeded the EQS Coastal criteria by one order of magnitude at SW2 during the first monitoring round and within the same order of magnitude at SW3 during the first and second monitoring rounds. The concentration of inorganic nitrogen was lower within samples from the second monitoring round, with only one exceedance recorded at SW3 (4.83mg/l). Therefore, these exceedances are considered marginal.

Exceedances of ammoniacal nitrogen were recorded at all sampling locations during the second monitoring round, with the highest concentration recorded at SW2 (1.3mg/l) at two orders of magnitude above the EQS Coastal criteria (0.021mg/l). The exceedances at SW1 and SW3 were recorded at one order of magnitude above the EQS Coastal criteria.

Overall, it is considered that the exceedances of PAHs, metals and inorganics are indicative of wider contamination within nearby surface watercourses associated with the historical and current industrial land use within the wider Immingham area. Sampling location SW1 is located within Habrough Marsh Drain approximately 40m west from the East Site-Hydrogen Production. Within the surrounding area to SW1, there are pipelines and industrial infrastructure. Sampling location SW2 is located upstream of the West Site adjacent to pipelines, railway sidings and industrial properties. Sampling location SW3 is also located approximately 450m from the East Site. Multiple industrial properties and chemical works are located immediately adjacent to the North Beck Drain. In addition, the PAH exceedances in surface water samples were not recorded in soil leachate or groundwater samples from the site. The elevated metals in surface water may be indicative of natural conditions, with the soil leachate and groundwater across the wider site also recording elevated concentrations.

9.9 Discussion

Groundwater samples, leachate samples and surface water samples have been analysed and exceedances of EQS for chlorinated hydrocarbons, PAH’s (naphthalene and anthracene) , metals (copper, nickel and zinc) and inorganics (cyanide, ammoniacal nitrogen and ammonium) were recorded. The distribution of exceedances is shown in Figure 9-5 and Figure 9-6.

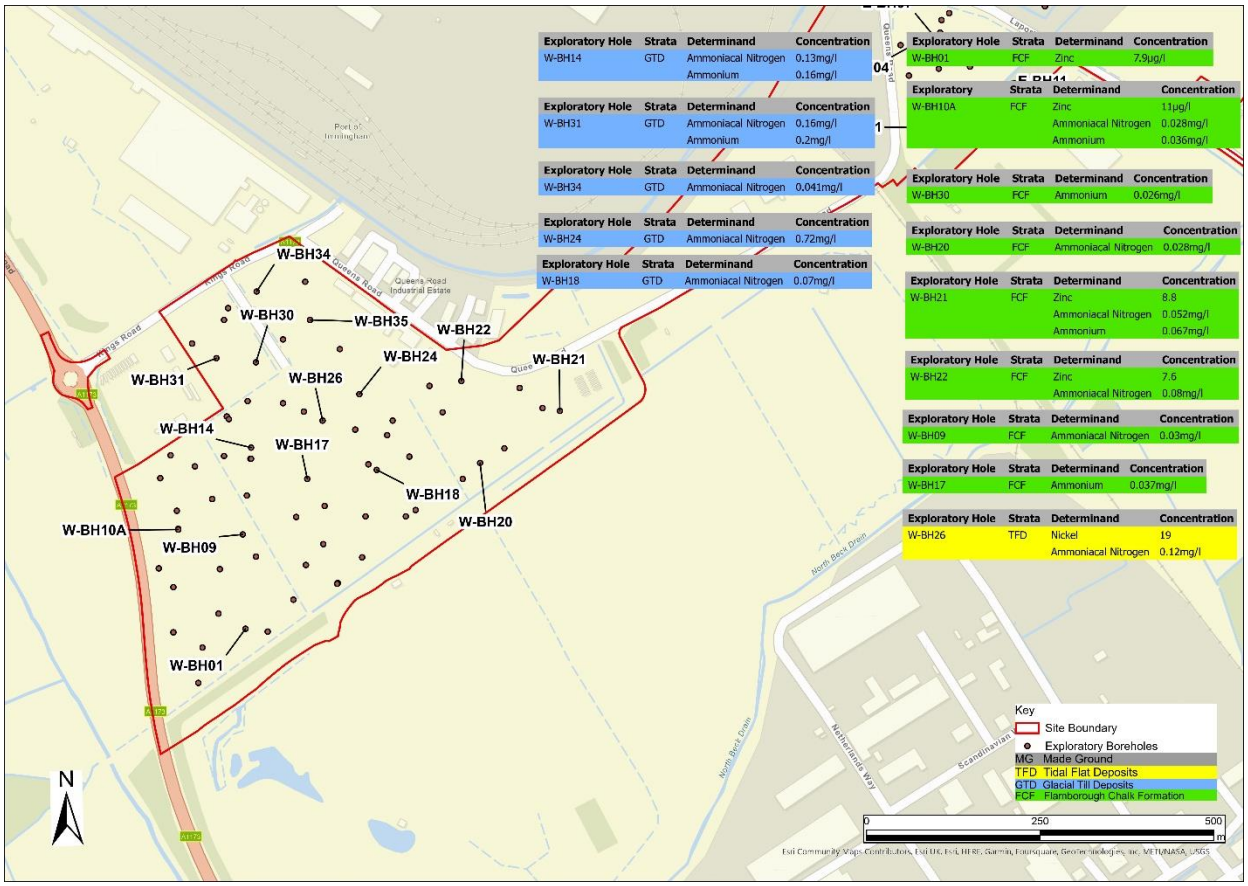

Figure 9-5. Groundwater Screening Exceedances Against EQS Screening Criteria in the West Site

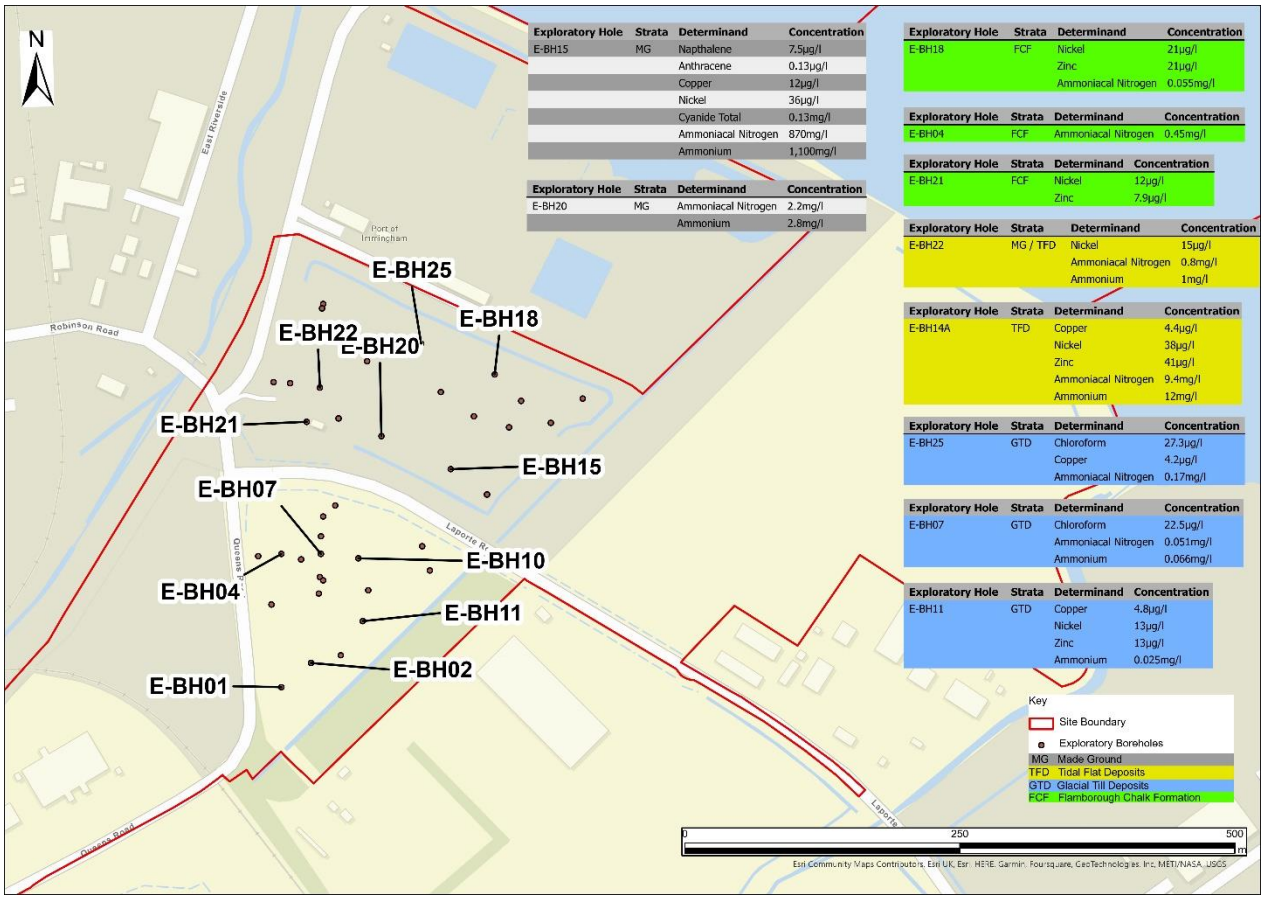

Figure 9-6. Groundwater Screening Exceedances Against EQS Screening Criteria in the East Site – Hydrogen Production and Ammonia Storage Areas

Surface water samples from Harbrough Marsh Drain (SW1 and SW2) and North Beck Drain (SW3) recorded exceedances of PAH's benzo(b)fluoranthene and fluoranthene above EQS coastal criteria. Exceedances above EQS for these two PAH's have not been recorded in groundwater or leachate during the ground investigation monitoring rounds. Given the distance from the site to the North Beck Drain (approximately 450m east) and the prevailing historical and current industrial land use immediately adjacent to the North Beck Drain and Habrough Marsh Drain, it is considered that these exceedances are associated with off-site industrial land use, and not from the site.

As a result of the limited number of exceedances, for chlorinated hydrocarbons, inorganics and PAH's across the strata and being isolated occurrences within the same order of magnitude or one order of magnitude above the EQS criteria, it is considered that there are no risks to surface waters from chlorinated hydrocarbons, inorganics and PAH's.

There is not considered to be a risk to surface water quality associated with the EQS exceedances of metals recorded in groundwater across all strata and surface water samples. The majority of metal exceedances recorded are within the same order of magnitude or one order of magnitude above the EQS Coastal criteria, therefore it is not considered that there is a risk to surface water associated with metals from groundwater or leachate. Furthermore, the exceedances were recorded across a range of strata which may suggest the concentrations are indicative of natural background conditions.

Surface water samples recorded marginal exceedances of ammoniacal nitrogen and inorganic nitrogen at all three surface water sampling locations during monitoring. The concentration of inorganic nitrogen were considered to be marginal as concentrations recorded during the second round of monitoring were lower than the first.

During the second round of monitoring exceedances of ammoniacal nitrogen were recorded at all sampling locations. Without further monitoring rounds it is difficult to identify a trend in concentrations to suggest the potential risk. However the recorded concentrations were two orders of magnitude above EQS at SW2 and one order of magnitude at SW1 and SW3.

Exceedances of ammoniacal nitrogen and ammonium were recorded within groundwater across all strata, with the highest maximum concentration recorded in groundwater within Made Ground. The highest concentrations were recorded within E-BH15 within the East Site – Hydrogen Production Area which coincides with an ammonia odour detected during the GI within Made Ground. Excluding the results from E-BH15, the maximum concentrations of ammoniacal nitrogen and ammonium were recorded in E-BH14A. During the GI, exploratory hole E-BH14, E-BH14A and E-BH15, which are adjacent boreholes, recorded an ammonia odour within Made Ground. As the concentration is elevated in Made Ground and Tidal Flat Deposits, there is a potential vertical migration pathway from Made Ground to natural strata. It is also noted that the groundwater within Made Ground is likely to be in hydraulic continuity with the Tidal Flat Deposits. The concentration of ammonium and ammoniacal nitrogen decreases within Made Ground further west. Therefore, there may be a localised source of ammoniacal nitrogen within Made Ground in the East Site, particularly within the south-east corner of the Hydrogen Production area.

There does not appear to be a pattern of exceedances within surface water samples to those exceedances recorded in groundwater and leachate, which suggests overall there is no risk to surface waters from groundwater or leachate. However, exceedances of ammoniacal nitrogen and inorganic nitrogen were recorded at all three surface water sampling locations during monitoring. The groundwater within the site flows towards the north-east towards the Humber Estuary. Therefore, there is a potential risk to the Humber Estuary associated with ammonia and ammoniacal nitrogen in groundwater. As a result, it is recommended that further groundwater monitoring is undertaken to determine trends in the concentration over time. The results of the further groundwater monitoring may indicate that further risk assessment is required.

The ground investigation has not identified any gross contamination or evidence to suggest a major spillage of fluid into the ground, therefore it is considered that the concentrations of determinands exceeding EQS are potentially due to an amalgamation of nearby industrial activity in the area.

9.10 Risk to Groundwater

9.10.1 Groundwater Sampling Test Results (Tier 2 Screening)

The Tier 2 Screening Table for groundwater samples are presented in Appendix I and the results are discussed in the following sections. The certificates of chemical analysis are presented in the Geotechnical Engineering Limited Factual Report, Appendix A.

Table and Table details the summary of the determinands in groundwater that exceeded the DWS protective of groundwater.

Table 9-18. Summary Groundwater Exceedances (DWS)

Chemical Group	Determinand	Units	DWS	Number of Results	Number of Detects	Minimum Concentration	Maximum Concentration	Number of Guideline Exceedances
TPH	C12-C16 Aromatics	µg/l	90	23	2	<10	100	1
PAH	Naphthalene (Filtered)	µg/l	6	23	1	<0.01	7.5	1
Metals	Arsenic (Filtered)	µg/l	10	23	20	<0.15	21.8	2
	Boron (Filtered)	µg/l	1000	23	23	19	3800	2
	Nickel (Filtered)	µg/l	20	23	21	<0.5	38	3
	Selenium (Filtered)	µg/l	10	23	7	<0.6	52	1
Inorganics	Sodium (Filtered)	mg/l	200	23	12	12	16,000	9
	Cyanide Total	mg/l	0.05	23	1	<0.01	0.13	1
	Chloride (Filtered)	mg/l	250	28	28	19	3700	9
	Nitrate as NO_{3-} (Filtered)	mg/l	50	16	16	0.31	1660	2
	Ammonium as NH_4	mg/l	0.5	16	15	<0.015	1100	5

Table 9-19. Summary Groundwater Exceedance Determinands Stratum Comparison (DWS)

	Determinand	Naphthalene (Filtered)	Arsenic (Filtered)	Boron (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Sodium (Filtered)*	Cyanide Total*	Chloride (Filtered)*	Nitrate (as NO3-)*	Ammonium as NH_4*	C12-C16 Aromatics
Min concentration	MG	<0.01	2.7	170	6.3	4.8	570	<0.01	790	1.04	1	-
	TFD	-		-	19	-	180	-	72	-	12	<10
	GTD	-		-		-	12	-	19	-		-
	FCF	-		19	0.9	-	13	-	24	1.98	<0.015	-
Max concentration	MG	7.5	21.8	3800	36	52	960	0.13	1500	1660	1100	-
	TFD	-		-	38	-	16000	-	3700	-	12	100
	GTD	-		-		-	460	-	850	-	-	-

	Determinand	Naphthalene (Filtered)	Arsenic (Filtered)	Boron (Filtered)	Nickel (Filtered)	Selenium (Filtered)	Sodium (Filtered)*	Cyanide Total*	Chloride (Filtered)*	Nitrate (as NO3-)*	Ammonium as NH_4*	C12-C16 Aromatics
	FCF	-		1000	21	-	400	-	590	50	1.2	-
Average Concentration	MG	2.5	14	1550	19	22	723	0.05	1050	554	368	-
	TFD	-		-	-	-	-	-	-	-	-	-
	GTD	-		-		-	98	-	162	-	-	-
	FCF	-		269	5.9	-	119	-	155	31	0.21	-
Geomean	MG	0.091	10	760	15	13	705	0.024	1006	13	15	-
	TFD	-		-	-	-	-	-	-	-	-	-
	GTD	-		-		-	34	-	56	-	-	-
	FCF	-		93	3.1	-	48	-	76	23	0.059	-
Median	MG	0.01	17.3	680	15	8.8	640	0.01	860	1.2	2.8	-
	TFD	-		-	28.5	-	8090	-	1886	-	12	55
	GTD	-		-		-	13.5	-	25.5	-	-	-
	FCF	-		48	2.9	-	14	-	35.5	-	0.037	-

'-' indicates that no exceedance was recorded for that strata.

9.10.1.1 Made Ground

Exceedances of the DWS were recorded within the three Made Ground monitoring wells (E-BH15, E-BH20 and E-BH22). The exceedances from the three monitoring wells are presented in Appendix I.

The key findings associated with the Made Ground groundwater are as follows:

- Exceedances of the DWS were recorded for sodium and chloride in all three monitoring wells. The highest concentrations were recorded in E-BH20, with a sodium concentration of 960mg/l and a chloride concentration of 1,500mg/l. The concentration of sodium is within the same order of magnitude as the DWS criteria and is therefore considered a marginal exceedance. However, the concentration of chloride is an order of magnitude higher than the DWS criteria. Nitrate was only detected within Made Ground groundwater.
- The highest concentration of nitrate and ammonium was recorded in E-BH15 at 1,660mg/l and 1,100mg/l respectively. Nitrate was only detected within groundwater in the Made Ground. The concentration of ammonium is four orders of magnitude above the DWS criteria. The concentration of nitrate is two orders of magnitude above the DWS criteria. The concentrations of ammonium was higher in groundwater within Made Ground compared to groundwater within superficial deposits and bedrock.
- An exceedance of selenium was recorded in E-BH15 (52µg/l) at an order of magnitude above the DWS. No exceedances of selenium were recorded in groundwater within superficial deposits or bedrock.
- Exceedances of arsenic, boron and nickel were also recorded. Nickel was recorded at 21.8µg/l in E-BH15 and 17.3µg/l in E-BH20. An exceedance of nickel was only recorded in E-BH15 at 36µg/l. Boron was only exceeded in E-BH22 (3800µg/l). As the exceedances are within the same order of magnitude as the DWS, the arsenic, boron and nickel exceedances are considered marginal.

9.10.1.2 Tidal Flat Deposits

Exceedances of the DWS were recorded within the Tidal Flat Deposits monitoring wells (E-BH14A and W-BH26). The exceedances from the two monitoring wells are presented in Appendix I.

The key findings associated with the Tidal Flat Deposits groundwater are as follows:

Exceedances of inorganics were only recorded in E-BH14A. The concentration of sodium (16,000mg/l) and ammonium (12mg/l) were recorded two orders of magnitude above the DWS. The concentration of chloride (3700mg/l) is one order of magnitude above the DWS. The groundwater within Tidal Flat Deposits recorded the highest maximum concentration of sodium and chloride compared to the groundwater within Made Ground, Glacial Till Deposits and the Flamborough Chalk Formation.

Exceedances of metals were recorded for nickel. The DWS exceedance of nickel (38µg/l) was recorded within the same order of magnitude as the DWS criteria and is therefore considered marginal. The maximum concentration of nickel is higher in groundwater within Tidal Flat Deposits compared to Made Ground, Glacial Till Deposits and the Flamborough Chalk Formation.

No exceedances were recorded in W-BH26.

C12-C16 aromatics only exceeded the DWS criteria in E-BH14A with a recorded concentration of 100µg/l. As the concentration is within the same order of magnitude as the DWS, this is considered a marginal exceedance.

9.10.1.3 Glacial Till Deposits

Exceedances of the DWS were recorded within the Glacial Till Deposits monitoring wells (E-BH07, E-BH11. E-BH25, W-BH14, W-BH18, W-BH24, W-BH31 and W-BH34). The exceedances from the eight monitoring wells are presented in Appendix I.

The key findings associated with the Glacial Deposits groundwater are as follows:

Exceedances of metals and inorganics were recorded in E-BH07 and E-BH11.

Sodium and chloride were recorded at concentrations above the DWS in E-BH07 and E-BH11. However, the concentration of sodium and chloride is within the same order of magnitude as the DWS. Furthermore, the concentration of sodium and chloride is an order of magnitude lower in groundwater within Glacial Till Deposits compared to groundwater in Tidal Flat Deposits. Therefore, the exceedances are considered marginal.

9.10.1.4 Flamborough Chalk Formation

Exceedances of the DWS were recorded within the Flamborough Chalk Formation monitoring wells (E-BH01, E-BH02, E-BH04, E-BH10, E-BH18, E-BH21, W-BH01, W-BH09, W-BH17, W-BH20, W-BH21, W-BH22, W-BH30 and W-BH35). The exceedances from the fourteen monitoring rounds is presented in Appendix I.

The key findings associated with the Flamborough Chalk Formation groundwater are as follows:

Exceedances were recorded for metals and inorganics. However, no exceedances were recorded in E-BH01, W-BH09, W-BH17, W-BH20, W-BH30 and W-BH35.

The concentration of boron in E-BH03 is the same as the DWS criteria (1000µg/l). Therefore, this is considered a marginal exceedance. No exceedances of boron were recorded in groundwater within Made Ground and superficial deposits.

One exceedance of nickel was recorded in E-BH18 (21µg/l) which is the same order of magnitude for the DWS criteria.

Three exceedances of sodium were recorded in E-BH04 (400mg/l), E-BH18 (220mg/l) and E-BH21 (210mg/l). Three exceedances of chloride were also recorded in E-BH04 (590mg/l), E-BH18 (390mg/l) and E-BH21 (530mg/l). However, all three exceedances of sodium and chloride are within the same order of magnitude as the DWS criteria and are therefore considered marginal. The maximum concentration of exceedances within the Flamborough Chalk Formation are also lower compared to the exceedances within Made Ground, Tidal Flat Deposits and Glacial Till Deposits.

An exceedance of nitrate (50mg/l) and ammonium (1.2mg/l) were recorded in E-BH10 which are the same order of magnitude and one order of magnitude above the DWS respectively. No exceedances of nitrate were recorded in groundwater within Made Ground and superficial deposits.

9.10.2 Soil Leachate Sampling Test Results (Tier 2 Screening)

A total of twenty soil samples were analysed for soil leachate analysis. This included eight from the Made Ground, eight from the Tidal Flat Deposits three from the Glacial Till and one from the Chalk. The Made Ground samples were taken from depths ranging from ground level to 1.2m bgl. The Tidal Flat Deposits and Glacial Till samples were taken at depths between 0.6m bgl and 10m bgl and between 12.4m bgl and 16.2m bgl respectively. The sample from chalk was taken at 24.9m bgl. A summary of the soil leachate exceedances are shown in Table .

Table 9-20. Summary of Soil Leachate DWS Exceedances

Chemical Group	Determinand	Units	DWS	Number of Results	Number of Detects	Minimum Concentration	Maximum Concentration	Number of Guideline Exceedances
Metals	Antimony	µg/l	5	20	1	<1.7	13	1
	Arsenic	µg/l	10	20	17	<1	19.7	1
	Selenium	µg/l	10	20	2	<4	14	1
Inorganics	Fluoride	mg/l	1.5	20	19	<0.05	2.1	1
	Chloride	mg/l	250	20	20	1	270	1

9.10.2.1 Made Ground

A marginal exceedance of arsenic (19.7µg/l) and fluoride (2.1µg/l) were recorded within Made Ground in E-BH25.

9.10.2.2 Tidal Flat Deposits

An exceedance of the DWS for chloride was recorded in E-BH15 within Tidal Flat Deposits with a recorded concentration of 270mg/l. However, as the exceedance is recorded within the same order of magnitude as the DWS, it is considered marginal

9.10.2.3 Flamborough Chalk Formation

Exceedances within the Flamborough Chalk Formation were recorded in E-BH06B forfor antimony and selenium within the chalk. However, the exceedance of selenium is within the same order of magnitude as the DWS (10µg/l) and is therefore considered marginal. The exceedance of antimony is one order of magnitude above the DWS (13µg/l).

9.10.3 An exceedance of the DWS for chloride was recorded in E-BH15 within Tidal Flat Deposits with a recorded concentration of 270mg/l. However, as the exceedance is recorded within the same order of magnitude as the DWS, it is considered marginal. Discussion of exceedances against Drinking Water Standards (DWS)

Exceedances of the DWS criteria were recorded for hydrocarbons, PAHs, metals and inorganics in groundwater across all strata and for metals and inorganics within soil leachate in Made Ground, Tidal Flat Deposits and the Flamborough Chalk Formation. The distribution of exceedances is shown in

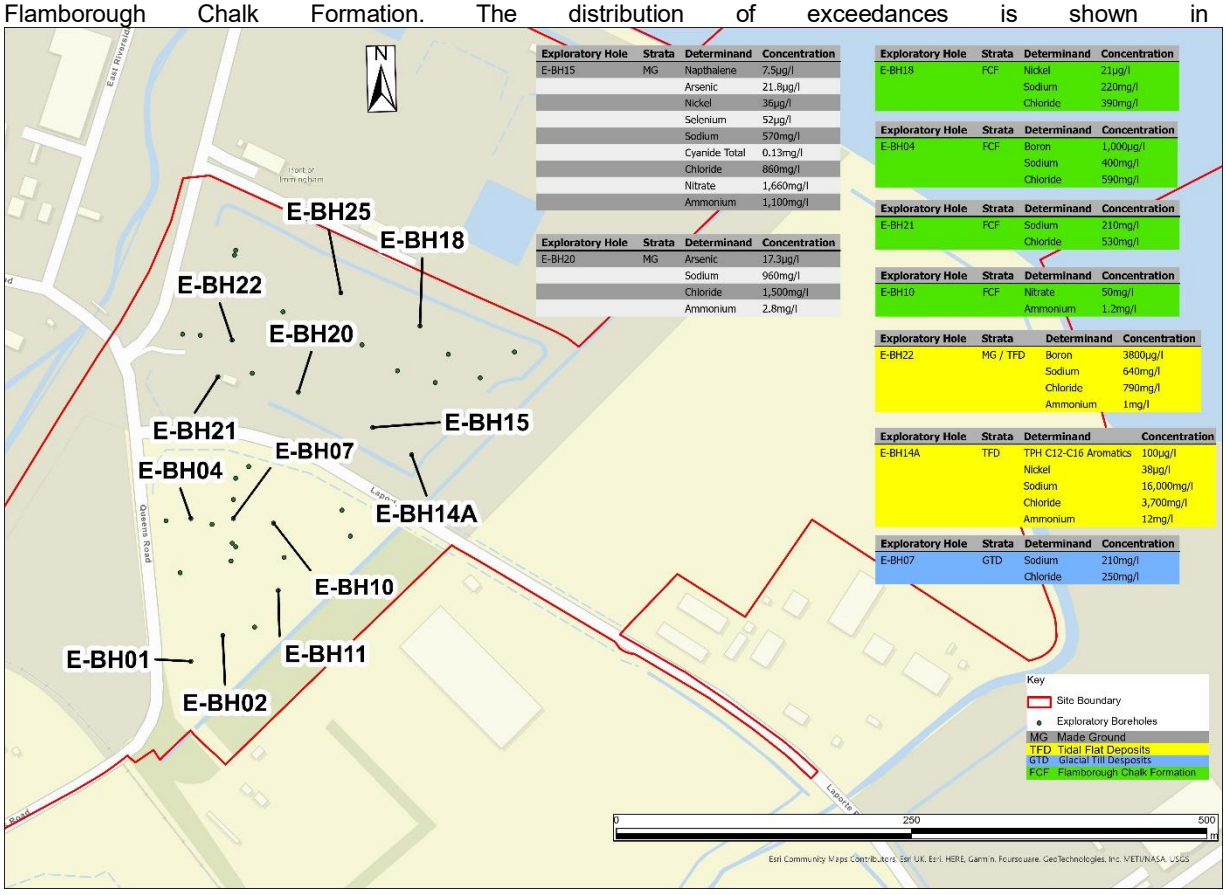

Figure 9-7. Groundwater Screening Exceedances Against DWS Screening Criteria

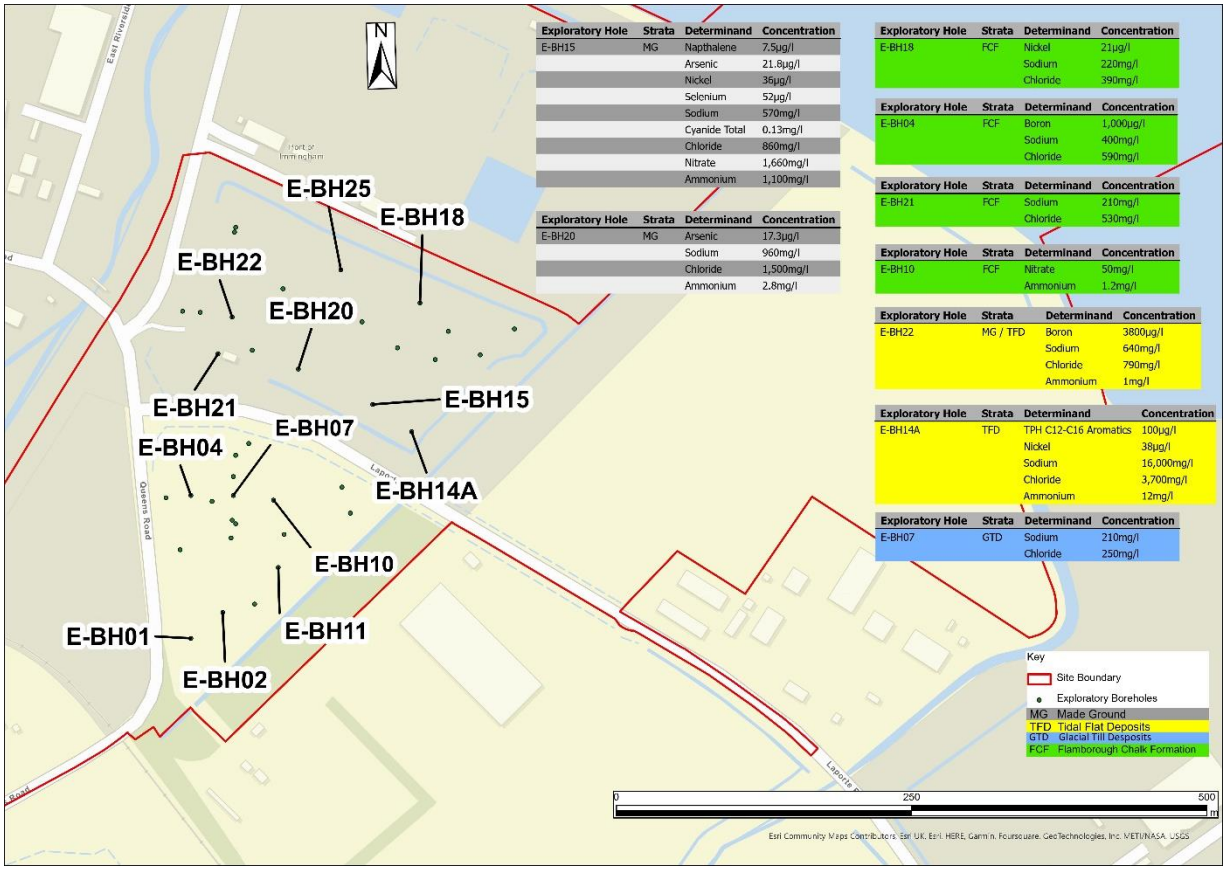

Figure 9-7. Groundwater Screening Exceedances Against DWS Screening Criteria

There is not considered to be a risk to groundwater quality associated with the isolated exceedances of TPH within Tidal Flat Deposits and PAHs within Made Ground in the East Site-Hydrogen Production. The exceedances are considered marginal, and the groundwater within Made Ground and Tidal Flat Deposits is not used as a potable drinking source. Furthermore, the Tidal Flat Deposits are designated as an Unproductive Aquifer. Therefore, there is not considered to be a risk to groundwaters associated with TPH and PAH.

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There is not considered to be a risk to groundwater quality within Made Ground and Tidal Flat Deposits associated with metals as the identified exceedances were marginal. The groundwater within Made Ground and Tidal Flat Deposits is not used as a potable drinking abstraction due to the unproductive nature of the strata. Furthermore, the thickness of the lower permeability clay deposits will provide a barrier to vertical migration of metals to the Principal Aquifer in the Flamborough Chalk Formation.

There may be a potential risk to groundwater in the East Site – Hydrogen Production Area associated with inorganics. Concentrations of ammonium in E-BH15 (1,100mg/l) are four orders of magnitude above the DWS (0.5mg/l) within Made Ground in E-BH15. Furthermore, the concentration of nitrate in E-BH15 (1,660mg/l) is two orders of magnitude above the DWS (50mg/l). As no nitrate exceedances were recorded in Made Ground or Tidal Flat Deposits in other exploratory holes, this may suggest a localised source of nitrate within Made Ground in E-BH15. During the GI, adjacent exploratory holes (E-BH14, E-BH14A and E-BH15), recorded an ammonia odour within Made Ground. Therefore, there is a correlation between the strong ammonia within Made Ground in E-BH15 and the highest recorded maximum concentration of ammonia and nitrate in groundwater within Made Ground.. Although the concentration in groundwater within Tidal Flat Deposits is not as high as that recorded in Made Ground in E-BH15, this may suggest that there is potential for vertical migration of ammonia in groundwater from Made Ground into Tidal Flat Deposits. Therefore, this further suggests a localised source of ammonium in groundwater within the south-east corner of the East Site-Hydrogen Production.

There is a potential risk to the groundwater quality within the Flamborough Chalk Formation associated with metals and inorganics (ammonium, sodium and chloride).

This may be associated with saltwater intrusion from the Humber Estuary, particularly for groundwater within Made Ground and Tidal Flat Deposits. However, it is recommended to undertaken further groundwater monitoring to understand the concentration over time particularly as the Flamborough Chalk Formation is a Principal Aquifer.

Overall, it is noted that there is a potential risk to groundwater, particularly associated with metals and inorganics in the East Site (Hydrogen Production and Ammonia Storage Areas). The exceedances of metals and ammonium within the Flamborough Chalk Formation may present a potential risk to the Principal Aquifer which is associated with an SPZ1. However, the exceedances of inorganics within Made Ground and Tidal Flat Deposits are unlikely to present a risk to groundwater as the Tidal Flat Deposits are designated as an Unproductive Aquifer and is therefore not used as a potable abstraction source for drinking water. It is recommended that further groundwater monitoring rounds are undertaken. Further risk assessment may be required depending on the results of the groundwater monitoring. No exceedances were recorded in the West Site, and as such there is not considered to be a risk to groundwater quality.

Appendix H Ground Gas Assessment

Ground Gas Risk Assessment

The generation and migration of ground gases from natural and man made sources can pose a major hazard to structures if gases are able to accumulate within them. In terms of the proposed scheme, the major risks are that ground gases may accumulate within any buildings, excavations, any enclosed structures such as drainage runs and manholes, or beneath any pavements.

For this study, the borehole gas concentration and flow rate results for carbon dioxide (CO_2) and methane (CH_4) have been compared to guidance values given in the following documents:

BS 8485:2015+A1:2019 “Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings”; and

CIRIA Report C665 (2007) “Assessing Risks Posed by Hazardous Ground Gases to Buildings”.

9.11 Ground Gas Monitoring Results

An assessment has been undertaken on the data collected from seven monitoring rounds undertaken during the GI between 13th January and 27th February 2023 and six post-field monitoring rounds undertaken between 27th February and 9th May 2023.

Ground gas monitoring was undertaken at weekly intervals during the intrusive ground investigation works. Overall, up to six rounds of gas monitoring were undertaken between 13th January 2023 and 23rd February 2023 comprising the following:

13th January 2023: Ground gas monitoring was undertaken in E-BH04 and E-BH20 (falling barometric pressure conditions);

20th January 2023: Ground gas monitoring was undertaken in E-BH04, E-BH20 and E-BH26 2023 (rising barometric pressure conditions);

27th January 2023: Ground gas monitoring was undertaken in E-BH04, E-BH15, E-BH18, E-BH20 and E-BH26 2023 (rising barometric pressure conditions);

2nd – 3rd February 2023: Ground gas monitoring was undertaken in E-BH02, E-BH04, E-BH15, E-BH18, E-BH20 E-BH26 (rising barometric pressure conditions);

9th – 10th February 2023: Ground gas monitoring was undertaken in E-BH02, E-BH04, E-BH15, E-BH18, E-BH20, E-BH25 and E-BH26 (rising barometric pressure conditions);

15th February 2023: Ground gas monitoring was undertaken in E-BH02, E-BH04, E-BH15, E-BH18, E-BH20, E-BH25 and E-BH26 (falling barometric pressure conditions); and

23rd February 2023: Ground gas monitoring was undertaken in E-BH07, E-BH11, E-BH14A (rising barometric pressure conditions.

The dates of the post-fieldwork ground gas monitoring are as follows:

Round 1: 27th February to 1st March 2023 (rising barometric pressure conditions);

Round 2: 13th – 14th March 2023 (rising barometric pressure conditions, following a fall in pressure the previous day);

Round 3: 28th – 29th March 2023 (rising barometric pressure conditions);

Round 4: 11th – 13th April 2023 (falling barometric pressure conditions);

Round 5: 24th – 25th April 2023 (rising barometric pressure conditions); and

Round 6: 9th May 2023 (falling barometric pressure conditions).

The range of gas concentrations, flow rates and atmospheric pressures recorded during the monitoring round is presented in Table below along with the CS grade for each well installation. Recorded barometric pressure ranged between 978 mbar and 1038 mbar throughout the monitoring period.

Table 9-21. Summary of Ground Gas Monitoring Results During and Post Ground Investigation

Well Installation	Response Zone	Max. CH_4 (% v/v)	Max. CO_2 (% v/v)	Min. O_2 (% v/v)	Max. CO (ppm)	Max. H_2S (ppm)	Flow Rate (l/hr)	CS Grade
E-BH02	Flamborough Chalk Formation	<0.1	0.1	19.8	<0.1	<0.1	<0.1	CS1
E-BH04	Flamborough Chalk Formation	83.3	3.7	<0.1	<0.1	<0.1	120.8	CS5
E-BH07	Glacial Till	1.6	0.5	19.1	<0.1	<0.1	<0.1	CS1
E-BH11	Glacial Till	*0.1*	<0.1	19.8	<0.1	<0.1	<0.1	CS1
E-BH14A	Tidal Flat Deposits	<0.1	2.2	17.2	<0.1	<0.1	11.8	CS2
E-BH15	Made Ground	<0.1	<0.1	13.5	32.0	<0.1	120.4	CS2
E-BH18	Flamborough Chalk Formation	93.9	5.9	0.2	103.0	25.0	122.0	CS5
E-BH20	Made Ground	1.6	0.72	7.8	16.0	<0.1	1.8	CS1
E-BH22	Made Ground and Tidal Flat Deposits	61.1	1.5	3.2	205.0	40.0	<0.1	CS5
E-BH25	Glacial Till Deposits	83.6	5.2	0.8	<0.1	<0.1	12.8	CS4
W-BH26	Clay (assumed Tidal Flat Deposits)	<0.1	2.4	13.1	<0.1	<0.1	0.2	CS1
W-BH31	Glacial Till Deposits	<0.1	<0.1	19.8	<0.1	<0.1	<0.1	CS1

Groundwater was encountered within the ground gas monitoring wells. Artesian groundwater conditions were encountered in the following exploratory hole locations: W-BH09, W-BH10A, W-BH14, W-BH17, W-BH18, W-BH20, W-BH21, W-BH22, W-BH24, W-BH30, W-BH34 and W-BH35 therefore, ground gas monitoring could not be undertaken. The details of the groundwater levels within each of the ground gas monitoring wells is presented within Section 5. Within monitoring installations E-BH22 and W-BH26 the groundwater level was recorded within the response zone for E-BH22 and W-BH26, therefore, the monitoring wells were not deemed to be flooded (i.e. where the groundwater level is above the screened section) and thus applicable to be used for ground gas monitoring. However, the groundwater levels were above the response zone, and therefore were flooded, in the following wells: E-BH02, E-BH04, E-BH07, E-BH11, E-BH14A, E-BH15, E-BH18, E-BH20, E-BH25 and W-BH31. Therefore, it is considered that those monitoring wells are flooded which may affect the concentrations of gases recorded during the monitoring rounds. The flooding of the wells may have caused a piston effect whereby the shallow groundwater levels may have resulted in compression of gases within the standpipe. The groundwater levels within the flooded wells were recorded between ground level (W-BH31) and 2.34m bgl (E-BH18). Apart from E-BH18, the groundwater levels were recorded up to 1.34m bgl. It should also be noted that W-BH31 was recorded as artesian in the groundwater monitoring rounds after 28th February 2023. The details of the response zones are presented in Section 5.

Ground gas monitoring was not undertaken for E-BH18 and E-BH25 on 14th March 2023 as the pressure had forced the bung off the standpipe. This may be associated with the piston effect as the high groundwater levels may have caused the gases within the standpipe to become compressed. The groundwater level in E-BH18 and E-BH25 were recorded as 1.34m bgl. The gas readings were terminated in E-BH25 on 27th March 2023 due to water uptake into the gas analyser and a sulphurous odour was also observed when the bung was removed. Within E-BH22 on the 3rd February 2022, a sudden change in gas levels was recorded with all gas concentrations increasing, and VOCs and oxygen concentrations decreasing. It should also be noted that the ground gas monitoring was terminated in the following boreholes due to water uptake:

E-BH04 on 9th May 2023;

E-BH18 on 24th April 2023

E-BH25 on 27th March 2023.

The gas monitoring results indicate that the maximum CH_4 and CO_2 concentrations recorded during the monitoring was 93.9% v/v and 5.9% v/v respectively at E-BH18 screened within the Flamborough Chalk Formation. The

maximum flow rate recorded during the monitoring was 122 l/hr at E-BH18 (screened within the Flamborough Chalk Formation).

A summary of the concentrations recorded during these monitoring rounds for CH_4 and CO_2 and flow rates is presented in Table 10-18Table . Elevated CH_4 and CO_2 were recorded in E-BH18 during the intrusive ground investigation works. It is also noted that an ammonia odour was recorded during the ground investigation within E-BH14 within Made Ground. The borehole was terminated at 1.2m bgl and continued as E-BH14A which continued to record an ammonia odour. Exploratory hole E-BH15, located adjacent to E-BH14A, also recorded an ammonia odour within Made Ground during the investigation.

Table 9-22. Summary of ground gas monitoring during the ground investigation

Well Installation	Response Zone	CO_2 Range (% v/v)	CH_4 Range (% v/v)	Flow Rates Range (l/h)
E-BH02	Flamborough Chalk	<0.1 – 0.1	<0.1	-27 – <0.1
E-BH04	Flamborough Chalk	<0.1 – 2.2	<0.1 – 1.2	-52.5 – 120.8
E-BH07	Glacial Till	<0.1 – 0.5	<0.1 – 1.6	-1.2 - <0.1
E-BH11	Glacial Till	<0.1 – 0.1	<0.1	-0.9 - <0.1
E-BH14A	Tidal Flat Deposits	<0.1 – 2.2	<0.1 – 0.3	-2.2 – 11.8
E-BH15	Made Ground	<0.1	<0.1	<0.1 – 120.4
E-BH18	Flamborough Chalk	<0.1 – 3.5	<0.1 – 48.7	-0.9 – 120.6
E-BH20	Made Ground	<0.1 – 0.7	<0.1 – 0.9	-3.4 – <0.1
E-BH22	Made Ground and Tidal Flat Deposits	<0.1 – 1.5	<0.1 – 27.4	-45.5 – <0.1
E-BH25	Glacial Till Deposits	<0.1 – 1.4	<0.1	<0.1 – 12.8
W-BH26	Clay (assumed Tidal Flat Deposits)	<0.1 – 2.4	<0.1	-0.3 – 0.2
W-BH31	Glacial Till Deposits	-	-	

9.12 Classification of Gas Regime

In accordance with BS 8485 (BSI, 2015), Gas Screening Values (GSVs) have been calculated to assess the significance of gas generation at the site. GSV can be calculated from the gas concentration and the flow rate:

$$GSV\ (l/hr) = \frac{Gas\ concentration\ (\%\ v/v)}{100}\ x\ flow\ rate\ (l/hr)$$

A GSV has been calculated for each well installation based on the maximum gas concentration (CH_4 or CO_2) and maximum flow rate recorded. The corresponding CS for the site is based on the comparison of the calculated GSV to the values given in Table taken from BS 8485 (BSI, 2015).

Table 9-23. Classification Scheme for Site Gas Risk Assessment

Characteristic Situation	Risk Classification	Gas Screening Value	Additional Factors	Typical Source of General
1	Very Low	<0.07	Typically, CH_4 <1% and CO_2 <5%. Otherwise consider increase to CS2.	Natural Soil with low organic content. “Typical” Made Ground.
2	Low	<0.7	Borehole air flow rate not to exceed 70l/hr. Otherwise consider increase to CS3.	Natural Soil with high peat/organic content. “Typical” Made Ground.
3	Moderate	<3.5	-	Old landfill Inert waste Mineworking (flooded)
4	Moderate to High	<15	Quantitative Risk Assessment required to evaluate scope of protective measures.	Mineworking susceptible to flooding Completed Landfill (WMP 26b criteria)

Characteristic Situation	Risk Classification	Gas Screening Value	Additional Factors	Typical Source of General
5	High	<70	-	Mineworking unflooded inactive with shallow workings near the surface.
6	Very High	>70	-	Recent Landfill site

Source: Modified Wilson and Card Classification

The initial approach in the assessment is to use the worst-case scenario by determining the GSV based on the maximum gas concentrations and maximum flow rate recorded across the site over the monitoring period. Guidance set out in BS 8485 (BSI, 2015), which is equivalent to the characteristic GSV in CIRIA C665 (CIRIA, 2007), stipulates a site characteristic maximum GSV of <0.07l/hr, with a typical maximum concentration of 1% v/v for CH_4, or 5% v/v for CO_2 would classify as CS1.

In accordance with the methodology outlined in BS 8485 (BSI, 2015), AECOM have utilised the results of the ground gas monitoring programme to calculate worst case GSVs, presented in Table 9-24.

Table 9-24. Site GSV Values

Gas Concentration	Max. Concentration (% v/v)	Max. Flow (l/hr)	GSV
CH_4	93.9	122	114.6
CO_2	5.9	122	7.20

Based on the results in Table 9-24 the site could be classified as CS5. Individual well installations in E-BH04, E-BH18 and E-BH22 are classified as CS5 due to elevated maximum methane concentrations coupled with high gas flow rates, and installation in E-BH25 is classified as CS4. Exploratory holes E-BH14A and E-BH15 are classified as CS2, and the remainder of the installations are classified as CS1.. BS 8485 (BSI, 2015) states the requirements for gas protection are based on the CS score and the resulting building type. These are combined to provide a gas protection score. The proposed development classifies as a Type D (commercial / industrial) building in accordance with Table 3 in BS 8485. The gas protection score for a Type D building constructed on a CS5 site is 4.5 (refer to Table 4 in BS 8485). The standard provides various gas protection measures, each with their own points score which when added together must equal or exceed the score. These methods include a combination of two or more protection measures such as structural barriers, ventilations measures and gas resistant membranes. As the site is scored at 4.5, gas protection measures are deemed to be required to be incorporated into the building design.

9.13 Ground Gas and Construction and Maintenance Workers

A potential risk to construction workers from the accumulation of ground gas could exist during the construction and maintenance phases. There is not considered to be a significant risk from ground gas during the operation phase as ground gas accumulation is only considered a risk in confined/enclosed spaces and this can be mitigated through design of appropriate in-ground protection measures following BS 8485 (BSI, 2015).

During the construction phase, restricted access to confined spaces, including excavations should be implemented. Where work in confined spaces is unavoidable, a site-specific and task-specific risk assessment should be undertaken prior to commencement of works. Monitoring of confined spaces for potential ground gas accumulations should be undertaken by suitably trained personnel with the use of specialist PPE where necessary.

Maintenance workers that are required to undertaken excavations during the operation life of the scheme will be provided with sufficient information by the project team on the nature of each sub-area at the site, upon which to base site and task-specific risk assessments. Such maintenance work will also include measures as detailed in the construction phase to minimise the effects of the work to human health.

The assessment presented in the following sections focuses on occupational exposure risks.

9.13.1 Methane

The greatest hazards posed by methane are those of fire and explosion. The limits of flammability, i.e. the Lower Explosion Limit (LEL) and Upper Explosion Limit (UEL), are 5% v/v and 15% v/v respectively. Where methane concentrations are encountered between these two ranges there is the possibility of ignition/explosion. However, it is important to note that where methane is outside of this range, i.e. above, safety shouldn't be assumed as further dilution can occur bringing it back to within explosive limits.

Where monitored, the installations within E-BH04, E-BH18, E-BH22 and E-BH25 in the East Site (Hydrogen Production and Ammonia Storage Areas) had recorded concentrations of methane which exceeded the 5% to 15% v/v range. The maximum methane (% v/v) concentrations within E-BH02, E-BH14A, E-BH15, W-BH26 and W-BH31 were recorded below the detection limit of the monitoring equipment on all occasions.

For methane, the threshold for toxicity by asphyxiation is considered to be 30% (v/v) (8 hour long term Occupational Exposure Limit (OEL). The results show that the concentrations of methane (% v/v) exceeded this limit in E-BH04, E-BH18, E-BH22 and E-BH25, recording concentrations between 61.1% (v/v) and 93.9% (v/v).

Ventilation in tunnels and confined spaces is required at concentrations greater than 0.25% (v/v). This should be monitored on site during construction activities. Where entry into excavations is unavoidable the activity should comply with confined space legislation. Due to the potential flammability and explosion risks appropriate plant and working methods should be undertaken along with workplace monitoring.

9.13.2 Oxygen

The results show that oxygen concentrations ranged from 0.1% v/v to 21% v/v. Depleted oxygen (i.e. less than 18%) was detected in E-BH04, E-BH14A, E-BH15, E-BH18, E-BH20, E-BH22, E-BH25 and W-BH26.
Table summarises the physiological effects of an oxygen deficient atmosphere (CIRIA, 1995). Based on the oxygen data recorded at the site, it is concluded that there would be a potential risk to construction workers entering excavations or enclosed spaces at the site.

Table 9-25. Effects of Reduced Oxygen Concentrations

Oxygen% (vol./vol.)	Physiological Effects
19 – 21	Normal range of concentration in the atmospheric air
17	Faster breathing, slight impairment of judgement
10 – 16	Initial signs of anoxia leading to emotional upsets, abnormal fatigue upon exertion
6 – 10	Nausea, vomiting, unconsciousness, collapse may occur
<6	Convulsions, gasping respirations, death

9.13.3 Carbon Dioxide

For carbon dioxide there is no risk of flammability; however, there is a risk of asphyxiation and as such there are toxicity levels of 0.5% (v/v) for an 8 hour long-term Occupation Exposure Limit (OEL) and 1.5% (v/v) for a 10 minute OEL. The following monitoring wells exceeded both the 8-hour long-term OEL and the 10 minute OEL: E-BH04, E-BH14A, E-BH18, E-BH25 and W-BH26. The 8-hour long term OEL was exceeded in E-BH07 and E-BH22.

A potential risk of asphyxiation would exist if concentrations exceeding the toxicity limits were identified within confined spaces. It is recommended that confined space legislation be adhered to where entry into excavations by site workers is unavoidable.

9.13.4 Hydrogen Sulphide

A long-term (8 hour) workplace exposure limit of 5pm and a short-term (15 minute) workplace exposure limit of 10ppm are given for hydrogen sulphide.

Elevated concentrations of hydrogen sulphide were detected in E-BH18 (25 ppm) and E-BH22 (40 ppm), which were in exceedance of both the long-term (8 hour) exposure limit and the short-term workplace exposure limit.

Hydrogen sulphide concentrations were recorded at or below the detection limit of the monitoring equipment in the other boreholes monitored.

9.13.5 Carbon Monoxide

A long-term (8 hour) workplace exposure limit of 30ppm and a short-term (15 minute) workplace exposure limit of 200ppm are given for carbon monoxide.

Elevated concentrations of carbon monoxide were identified in E-BH15, E-BH18, E-BH20 and E-BH22. The elevated concentrations within E-BH15, E-BH18 and E-BH22 were in exceedance of the long-term workplace

exposure limit. The highest concentration being 205 ppm in E-BH22 was in exceedance of the short-term workplace exposure limit.

Carbon monoxide concentrations were below the detection limit in the other monitored boreholes.

9.14 Pragmatic Approach to Gas Risk Assessment

Given the uncertainty over the source of the elevated gas concentrations and potential over estimatation of the flow rates in monitoring wells that have occurred an alternative approach to gas risk assessment has been undertaken, using guidance from Wilson and Card, A Pragmatic Approach to Ground Gas Risk Assessment for the 21st Century.

The alternative approach takes into account the average Total Organic Carbon (TOC) percentage within made ground across the site. Table 10.22 presents the recorded TOC in made ground samples.

Table 10.22. Recorded Total Organic Carbon content across Made Ground

Location	TOC concentration (%)
E-BH04	1.6
E-BH06A	0.9
E-BH20	0.9
E-BH22	1.3
E-BH24	0.9
E-BH25	1.5
W-BH35	2.1
Average TOC	1.25

The average TOC content was then compared to Wilson and Card, Table 2, Limiting Values of organic content in made ground :-

Table 2 Limiting values of organic content in Made Ground

Characteristic situation (BS 8485 and CIRIA C665)	Depth of Made Ground (m)	Maximum total organic carbon content of Made Ground – TOC (%)[see note 1 and 2]		Comments
		New Made Ground	Made Ground in place for > 20 years	
CS1	Maximum 5m Average < 3m	≤1.0	≤1.0	Limiting values based on reported soil organic matter (SOM) content of natural soils up to about 1%
CS2	Maximum 5m Average < 3m	≤1.5	≤3	Limiting values based on gas generation modelling assuming slow degradation Equilibrium methane concentration in building above <0.01%
CS3	Maximum 5m Average < 3m	≤4	≤6	Limiting values based on gas generation modelling assuming slow degradation Equilibrium methane concentration in building above <0.01%
This method can only be used to define characteristic situations up to 3.	Gas monitoring required where TOC is greater than 6%. Gas monitoring results will show whether the high TOC is available and conditions are suitable to generate ground gas.			

Note 1: TOC = DOC x 1.33 (Hesse, 1971)

Note 2: TOC tested in accordance with the method described in Guidance on sampling and testing of wastes to meet landfill waste acceptance procedures, Environment Agency , 2005)

The outcome of this approach gives a characteristic screen value of CS2

Ground Gas Monitoring Borehole	Monitoring Round	Date	Methane (% v/v)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	Flow l/hr		Atmospheric Pressure	Depth to Water	Depth to Base	Gas Screening Value l/hr		Response Zone Strata	Gas Characteristic Situation (CIRIA C665)	NHBC Traffic Light Classification	
			Steady	Peak	Steady	Peak	Steady	Peak	Peak	Peak	Steady	Peak	(mBar)	(m bgl)	(m bgl)	CH4	CO2			CH4	CO2
E-BH02	During GI	02/02/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.0	20.1	*0.1*	*0.1*	-0.1	-0.7	1023	1.21		**0.0001**	**0.0001**	Chalk	CS1	GREEN	GREEN
	During GI	10/02/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.2	20.2	*0.1*	*0.1*	-0.5	-27.0	1031	1.07							
	During GI	15/02/2023	*0.1*	*0.1*	*0.1*	0.1	20.3	20.4	*0.1*	*0.1*	*0.1*	-1.2	1018	0.74							
	1	01/03/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.1	20.1	*0.1*	*0.1*	*0.1*	*0.1*	1031	0.61							
	2	14/03/2023	*0.1*	*0.1*	*0.1*	*0.1*	19.8	19.8	*0.1*	*0.1*	-3.1	-3.1	1004	1.29							
	3	29/03/2023	*0.1*	*0.1*	*0.1*	0.1	19.9	19.9	*0.1*	*0.1*	-0.4	-0.3	1008	0.8							
	4	13/04/2023	*0.1*	*0.1*	*0.1*	0.1	20.0	20.0	*0.1*	*0.1*	-1.9	-1.7	994	0.8							
	5	25/04/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.1	20.0	*0.1*	*0.1*	-1.1	-1.0	1018	0.37							
	6	09/05/2023	*0.1*	*0.1*	*0.1*	0.1	20.7	20.7	*0.1*	*0.1*	*0.1*	*0.1*	1008	0.4							
E-BH04	During GI	13/01/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.1	20.1	*0.1*	*0.1*	0.1	-61.2	1001	1.20		**100.6264**	**4.3660**	Chalk	CS5	RED	RED
	During GI	20/01/2023	*0.1*	*0.1*	*0.1*	0.3	20.2	19.9	0.1	0.1	-0.2	-46.5	1001	1.73							
	During GI	27/01/2023	*0.1*	1.2	0.1	2.2	20.0	20.1	0.1	0.1	0.1	120.8	1033	0.98							
	During GI	02/02/2023	*0.1*	*0.1*	0.4	0.4	20.1	20.3	0.1	0.1	*0.1*	-52.5	1033	1.46							
	During GI	10/02/2023	*0.1*	*0.1*	1.5	1.9	19.3	19.1	0.1	0.1	0.4	120.4	1032	1.14							
	During GI	15/02/2023	1.2	1.6	*0.1*	*0.1*	19.8	19.7	0.1	0.1	0.0	104.0	1019	1.20							
	1	01/03/2023	0.1	5.4	2.9	3.0	18.5	18.4	*0.1*	*0.1*	*0.1*	*0.1*	1033	0.81							
	2	14/03/2023	*0.1*	*0.1*	*0.1*	0.1	19.7	18.7	*0.1*	*0.1*	-0.7	0.8	1033	1.36							
	3	29/03/2023	*0.1*	*0.1*	1.9	2.0	17.9	17.7	*0.1*	*0.1*	-1.5	-1.5	1010	1.16							
	4	13/04/2023	8.6	83.3	0.4	2.7	17.9	*0.1*	*0.1*	*0.1*	*0.1*	98.0	995	1.10							
	5	24/04/2023	*0.1*	74.2	*0.1*	3.7	20.0	0.5	*0.1*	*0.1*	*0.1*	22.0	1011	1.53							
	6	09/05/2023	53.0	62.5	3.0	3.6	1.7	5.1	*0.1*	*0.1*	*0.1*	118.0	1011	0.32							
E-BH07	During GI	23/02/2023	*0.1*	*0.1*	0.2	0.2	19.1	19.1	*0.1*	*0.1*	-0.7	*0.1*	1021	1.55		**0.0016**	**0.0005**	Glacial Till	CS1	GREEN	GREEN
	1	01/03/2023	*0.1*	0.1	*0.1*	0.2	20.1	20.1	*0.1*	*0.1*	*0.1*	*0.1*	1032	0.71							
	2	14/03/2023	*0.1*	*0.1*	*0.1*	0.1	19.8	19.8	*0.1*	*0.1*	-0.9	-0.7	1004	1.56							
	3	29/03/2023	*0.1*	*0.1*	0.1	0.1	19.8	19.9	*0.1*	*0.1*	-1.2	-0.9	1009	1.06							
	4	13/04/2023	*0.1*	1.6	0.1	0.5	20.0	19.6	*0.1*	*0.1*	0.1	*0.1*	994	0.98							
	5	25/04/2023	*0.1*	*0.1*	*0.1*	0.2	20.2	20.2	*0.1*	*0.1*	-0.9	-0.7	1013	0.69							
	6	09/05/2023	*0.1*	*0.1*	0.1	0.2	20.7	20.7	*0.1*	*0.1*	*0.1*	*0.1*	1007	0.3							
E-BH11	During GI	23/02/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.2	20.2	*0.1*	*0.1*	*0.1*	*0.1*	1022	1.22		**0.0001**	**0.0001**	Glacial Till	CS1	GREEN	GREEN
	1	01/03/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.2	20.2	-17.0	*0.1*	*0.1*	*0.1*	1033	0.83							
	2	14/03/2023	*0.1*	*0.1*	*0.1*	*0.1*	19.8	19.8	*0.1*	*0.1*	-1.0	-0.9	1003	1.42							
	3	29/03/2023	*0.1*	*0.1*	*0.1*	0.1	19.8	19.8	*0.1*	*0.1*	-0.8	-0.7	1008	1.07							
	4	13/04/2023	*0.1*	*0.1*	*0.1*	0.1	20.1	20.0	*0.1*	*0.1*	*0.1*	*0.1*	994	0.95							
	5	25/04/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.0	20.0	*0.1*	*0.1*	-1.1	-0.9	1016	0.61							
	6	09/05/2023	*0.1*	*0.1*	*0.1*	0.1	20.7	20.7	*0.1*	*0.1*	*0.1*	*0.1*	1008	0.50							
E-BH14A	During GI	23/02/2023	*0.1*	*0.1*	0.3	2.2	20.0	18.9	*0.1*	*0.1*	-0.1	*0.1*	1022	0.91		**0.0118**	**0.2596**	Tidal Flat Deposits	CS2	GREEN	GREEN
	1	28/02/2023	*0.1*	*0.1*	*0.1*	1.7	18.6	17.2	*0.1*	*0.1*	*0.1*	*0.1*	1035	0.83							
	2	14/03/2023	*0.1*	*0.1*	*0.1*	*0.1*	19.9	19.8	*0.1*	*0.1*	-0.5	-0.4	1003	1.74							
	3	27/03/2023	*0.1*	*0.1*	*0.1*	0.5	20.1	19.9	*0.1*	*0.1*	-2.2	-2.1	1022	0.73							
	4	11/04/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.3	19.9	*0.1*	*0.1*	-0.2	*0.1*	1003	0.58							
	5	24/04/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.2	19.9	*0.1*	*0.1*	-0.9	-0.7	1006	0.65							
	6	09/05/2023	*0.1*	*0.1*	*0.1*	0.2	20.7	20.1	*0.1*	*0.1*	*0.1*	11.8	1007	0.65							
E-BH15	During GI	27/01/2023	*0.1*	*0.1*	*0.1*	*0.1*	19.9	19.9	*0.1*	*0.1*	0.8	2.2	1033	0.49		**0.1204**	**0.1204**	Made Ground	CS2	GREEN	GREEN
	During GI	03/02/2023	*0.1*	*0.1*	*0.1*	*0.1*	17.0	15.8	*0.1*	*0.1*	1.6	120.4	1026	0.97							
	During GI	10/02/2023	*0.1*	*0.1*	*0.1*	*0.1*	15.2	13.5	32.0	*0.1*	2.3	56.4	1033	0.74							
	During GI	15/02/2023	*0.1*	*0.1*	*0.1*	*0.1*	18.5	18.0	10.0	*0.1*	1.0	3.9	1023	0.52							
	1	27/02/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.1	20.1	*0.1*	*0.1*	*0.1*	*0.1*	1036	0.68							
	2	14/03/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.0	19.2	*0.1*	*0.1*	*0.1*	*0.1*	1026	1.10							
	3	27/03/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.1	19.6	*0.1*	*0.1*	-1.9	-1.9	1026	0.32							
	4	11/04/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.4	20.1	*0.1*	*0.1*	-0.1	*0.1*	1003	0.20							
	5	24/04/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.2	20.1	*0.1*	*0.1*	-0.9	-0.7	1009	0.48							
	6	09/05/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.7	20.6	*0.1*	*0.1*	*0.1*	8.7	1006	0.39							
			0.1																		
	During GI	27/01/2023	*0.1*	26.4	*0.1*	1.1	19.9	15.4	*0.1*	*0.1*	1.6	122.0	1033	1.35							
	During GI	03/02/2023	30.0	41.6	1.9	2.5	12.3	10.4	58.0	*0.1*	-1.6	120.2	1028	0.49							
	During GI	10/02/2023	23.4	28.1	2.0	2.2	14.1	12.9	103.0	25.0	-0.1	120.6	1033	2.02							
	During GI	15/02/2023	32.3	48.7	2.2	3.4	12.0	8.3	73.0	25.0	*0.1*	109.0	1022	2.02							

Ground Gas Monitoring Borehole	Monitoring Round	Date	Methane (% v/v)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Carbon Monoxide (ppm)	Hydrogen Sulphide (ppm)	Flow l/hr		Atmospheric Pressure	Depth to Water	Depth to Base	Gas Screening Value l/hr		Response Zone Strata	Gas Characteristic Situation (CIRIA C665)	NHBC Traffic Light Classification	
			Steady	Peak	Steady	Peak	Steady	Peak	Peak	Peak	Steady	Peak	(mBar)	(m bgl)	(m bgl)	CH4	CO2			CH4	CO2
E-BH18	1	01/03/2023	2.3	93.9	*0.1*	5.9	19.7	0.2	*0.1*	*0.1*	*0.1*	*0.1*	1036	1.77		**114.5580**	**7.1980**	Chalk	CS5	RED	RED
	3	27/03/2023	*0.1*	*0.1*	0.3	0.3	20.0	20.0	*0.1*	*0.1*	-2.0	-1.9	1022	2.34							
	5	24/04/2023	*0.1*	*0.1*	0.2	0.5	19.8	19.2	*0.1*	*0.1*	*0.1*	62.3	1009	0.87							
	6	09/05/2023	*0.1*	*0.1*	*0.1*	1.0	20.7	20.7	*0.1*	*0.1*	*0.1*	7.1	1006								
E-BH20	During GI	13/01/2023	*0.1*	*0.1*	*0.1*	0.7	20.2	20.2	*0.1*	*0.1*	*0.1*	*0.1*	1000	0.75		**0.0288**	**0.0126**	Made Ground	CS1	GREEN	GREEN
	During GI	20/01/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.2	20.2	*0.1*	*0.1*	*0.1*	-3.4	1017	0.76							
	During GI	27/01/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.0	20.0	*0.1*	*0.1*	*0.1*	-1.0	1033	0.77							
	During GI	03/02/2023	*0.1*	*0.1*	0.1	*0.1*	21.0	18.0	16.0	*0.1*	*0.1*	-1.0	1028	2.5							
	During GI	10/02/2023	*0.1*	*0.1*	0.1	0.1	15.8	12.3	*0.1*	*0.1*	*0.1*	-1.0	1031	1.9							
	During GI	15/02/2023	*0.1*	0.9	*0.1*	*0.1*	16.2	7.8	*0.1*	*0.1*	*0.1*	*0.1*	1021	1.48							
	1	27/02/2023	*0.1*	1.6	*0.1*	*0.1*	19.1	14.9	*0.1*	*0.1*	*0.1*	*0.1*	1036	1.12							
	2	14/03/2023	0.0	0.0	*0.1*	0.2	19.9	10.7	*0.1*	*1.0*	*0.1*	*0.1*	988	1.42							
	3	27/03/2023	*0.1*	*0.1*	*0.1*	0.2	19.8	18.7	*0.1*	*0.1*	-1.6	-1.5	1024	1.00							
	4	11/04/2023	*0.1*	*0.1*	*0.1*	0.2	20.4	19.3	*0.1*	*0.1*	*0.1*	1.8	1005	1.85							
	5	24/04/2023	*0.1*	*0.1*	*0.1*	0.2	20.1	19.3	*0.1*	*0.1*	-0.7	-0.6	1010	0.94							
	6	09/05/2023	*0.1*	*0.1*	*0.1*	0.3	20.6	19.7	*0.1*	*0.1*	*0.1*	*0.1*	1007	0.91							
E-BH22	During GI	20/01/2023	*0.1*	*0.1*	*0.1*	0.1	20.0	19.7	*0.1*	*0.1*	-15	-45.5	1017	0.95		**0.0274**	**0.0015**	Made Ground and Tidal Flat Deposits	CS1	GREEN	GREEN
	During GI	27/01/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.0	20.0	*0.1*	*0.1*	-0.7	-26	1033	1.04							
	During GI	03/02/2023	16.7	21.2	1.0	1.5	11.4	10.5	121.4	40	-0.4	-2.2	1027	1.05							
	During GI	10/02/2023	26.9	27.4	1.4	1.5	3.4	3.2	205.0	40	-0.2	-0.6	1033	2.32							
	During GI	15/02/2023	5.8	18.9	0.5	1.3	15.2	4.9	26	*0.1*	-0.1	-0.1	1020								
	1	27/02/2023	1.7	5.1	0.1	0.7	18.7	15.3	*0.1*	*0.1*	*0.1*	*0.1*	1036	1.65							
	3	27/03/2023	0.9	0.9	*0.1*	*0.1*	19.2	19.2	*0.1*	1.0	-1.4	-1.4	1029	1.32							
	4	11/04/2023	32.4	36.7	0.7	0.7	11.3	10.5	*0.1*	*0.1*	-0.4	-0.4	1008	1.15							
	5	24/04/2023	*0.1*	50.5	*0.1*	0.8	19.9	8.5	*0.1*	*0.1*	-0.7	-0.6	1010	1.27							
	6	09/05/2023	1.2	61.1	*0.1*	0.9	19.7	5.0	*0.1*	*0.1*	*0.1*	*0.1*	1007	1.33							
E-BH25	During GI	10/02/2023	*0.1*	*0.1*	*0.1*	*0.1*	19.8	19.8	*0.1*	*0.1*	0.5	12.8	1034	1.83		**10.7008**	**0.6656**	Glacial Till Deposits	CS4	RED	GREEN
	During GI	15/02/2023	*0.1*	*0.1*	*0.1*	*0.1*	19.6	19.5	*0.1*	*0.1*	0.2	3.1	1020								
	1	01/03/2023	7.4	37.1	*0.1*	1.4	19.0	12.2	*0.1*	*0.1*	*0.1*	*0.1*	1033	1.90							
	3	27/03/2023	7.3	7.5	4.2	5.0	4.4	4.0	*0.1*	*0.1*	-2.2	-2.2	1024	0.90							
	4	11/04/2023	1.9	83.6	*0.1*	5.2	19.9	0.8	*0.1*	*0.1*	*0.1*	11.8	1004	1.85							
	5	24/04/2023	0.5	62.1	0.5	4.5	18.6	6.8	*0.1*	*0.1*	-1.0	-0.7	1009	1.73							
	6	09/05/2023	4.9	74.9	0.4	3.5	19.6	3.8	*0.1*	*0.1*	*0.1*	*0.1*	1006	1.90							
W-BH26	During GI	20/01/2023	*0.1*	*0.1*	*0.1*	0.4	20.2	20.0	*0.1*	*0.1*	*0.1*	*0.1*	1013	1.11		**0.0002**	**0.0048**	Clay (assumed Tidal Flat Deposits)	CS1	GREEN	GREEN
	During GI	27/01/2023	*0.1*	*0.1*	*0.1*	0.7	20.0	19.7	*0.1*	*0.1*	*0.1*	*0.1*	1033	1.28							
	During GI	02/02/2023	*0.1*	*0.1*	*0.1*	0.4	20.1	19.7	*0.1*	*0.1*	*0.1*	0.2	1023	0.92							
	During GI	09/02/2023	*0.1*	*0.1*	0.9	2.4	17.1	13.1	*0.1*	*0.1*	-0.3	-0.3	1032	1.39							
	During GI	15/02/2023	*0.1*	*0.1*	0.6	2.3	14.0	18.6	*0.1*	*0.1*	-0.2	-0.2	1019	1.20							
	1	28/02/2023	*0.1*	*0.1*	0.8	1.5	18.0	17.2	*0.1*	*0.1*	*0.1*	*0.1*	1038	1.07							
	2	13/03/2023	*0.1*	*0.1*	0.2	0.8	19.8	18.7	*0.1*	*0.1*	-0.3	-0.1	978	1.05							
	3	28/03/2023	*0.1*	*0.1*	0.1	0.1	19.6	19.6	*0.1*	*0.1*	-2.2	-0.9	1017	0.88							
	4	12/04/2023	*0.1*	*0.1*	0.1	0.1	20.2	20.2	*0.1*	*0.1*	-0.3	-0.2	990	0.76							
	5	25/04/2023	*0.1*	*0.1*	*0.1*	0.1	20.6	20.6	*0.1*	*0.1*	-0.5	-0.4	1015	0.93							
	6	09/05/2023	*0.1*	0.1	0.4	1.8	19.6	15.5	*0.1*	*0.1*	*0.1*	*0.1*	1007	0.93							
W-BH31	1	28/02/2023	*0.1*	*0.1*	*0.1*	*0.1*	20.1	19.8	*0.1*	*0.1*	*0.1*	*0.1*	1036	0.00		**0.0001**	**0.0001**	Glacial Till Deposits	CS1	GREEN	GREEN
	Maximum Values			**93.9**		**5.9**						**122.0**				**114.5580**	**7.198**		**CS5**	**RED**	**RED**

Key

0.1 Less than detection

Appendix I GQRA Screening Tables

			GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location	E-BH17	E-BH01		E-BH02		E-BH03			E-BH04		E-BH05		E-BH06A	E-BH06B				E-BH07			E-BH08			E-BH09
				Average Depth (m)	0	0.1	3	9.3	18	0.1	0.5	10	0.1		0.5	10	0	0	3.5	24.9		0.1	0.7	10	0	11.5	23.4	0.8
				Date	08/11/2022	04/01/2023	04/01/2023	11/01/2023	12/01/2023	25/01/2023	25/01/2023	26/01/2023	10/11/2022		16/11/2022	17/11/2022	17/11/2022	17/11/2022	17/11/2022	30/11/2022		24/01/2023	24/01/2023	25/01/2023	09/11/2022	16/11/2022	17/11/2022	13/12/2022
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	22-96579	23-10590	23-10590	23-12169	23-12263	23-14638	23-14638	23-15173	22-97150	22-97153	22-98816	22-98887	22-98889	22-98887	22-98887	22-13079	22-13082	23-14640	23-14640	23-14638	22-96532	22-98816	22-98887	22-13738
	Units	Method Detection Limit		Stratum	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - GTD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Silt - TFD	Chalk	Chalk	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	Clay - GTD	Chalk	Clay - TFD
Textural Class (no units)	-	0			-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	1	-	-	-
Loss on ignition	%	0.2			-	-	-	-	-	-	-	-	-	6.9	-	-	-	-	-	-	0.5	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001	28,000[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Metals, boron, sulphates in so																												
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125			0.69	0.16 - 0.163	0.29 - 0.293	0.976 - 0.98	0.02 - 0.0202	0.259 - 0.26	-	0.41 - 0.414	0.045 - 0.0452	-	0.0778 - 0.078	0.79 - 0.794	-	0.2 - 0.204	0.175 - 0.18	0.091 - 0.0913	-	0.59	0.14 - 0.142	0.8 - 0.804	0.0567 - 0.057	0.013 - 0.0132	0.0087	0.197 - 0.2
TPH																												
>C5-C6 Aliphatics	mg/kg	0.001	3,200[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	7,800[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	2,000[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	9,700[#2]		<1	<1	<1	<1	<1	<1	-	<1	<1	-	6.3	<1	-	<1	<1	<1	-	<1	<1	<1	<1	5.7	<1	<1
>C12-C16 Aliphatics	mg/kg	2	59,000[#2]		6	<2	<2	<2	<2	<2	-	<2	<2	-	15	2.7	-	<2	<2	<2	-	2.6	<2	<2	<2	12	<2	<2
>C16-C21 Aliphatics	mg/kg	8			11	<8	<8	<8	<8	<8	-	<8	<8	-	18	<8	-	14	<8	<8	-	15	<8	<8	<8	17	<8	<8
>C21-C35 Aliphatics	mg/kg	8			48	<8	<8	<8	<8	19	-	<8	<8	-	47	13	-	140	<8	<8	-	43	<8	<8	<8	44	<8	<8
>C5-C35 Aliphatics	mg/kg	10			65	<10	<10	<10	<10	25	-	<10	<10	-	86	19	-	150	<10	<10	-	61	<10	<10	<10	78	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001	26,000[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	56,000[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	3,500[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	16,000[#2]		<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1	3.1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	36,000[#2]		4.5	<2	<2	<2	<2	4.4	-	<2	<2	-	<2	5.4	-	<2	<2	<2	-	<2	<2	<2	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10	28,000[#2]		21	<10	<10	<10	<10	19	-	<10	<10	-	<10	<10	-	28	<10	<10	-	17	<10	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10	28,000[#2]		51	<10	<10	<10	<10	30	-	<10	33	-	<10	16	-	270	<10	<10	-	29	<10	<10	<10	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10			76	<10	<10	<10	<10	54	-	<10	39	-	<10	30	-	300	<10	<10	-	47	<10	<10	<10	<10	<10	<10
mineral oil	mg/kg	10	3,500,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX																												
Benzene	mg/kg	0.001	27[#3]		<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005
Toluene	mg/kg	0.001	56,000[#2]		<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005
Ethylbenzene	mg/kg	0.001	5,700[#2]		<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005
Xylene (m & p)	mg/kg	0.001			<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005
Xylene (o)	mg/kg	0.001	6,600[#2]		<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005
Total BTEX	mg/kg	0.005			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxygenates																												
MTBE	mg/kg	0.001	7,900[#4]		<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005
Chlorinated Hydrocarbons																												
Chloromethane	mg/kg	0.001	1[#4]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Vinyl chloride	mg/kg	0.001	1.1[#5]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Chloroethane	mg/kg	0.001	960[#4]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,1-dichloroethene	mg/kg	0.001	26[#4]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
trans-1,2-dichloroethene	mg/kg	0.001	22[#4] | 300[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,1-dichloroethane	mg/kg	0.001	280[#4]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
cis-1,2-dichloroethene	mg/kg	0.001	14[#4] | 2300[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Chloroform	mg/kg	0.001	99[#2]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,1,1-trichloroethane	mg/kg	0.001	660[#2]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Carbon tetrachloride	mg/kg	0.001	2.9[#2]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Trichloroethene	mg/kg	0.001	0.73[#5]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,1,2-trichloroethane	mg/kg	0.001	94[#4]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Tetrachloroethene	mg/kg	0.001	24[#5]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
VOC																												
2,2-dichloropropane	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,1-dichloropropene	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,2-dichloroethane	mg/kg	0.001	0.67[#2]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,2-dichloropropane	mg/kg	0.001	3.3[#4]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Dibromomethane	mg/kg	0.001	99[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Bromodichloromethane	mg/kg	0.001	1.3[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
cis-1,3-dichloropropene	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
trans-1,3-dichloropropene	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,3-dichloropropane	mg/kg	0.001	23,000[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Chlorodibromomethane	mg/kg	0.001	39[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,1,1,2-tetrachloroethane	mg/kg	0.001	110[#2]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Styrene	mg/kg	0.001	3,300[#4]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Bromoform	mg/kg	0.001	760[#4]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Isopropylbenzene	mg/kg	0.001	1,400[#4]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,1,2,2-tetrachloroethane	mg/kg	0.001	270[#2]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
n-propylbenzene	mg/kg	0.001	4,100[#4]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,3,5-trimethylbenzene	mg/kg	0.001	1,500[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
tert-butylbenzene	mg/kg	0.001	120,000[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,2,4-trimethylbenzene	mg/kg	0.001	42[#4]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
sec-butylbenzene	mg/kg	0.001	120,000[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
p-isopropyltoluene	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
n-butylbenzene	mg/kg	0.001	58,000[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,2-dibromo-3-chloropropane	mg/kg	0.001	0.064[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Hexachlorobutadiene	mg/kg	0.001	31[#2]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
PAH																												
Naphthalene	mg/kg	0.00005	190[#2]		<0.0001 - 0.12	<0.05	<0.0001	<0.0001	<0.0001	0.28	<0.0001	<0.0001	<0.0001 - 0.72	-	0.54	<0.0001 - 1.5	-	<0.0001 - 0.36	<0.0001	0.18	-	<0.05	<0.0001	<0.0001	<0.0001	<0.0001 - 0.2	0.34	<0.0001
Acenaphthylene	mg/kg	0.05	83,000[#2]		0.06	<0.05	<0.05	<0.05	<0.05	0.3	<0.05	<0.05	0.05	-	<0.05	<0.05	-	0.08	<0.05	<0.05	-	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	84,000[#2]		0.15	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05	0.07	-	0.09	0.39	-	0.2	<0.05	<0.05	-	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	63,000[#2]		0.19	<0.05	<0.05	<0.05	<0.05	0.29	<0.05	<0.05	0.1	-	0.06	0.1	-	0.29	<0.05	0.07	-	0.17	<0.05	<0.05	<0.05	<0.05	0.08	0.05
Phenanthrene	mg/kg	0.05	22,000[#2]		3.4	0.41	0.06	<0.05	<0.05	3.4	0.22	<0.05	3.3	-	0.42	0.16	-	3.1	0.11	0.21	-	2.4	0.12	0.08	<0.05	<0.05	0.16	0.32
Anthracene	mg/kg	0.05	520,000[#2]		0.89	0.08	<0.05	<0.05	<0.05	0.95	<0.05	<0.05	0.29	-	0.08	<0.05	-	0.88	<0.05	<0.05	-	0.65	<0.05	<0.05	<0.05	<0.05	<0.05	0.07
Fluoranthene	mg/kg	0.05	23,000[#2]		5.8	0.51	<0.05	<0.05	<0.05	4.6	0.25	<0.05	1.7	-	0.52	0.09	-	4.5	0.13	0.1	-	4.5	0.14	0.07	0.07	<0.05	0.22	0.31
Pyrene	mg/kg	0.05	54,000[#2]		5.6	0.42	<0.05	<0.05	<0.05	4.8	0.24	<0.05	4.2	-	0.45	0.07	-	4.8	0.13	0.07	-	4.4	0.13	0.08	0.07	<0.05	0.21	0.3
Benz(a)anthracene	mg/kg	0.05	170[#2]		2.5	0.22	<0.05	<0.05	<0.05	3	0.15	<0.05	3.8	-	0.32	<0.05	-	2.7	0.06	<0.05	-	2.3	0.06	0.07	<0.05	<0.05	0.17	0.17
Chrysene	mg/kg	0.05	350[#2]		3.2	0.34	<0.05	<0.05	<0.05	3.9	0.26	<0.05	10	-	0.35	<0.05	-	3.3	<0.05	<0.05	-	2.7	0.1	0.12	<0.05	<0.05	0.14	0.23
Benzo(a) pyrene	mg/kg	0.05	35[#2]		2.3	0.21	<0.05	<0.05	<0.05	2.5	0.13	<0.05	3.3	-	0.18	<0.05	-	2.5	0.06	<0.05	-	2.3	0.05	<0.05	<0.05	<0.05	0.15	0.14
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	500[#2]		1.2	0.13	<0.05	<0.05	<0.05	1.3	0.05	<0.05	1.2	-	0.1	<0.05	-	1.1	<0.05	<0.05	-	1.2	<0.05	<0.05	<0.05	<0.05	<0.05	0.07
Dibenz(a,h)anthracene	mg/kg	0.05	3.5[#2]		0.32	<0.05	<0.05	<0.05	<0.05	0.47	<0.05	<0.05	0.91	-	<0.05	<0.05	-	0.35	<0.05	<0.05	-	0.35	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	3,900[#2]		1.4	0.16	<0.05	<0.05	<0.05	1.6	0.09	<0.05	3.1	-	0.15	<0.05	-	1.3	<0.05	<0.05	-	1.5	0.05	<0.05	<0.05	<0.05	<0.05	0.11
Benzo(b)fluoranthene	mg/kg	0.05	44[#2]		2.6	0.25	<0.05	<0.05	<0.05	2.5	0.16	<0.05	3.5	-	0.22	<0.05	-	3.2	0.07	<0.05	-	2.6	0.09	0.06	<0.05	<0.05	0.17	0.19
Benzo(k)fluoranthene	mg/kg	0.05	1,200[#2]		1.5	0.15	<0.05	<0.05	<0.05	1.3	<0.05	<0.05	1.2	-	0.12	<0.05	-	0.93	<0.05	<0.05	-	1.1	<0.05	<0.05	<0.05	<0.05	0.07	0.06
PAH 17 Total	mg/kg	0.85			31.3	2.88	<0.85	<0.85	<0.85	31.2	-	<0.85	37.7	-	3.6	2.33	-	29.6	<0.85	<0.85	-	26.4	<0.85	<0.85	<0.85	<0.85	1.71	2.02
SVOC																												
Coronene	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1	3,000[#1]		0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	0.5	-	-	0.3	-	0.3	<0.1	-	-	-	<0.1	<0.1	<0.1	0.1	-	<0.1
4-bromophenyl phenyl ether	mg/kg	0.2			<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2
4-chlorophenyl phenyl ether	mg/kg	0.3			<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3
Azobenzene	mg/kg	0.3	26[#1]		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3
Bis(2-chloroethoxy) methane	mg/kg	0.3	2,500[#1]		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3
Bis(2-chloroethyl)ether	mg/kg	0.2	1[#1]		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2
Carbazole	mg/kg	0.3			<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	0.4	<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3
Dibenzofuran	mg/kg	0.2	1,200[#1]		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	0.4	-	0.2	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2
Hexachloroethane	mg/kg	0.05	22[#4]		<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	-	<0.05	-	<0.05	<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	<0.05
Bis(2-chloroisopropyl) ether	mg/kg	0.1	47,000[#1]		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1
9,10-Anthracenedione	mg/kg	0.3	57[#1]		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3
Phenolics																												
2-methylphenol	mg/kg	0.3	160,000		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3
2-nitrophenol	mg/kg	0.3			<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3
2,4-dimethylphenol	mg/kg	0.3	16,000[#4]		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3
4-chloro-3-methylphenol	mg/kg	0.1	82,000[#1]		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1
4-methylphenol	mg/kg	0.2	160,000		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2
Phenol	mg/kg	0.2	440[#2]		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2
2-chloronaphthalene	mg/kg	0.1	390[#4]		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1
Total Monohydric Phenols (S) Corrected	mg/kg	1			<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	1.1	-	<1	<1	<1	<1	<1	<1	<1
PCBs																												
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001	0.16[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001	0.048[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001	0.49[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001	0.5[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001
PCB 118	mg/kg	0.001	0.49[#1]		<0.001	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	<0.001
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001	0.49[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001	0.00015[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001	0.5[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001	0.5[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001	0.51[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001	0.00051[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001	0.52[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001
Total PCB WHO 12	mg/kg	0.012			<0.012	-	-	-	-	-	-	-	-	-	-	-	-	<0.012	-	-	-	-	-	-	<0.012	-	-	<0.012
PCB 28	mg/kg	0.001			<0.001	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	<0.001
PCB 52	mg/kg	0.001			<0.001	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	<0.001
PCB 101	mg/kg	0.001			0.003	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	<0.001
PCB 138	mg/kg	0.001			0.01	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	<0.001
PCB 153	mg/kg	0.001			0.011	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	<0.001
PCB 180	mg/kg	0.001			0.011	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	<0.001
PCBs (Sum of total)	mg/kg	0.007	0.94[#1]		0.036	-	-	-	-	-	-	-	-	-	-	-	-	<0.007	-	-	-	-	-	-	<0.007	-	-	<0.007
Anilines																												
Aniline	mg/kg	0.1	400[#1]		0.5	-	8.7	<0.1	<0.1	-	<0.1	1.8	0.7	-	-	<0.1	-	1.1	0.7	-	-	-	<0.1	<0.1	0.6	0.4	-	<0.1
4-chloroaniline	mg/kg	0.1	11[#1]		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1
4-nitroaniline	mg/kg	0.2	110[#1]		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2
Explosives																												
2,4-Dinitrotoluene	mg/kg	0.2	3,700[#4]		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2
2,6-dinitrotoluene	mg/kg	0.1	1,900[#4]		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1
Nitrobenzene	mg/kg	0.3	22[#1]		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3
Halogenated Benzenes																												
Chlorobenzene	mg/kg	0.001	56[#2]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
2-chlorotoluene	mg/kg	0.001	23,000[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
4-chlorotoluene	mg/kg	0.001	23,000[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,3-dichlorobenzene	mg/kg	0.001	30[#2]		<0.001 - 0.4	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001 - 0.2	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,4-dichlorobenzene	mg/kg	0.001	4,400[#2]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,2-dichlorobenzene	mg/kg	0.001	2,000[#2]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005

			GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location	E-BH17	E-BH01		E-BH02		E-BH03			E-BH04		E-BH05		E-BH06A	E-BH06B			E-BH07			E-BH08			E-BH09
				Average Depth (m)	0	0.1	3	9.3	18	0.1	0.5	10	0.1		0.5	10	0	0	3.5	24.9	0.1	0.7	10	0	11.5	23.4	0.8
				Date	08/11/2022	04/01/2023	04/01/2023	11/01/2023	12/01/2023	25/01/2023	25/01/2023	26/01/2023	10/11/2022		16/11/2022	17/11/2022	17/11/2022	17/11/2022	17/11/2022	30/11/2022	24/01/2023	24/01/2023	25/01/2023	09/11/2022	16/11/2022	17/11/2022	13/12/2022
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	22-96579	23-10590	23-10590	23-12169	23-12263	23-14638	23-14638	23-15173	22-97150	22-97153	22-98816	22-98887	22-98889	22-98887	22-98887	22-13079	22-13082	23-14640	23-14640	23-14638	22-96532	22-98816	22-98887	22-13738
	Units	Method Detection Limit		Stratum	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - GTD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Silt - TFD	Chalk	Chalk	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	Clay - GTD	Chalk	Clay - TFD
1,2,4-trichlorobenzene	mg/kg	0.001	220[#2]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,2,3-trichlorobenzene	mg/kg	0.001	102[#2]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Hexachlorobenzene	mg/kg	0.3	110[#2]		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3
Hexabromobenzene	mg/kg	0.001	2.300[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Halogenated Hydrocarbons																												
Bromomethane	mg/kg	0.001	30[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Trichlorofluoromethane	mg/kg	0.001	350,000[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
1,2-dibromoethane	mg/kg	0.001	0.16[#1]		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005
Halogenated Phenols																												
2-chlorophenol	mg/kg	0.1	5,900[#1]		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1
2,4-dichlorophenol	mg/kg	0.3	2,500[#1]		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3
2,4,5-trichlorophenol	mg/kg	0.2	82,000[#1]		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2
2,4,6-trichlorophenol	mg/kg	0.1	210[#1]		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1
Phthalates																												
Butyl benzyl phthalate	mg/kg	0.3	940,000[#4]		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3
Di-n-butyl phthalate	mg/kg	0.2	15,000[#4]		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2
Diethylphthalate	mg/kg	0.2	150,000[#4]		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2
Dimethyl phthalate	mg/kg	0.1			<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1
Solvents																												
Isophorone	mg/kg	0.2	2,400[#1]		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2
Metals																												
Arsenic	mg/kg	1	640[#3]		6.6	15	13	13	3.5	10	-	13	9.2	-	16	12	-	10	11	3.2	-	9.2	13	10	17	8.1	3	17
Barium	mg/kg	1	22,000[#4]		260	79	93	93	26	130	-	75	130	-	81	38	-	150	130	13	-	150	100	81	86	100	20	79
Beryllium	mg/kg	0.06	12[#3]		6.4	1	0.88	1	0.26	0.81	-	0.77	0.87	-	1.2	1	-	0.88	0.87	0.14	-	1	0.91	0.76	1.2	0.72	0.32	1.4
Boron	mg/kg	0.2	240,000[#2]		3.9	7	10	20	0.4	2.6	-	6.7	0.6	-	1.1	17	-	4.1	3.7	0.5	-	1.5	1.3	16	3.4	1.4	0.3	1.6
Cadmium	mg/kg	0.2	410[#3]		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	0.4	-	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	<0.2
Chromium (III+VI)	mg/kg	1	8,600		64	32	27	30	7.7	23	-	23	24	-	35	28	-	26	26	2.2	-	23	28	23	38	20	7.4	42
Copper	mg/kg	1	68,000[#2]		19	19	16	15	3.9	33	-	10	40	-	22	22	-	29	11	5.1	-	34	18	14	15	17	8.5	18
Lead	mg/kg	1	2,330[#3]		15	35	18	17	4.7	52	-	12	30	-	38	15	-	58	14	3	-	72	32	15	24	11	5.4	30
Mercury	mg/kg	0.3	350[#1]		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	980[#2]		5.9	31	28	33	9.1	15	-	24	16	-	34	29	-	15	26	14	-	13	28	25	35	20	12	37
Selenium	mg/kg	1	12,000[#2]		<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1	9,000[#2]		180	51	42	46	14	37	-	37	33	-	53	37	-	49	38	3.5	-	36	42	37	56	27	11	62
Zinc	mg/kg	1	730,000[#5]		55	83	62	76	20	89	-	59	130	-	93	86	-	95	60	27	-	79	74	68	79	44	24	95
Chromium (hexavalent)	mg/kg	1.8	40[#3]		<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Organics																												
TOC	%	0.1			-	-	-	-	-	-	-	-	-	1.6	-	-	0.9	-	-	-	0.2	-	-	-	-	-	-	-
Inorganics																												
Cyanide (Free)	mg/kg	1			<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1	150[#1]		<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1			2,600	5.9	88	100	26	29	-	160	120	-	7.9	270	-	28	230	36	-	65	1.1	130	9	18	26	<1
% Moisture	%	0.01			13	22	31	45	13	9.5	18	43	14	14	19	48	9.8	9.8	22	18	18	12	17	46	22	14	14	22
pH (Lab)	pH Units	0			10.4	7.6	8.2	7.4	8.7	10.8	-	8.3	11.9	8.4	8	8.2	9.5	10.6	8.8	8.5	7.9	7.9	8.1	7.4	8.8	9.1	8.4	8.8
Asbestos																												
Asbestos Type	None	0			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0			Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	-	Not detected	Not detected	-	Not detected	Not detected	-	Not detected	Not detected	Not detected	-	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
Particle Size																												
Stones content (>50mm)	%	0.1			-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	<0.1	-	-	-

Env Stds Comments
#1:USEPA RSL (NOV 2021)
#2:LQM/CIEH S4ULs 2015
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=0.58 to <1.45%

Location			GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	E-BH10					E-BH11	E-BH12		E-BH13	E-BH14	E-BH14A		E-BH15				E-BH16			E-BH17		E-BH18						E-BI
Average Depth (m)				0	1.7		21.4	25.2	21	0.1	23.5	3	0.3	1.5	3.5	0.2		10		0.9	14	24	9	20.8	0.5	2.5		4.5		27.4	0.9
Date				11/11/2022	11/11/2022		17/11/2022	25/11/2022	03/02/2023	30/01/2023	02/02/2023	10/02/2023	16/01/2023	13/02/2023	13/02/2023	28/11/2022		06/12/2022		25/11/2022	30/11/2022	01/12/2022	18/11/2022	22/11/2022	25/11/2022	28/11/2022		29/11/2022		13/12/2022	14/12/2022
Sample Type				Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal		Normal	Normal
Lab Report Number				22-97121	22-97121	22-97123	22-98887	22-11254	23-17045	23-15977	23-16960	23-18009	23-13184	23-18009	23-18009	22-13308	22-13322	22-13291	22-13294	22-11254	22-13079	22-12879	22-98820	22-11249	22-11254	22-13308	22-13322	22-13250	22-13359	22-13738	22-13842
Stratum	Units	Method Detection Limit		MADE GROUND	Clay - TFD	Clay - TFD	Gravel - GTD	Chalk	Gravel - GTD	MADE GROUND	Silt - GTD	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	MADE GROUND	Clay - GTD	Silt - GTD	Clay - TFD	Gravel - GTD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Chalk	MADE GROUND
Textural Class (no units)	-	0		-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	1	-	1	-	-
Loss on ignition	%	0.2		-	-	2.6	-	-	-	-	-	-	-	-	-	-	41.1	-	11.6	-	-	-	-	-	-	-	-	-	3.2	-	-
Freon 113	mg/kg	0.001	28,000[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Metals, boron, sulphates in so																															
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		-	0.278 - 0.28	-	0.0106 - 0.011	0.0074	0.015 - 0.0151	0.688 - 0.69	0.015 - 0.0154	0.55 - 0.554	3.07 - 3.1	2.6	0.33 - 0.332	0.5 - 0.503	-	1.4 - 1.43	-	0.0445 - 0.045	0.33 - 0.334	0.011 - 0.0113	0.296 - 0.3	0.015 - 0.0151	0.11 - 0.114	0.1 - 0.102	-	0.6 - 0.602	-	0.0289 - 0.029	0.468 - 0.47
TPH																															
>C5-C6 Aliphatics	mg/kg	0.001	3,200[#2]	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	7,800[#2]	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	2,000[#2]	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	9,700[#2]	-	<1	-	<1	<1	<1	<1	<1	<1	1.3	<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
>C12-C16 Aliphatics	mg/kg	2	59,000[#2]	-	<2	-	<2	<2	<2	<2	<2	<2	5	2.6	<2	2.6	-	<2	-	<2	<2	<2	<2	<2	4.7	<2	-	<2	-	<2	4.6
>C16-C21 Aliphatics	mg/kg	8		-	<8	-	<8	<8	<8	<8	<8	<8	12	<8	<8	8.2	-	<8	-	<8	<8	<8	<8	<8	29	<8	-	<8	-	<8	14
>C21-C35 Aliphatics	mg/kg	8		-	<8	-	<8	23	<8	<8	<8	<8	230	22	<8	34	-	<8	-	<8	<8	<8	<8	<8	1,400	<8	-	<8	-	8.9	78
>C5-C35 Aliphatics	mg/kg	10		-	<10	-	<10	28	<10	<10	<10	<10	250	29	<10	45	-	<10	-	<10	<10	<10	<10	<10	1,500	<10	-	<10	-	<10	96
>EC5-EC7 Aromatics	mg/kg	0.001	26,000[#2]	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.036	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	56,000[#2]	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.058	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	3,500[#2]	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.027	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	16,000[#2]	-	1.2	-	<1	<1	<1	<1	<1	<1	<1	2.2	<1	1.9	-	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	36,000[#2]	-	2.9	-	<2	<2	<2	<2	<2	<2	<2	8.5	<2	6.7	-	<2	-	<2	2.8	<2	<2	<2	8.8	<2	-	<2	-	<2	11
>EC16-EC21 Aromatics	mg/kg	10	28,000[#2]	-	<10	-	<10	<10	<10	<10	<10	<10	<10	22	<10	<10	-	<10	-	<10	<10	<10	<10	<10	42	<10	-	<10	-	<10	33
>EC21-EC35 Aromatics	mg/kg	10	28,000[#2]	-	14	-	<10	20	<10	<10	<10	<10	180	29	<10	<10	-	<10	-	<10	10	<10	<10	<10	1,400	<10	-	<10	-	<10	79
>EC5-EC35 Aromatics	mg/kg	10		-	22	-	<10	20	<10	<10	<10	<10	190	61	<10	23	-	<10	-	<10	20	<10	<10	<10	1,400	<10	-	<10	-	<10	120
mineral oil	mg/kg	10	3,500,000[#1]	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	-	-	-	-	23	-	-
BTEX																															
Benzene	mg/kg	0.001	27[#3]	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	0.025	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	56,000[#2]	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	0.049	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	5,700[#2]	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001		-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	6,600[#2]	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	0.0089	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	<0.005	-	-
Oxygenates																															
MTBE	mg/kg	0.001	7,900[#4]	-	<0.001	-	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.005	-	<0.005	<0.005
Chlorinated Hydrocarbons																															
Chloromethane	mg/kg	0.001	1[#4]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Vinyl chloride	mg/kg	0.001	1.1[#5]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Chloroethane	mg/kg	0.001	960[#4]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1-dichloroethene	mg/kg	0.001	26[#4]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
trans-1,2-dichloroethene	mg/kg	0.001	22[#4] / 300[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1-dichloroethane	mg/kg	0.001	280[#4]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
cis-1,2-dichloroethene	mg/kg	0.001	14[#4] / 2300[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Chloroform	mg/kg	0.001	99[#2]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1,1-trichloroethane	mg/kg	0.001	660[#2]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Carbon tetrachloride	mg/kg	0.001	2.9[#2]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Trichloroethene	mg/kg	0.001	0.73[#5]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1,2-trichloroethane	mg/kg	0.001	94[#4]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Tetrachloroethene	mg/kg	0.001	24[#5]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
VOC																															
2,2-dichloropropane	mg/kg	0.001		-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1-dichloropropene	mg/kg	0.001		-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2-dichloroethane	mg/kg	0.001	0.67[#2]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2-dichloropropane	mg/kg	0.001	3.3[#4]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Dibromomethane	mg/kg	0.001	99[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Bromodichloromethane	mg/kg	0.001	1.3[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
cis-1,3-dichloropropene	mg/kg	0.001		-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
trans-1,3-dichloropropene	mg/kg	0.001		-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,3-dichloropropane	mg/kg	0.001	23,000[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Chlorodibromomethane	mg/kg	0.001	39[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.001	110[#2]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Styrene	mg/kg	0.001	3,300[#4]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Bromoform	mg/kg	0.001	760[#4]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Isopropylbenzene	mg/kg	0.001	1,400[#4]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.001	270[#2]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
n-propylbenzene	mg/kg	0.001	4,100[#4]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.001	1,500[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
tert-butylbenzene	mg/kg	0.001	120,000[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.001	42[#4]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
sec-butylbenzene	mg/kg	0.001	120,000[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
p-isopropyltoluene	mg/kg	0.001		-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
n-butylbenzene	mg/kg	0.001	58,000[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.001	0.064[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Hexachlorobutadiene	mg/kg	0.001	31[#2]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
PAH																															
Naphthalene	mg/kg	0.00005	190[#2]	-	<0.0001 - 0.53	0.45	0.07	<0.05	<0.05	<0.0001	<0.05	<0.0001	<0.0001 - 2	2.4	<0.0001	<0.0001 - 1.8	-	<0.0001	0.11	<0.0001 - 0.06	0.38	0.11	0.12	<0.05	0.89	<0.0001 - 0.06	-	<0.0001	<0.05	<0.05	2.3
Acenaphthylene	mg/kg	0.05	83,000[#2]	-	0.07	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	0.18	<0.05	-	<0.05	<0.05	<0.05	0.08
Acenaphthene	mg/kg	0.05	84,000[#2]	-	0.09	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.49	0.57	<0.05	0.16	-	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	0.21	<0.05	-	<0.05	<0.05	<0.05	0.84
Fluorene	mg/kg	0.05	63,000[#2]	-	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.64	0.68	<0.05	0.52	-	<0.05	<0.05	<0.05	0.15	0.05	<0.05	<0.05	0.36	<0.05	-	<0.05	<0.05	<0.05	0.71
Phenanthrene	mg/kg	0.05	22,000[#2]	-	0.16	0.11	0.21	<0.05	<0.05	0.72	<0.05	0.07	2.8	5.4	0.06	2.3	-	<0.05	0.06	0.06	0.47	0.14	0.09	<0.05	1.7	0.11	-	0.15	0.14	0.07	7.1
Anthracene	mg/kg	0.05	520,000[#2]	-	<0.05	<0.05	0.07	<0.05	<0.05	0.16	<0.05	<0.05	0.96	1.3	<0.05	0.5	-	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	<0.05	0.62	<0.05	-	<0.05	0.13	<0.05	1.6
Fluoranthene	mg/kg	0.05	23,000[#2]	-	0.15	0.09	0.56	<0.05	<0.05	1.5	<0.05	0.08	2.5	6.4	0.05	1.6	-	<0.05	<0.05	0.07	0.23	0.15	0.06	<0.05	1.8	0.09	-	0.15	0.13	0.05	7.8
Pyrene	mg/kg	0.05	54,000[#2]	-	0.14	0.11	0.59	<0.05	<0.05	1.7	<0.05	0.08	2.5	5.7	0.06	1.6	-	<0.05	<0.05	0.07	0.18	0.17	0.05	<0.05	1.6	0.1	-	0.13	0.13	<0.05	7.1
Benz(a)anthracene	mg/kg	0.05	170[#2]	-	0.07	<0.05	0.43	<0.05	<0.05	1.2	<0.05	<0.05	1.5	3.2	<0.05	1	-	<0.05	<0.05	<0.05	0.1	0.07	<0.05	<0.05	1	<0.05	-	0.08	<0.05	<0.05	3.6
Chrysene	mg/kg	0.05	350[#2]	-	0.09	<0.05	0.4	<0.05	<0.05	1.7	<0.05	<0.05	1.6	2.5	0.05	1	-	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	1.1	<0.05	-	<0.05	<0.05	<0.05	2.9
Benzo(a) pyrene	mg/kg	0.05	35[#2]	-	0.07	<0.05	0.41	<0.05	<0.05	1.3	<0.05	<0.05	1.2	2.5	<0.05	0.65	-	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.84	<0.05	-	<0.05	<0.05	<0.05	2.6
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	500[#2]	-	<0.05	<0.05	0.24	<0.05	<0.05	0.78	<0.05	<0.05	0.52	1.2	<0.05	0.52	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.29	<0.05	-	<0.05	<0.05	<0.05	1.3
Dibenz(a,h)anthracene	mg/kg	0.05	3.5[#2]	-	<0.05	<0.05	<0.05	<0.05	<0.05	0.22	<0.05	<0.05	0.21	0.3	<0.05	0.15	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	0.26
Benzo(g,h,i)perylene	mg/kg	0.05	3,900[#2]	-	<0.05	<0.05	0.25	<0.05	<0.05	0.96	<0.05	<0.05	0.7	1.4	<0.05	0.89	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.46	<0.05	-	<0.05	<0.05	<0.05	1.4
Benzo(b)fluoranthene	mg/kg	0.05	44[#2]	-	0.1	<0.05	0.46	<0.05	<0.05	1.4	<0.05	<0.05	1.6	2.9	<0.05	1.1	-	<0.05	<0.05	0.05	0.08	<0.05	<0.05	<0.05	0.88	<0.05	-	0.06	<0.05	<0.05	3.1
Benzo(k)fluoranthene	mg/kg	0.05	1,200[#2]	-	<0.05	<0.05	0.26	<0.05	<0.05	0.79	<0.05	<0.05	0.61	0.93	<0.05	0.6	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.46	<0.05	-	<0.05	<0.05	<0.05	1.4
PAH 17 Total	mg/kg	0.85		-	1.55	<0.85	4.03	<0.85	<0.85	12.3	<0.85	<0.85	20	37.2	<0.85	14.4	-	<0.85	<0.85	<0.85	1.91	<0.85	<0.85	<0.85	12.4	<0.85	-	<0.85	<0.85	<0.85	44
SVOC																															
Coronene	mg/kg	0.05		-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1	3,000[#1]	-	0.3	-	-	-	-	<0.1	-	<0.1	1.9	-	<0.1	3.9	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.2		-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Azobenzene	mg/kg	0.3	26[#1]	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Bis(2-chloroethoxy) methane	mg/kg	0.3	2,500[#1]	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	1[#1]	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
Carbazole	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Dibenzofuran	mg/kg	0.2	1,200[#1]	-	<0.2	-	-	-	-	<0.2	-	<0.2	0.5	-	<0.2	0.9	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
Hexachloroethane	mg/kg	0.05	22[#4]	-	<0.05	-	-	-	-	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	-	<0.05	-	-	-	-	-	<0.05	-	<0.05	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1	47,000[#1]	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
9,10-Anthracenedione	mg/kg	0.3	57[#1]	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Phenolics																															
2-methylphenol	mg/kg	0.3	160,000	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
2-nitrophenol	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
2,4-dimethylphenol	mg/kg	0.3	16,000[#4]	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
4-chloro-3-methylphenol	mg/kg	0.1	82,000[#1]	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
4-methylphenol	mg/kg	0.2	160,000	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
Phenol	mg/kg	0.2	440[#2]	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
2-chloronaphthalene	mg/kg	0.1	390[#4]	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		-	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	1.8	<1	<1	-	<1	-	<1	<1
PCBs																															
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001	0.16[#1]	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001	0.048[#1]	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001	0.49[#1]	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001	0.5[#1]	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
PCB 118	mg/kg	0.001	0.49[#1]	-	-	<0.001	-	-	-	-	-	-	0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001	0.49[#1]	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001	0.00015[#1]	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001	0.5[#1]	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001	0.5[#1]	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001	0.51[#1]	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001	0.00051[#1]	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001	0.52[#1]	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	-	-	-	-	<0.012	-	-	<0.012	-	<0.012	-	-	-	-	-	-	-	<0.012	-	<0.012	-	-	-
PCB 28	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	0.004	-	-	0.009	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
PCB 52	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	0.002	-	-	0.002	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
PCB 101	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	0.004	-	-	0.001	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
PCB 138	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	0.015	-	-	0.002	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
PCB 153	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	0.02	-	-	0.002	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
PCB 180	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	0.023	-	-	0.002	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
PCBs (Sum of total)	mg/kg	0.007	0.94[#1]	-	-	<0.007	-	-	-	-	-	-	0.069	-	-	0.018	-	<0.007	<0.007	-	-	-	-	-	-	<0.007	-	<0.007	<0.007	-	-
Anilines																															
Aniline	mg/kg	0.1	400[#1]	-	0.3	-	-	-	-	<0.1	-	<0.1	2.4	-	<0.1	<0.1	-	0.3	-	2.6	-	-	-	-	-	<0.1	-	0.4	-	-	-
4-chloroaniline	mg/kg	0.1	11[#1]	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
4-nitroaniline	mg/kg	0.2	110[#1]	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
Explosives																															
2,4-Dinitrotoluene	mg/kg	0.2	3,700[#4]	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
2,6-dinitrotoluene	mg/kg	0.1	1,900[#4]	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
Nitrobenzene	mg/kg	0.3	22[#1]	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Halogenated Benzenes																															
Chlorobenzene	mg/kg	0.001	56[#2]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
2-chlorotoluene	mg/kg	0.001	23,000[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
4-chlorotoluene	mg/kg	0.001	23,000[#1]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,3-dichlorobenzene	mg/kg	0.001	30[#2]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005 - 0.2	-	<0.005	<0.005 - 0.9	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,4-dichlorobenzene	mg/kg	0.001	4,400[#2]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2-dichlorobenzene	mg/kg	0.001	2,000[#2]	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-

			GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location	E-BH10					E-BH11	E-BH12		E-BH13	E-BH14	E-BH14A		E-BH15				E-BH16			E-BH17		E-BH18								E-BI
				Average Depth (m)	0	1.7		21.4	25.2	21	0.1	23.5	0.3	1.5	3.5	0.2		10		0.9	14	24	9	20.8	0.5	2.5		4.5		27.4	0.9	
				Date	11/11/2022	11/11/2022		17/11/2022	25/11/2022	03/02/2023	30/01/2023	02/02/2023	10/02/2023	16/01/2023	13/02/2023	13/02/2023	28/11/2022		06/12/2022		25/11/2022	30/11/2022	01/12/2022	18/11/2022	22/11/2022	25/11/2022	28/11/2022		29/11/2022		13/12/2022	14/12/2022	
				Sample Type	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal		Normal	Normal	
				Lab Report Number	22-97121	22-97121	22-97123	22-98887	22-11254	23-17045	23-15977	23-16960	23-18009	23-13184	23-18009	23-18009	22-13308	22-13322	22-13291	22-13294	22-11254	22-13079	22-12879	22-98820	22-11249	22-11254	22-13308	22-13322	22-13250	22-13359	22-13738	22-13842	
				Stratum	MADE GROUND	Clay - TRD	Clay - TRD	Gravel - GTD	Chalk	Gravel - GTD	MADE GROUND	Silt - GTD	Clay - TRD	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TRD	Clay - TRD	MADE GROUND	Clay - GTD	Silt - GTD	Clay - TRD	Gravel - GTD	MADE GROUND	Clay - TRD	Clay - TRD	Clay - TRD	Clay - TRD	Chalk	MADE GROUND	MADE GROUND	
	Units	Method Detection Limit																														
1,2,4-trichlorobenzene	mg/kg	0.001	220[#2]		-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.001	102[#2]		-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	110[#1]		-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-
Hexabromobenzene	mg/kg	0.001	7.30[#1]		-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-
Halogenated Hydrocarbons																																	
Bromomethane	mg/kg	0.001	30[#1]		-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-
Trichlorofluoromethane	mg/kg	0.001	350,000[#5]		-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-
1,2-dibromoethane	mg/kg	0.001	0.16[#1]		-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-
Halogenated Phenols																																	
2-chlorophenol	mg/kg	0.1	5,900[#1]		-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-
2,4-dichlorophenol	mg/kg	0.3	2,500[#1]		-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.2	82,000[#1]		-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.1	210[#1]		-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-
Phthalates																																	
Butyl benzyl phthalate	mg/kg	0.3	940,000[#4]		-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.2	15,000[#4]		-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-
Diethylphthalate	mg/kg	0.2	150,000[#4]		-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-
Dimethyl phthalate	mg/kg	0.1			-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-
Solvents																																	
Isophorone	mg/kg	0.2	2,400[#1]		-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-
Metals																																	
Arsenic	mg/kg	1	640[#3]		-	14	-	4.1	1.3	2.8	10	3.5	17	12	28	15	7.3	-	14	-	5.9	8.1	2.5	18	4.7	7.9	15	-	11	-	1.7	43	
Barium	mg/kg	1	22,000[#4]		-	140	-	17	11	10	130	22	89	170	120	100	120	-	74	-	19	73	13	56	33	280	110	-	100	-	10	160	
Beryllium	mg/kg	0.06	12[#3]		-	1.1	-	0.23	0.12	0.14	1.2	0.23	1	1.9	1.3	0.98	1	-	1.1	-	0.18	0.66	0.13	1.2	0.36	0.36	1.3	-	0.95	-	0.11	1.8	
Boron	mg/kg	0.2	240,000[#2]		-	6.8	-	<0.2	<0.2	<0.2	1.8	0.2	7.2	5.1	3.6	9.5	11	-	5	-	0.3	1	0.4	6.3	<0.2	1.5	3.6	-	2.9	-	0.5	2.2	
Cadmium	mg/kg	0.2	410[#3]		-	<0.2	-	<0.2	0.3	0.2	<0.2	0.2	<0.2	0.6	<0.2	<0.2	0.5	-	<0.2	-	0.3	<0.2	0.3	<0.2	<0.2	0.7	<0.2	-	<0.2	-	0.4	<0.2	
Chromium (III+VI)	mg/kg	1	8,600		-	31	-	4.8	2.2	2.9	23	5.3	30	140	29	28	270	-	34	-	2.8	16	2	35	9.1	34	49	-	29	-	2.3	71	
Copper	mg/kg	1	68,000[#2]		-	17	-	3.1	4.2	4.8	14	6	16	60	49	18	45	-	18	-	11	12	5.7	18	7.6	13	21	-	12	-	3.1	70	
Lead	mg/kg	1	2,330[#3]		-	28	-	3.8	2.3	2.4	53	3.9	18	140	48	17	430	-	19	-	5	10	2.8	19	5.8	26	23	-	17	-	2.6	35	
Mercury	mg/kg	0.3	350[#1]		-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	<0.3	
Nickel	mg/kg	1	980[#2]		-	29	-	5.9	12	4.7	14	7.3	32	49	23	30	38	-	36	-	14	21	5.3	36	13	27	48	-	30	-	6.4	21	
Selenium	mg/kg	1	12,000[#2]		-	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	8.4	-	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	
Vanadium	mg/kg	1	9,000[#2]		-	47	-	9.3	3.1	6.6	38	9.1	45	86	68	43	60	-	49	-	4.2	24	3	49	15	36	56	-	45	-	3	89	
Zinc	mg/kg	1	730,000[#5]		-	72	-	19	19	16	96	21	73	140	150	71	190	-	85	-	20	39	19	88	26	49	88	-	71	-	15	61	
Chromium (hexavalent)	mg/kg	1.8	40[#3]		-	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-	<1.8	<1.8	
Organics																																	
TOC	%	0.1			-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	6.7	-	-	-	-	-	-	-	1.1	-	1.4	-	-	
Inorganics																																	
Cyanide (Free)	mg/kg	1			-	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	
Cyanide Total	mg/kg	1	150[#1]		-	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	
Sulphide	mg/kg	1			-	81	-	<1	<1	<1	92	24	270	71	80	230	320	-	170	-	2.2	62	2.2	830	19	85	1.8	-	430	-	7.9	270	
% Moisture	%	0.01			-	29	29	11	18	13	13	12	30	6.3	13	28	9.1	9.1	40	40	9.4	14	19	33	15	5.2	23	23	26	26	20	16	
pH (Lab)	pH Units	0			-	8.8	8.3	8.8	8.7	8.9	10.3	8.8	8.7	8.5	8.6	8.5	10.1	10	6.9	7.6	9.3	8.6	8.8	8.4	8.5	11.4	7.9	8.6	8.2	8.6	8.5	9.8	
Asbestos																																	
Asbestos Type	None	0			1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Asbestos fibres	-	0			1	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	-	Not-detected	Not-detected	
Particle Size																																	
Stones content (>50mm)	%	0.1			-	-	<0.1	-	-	-	-	-	-	-	-	-	-	30	-	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	

Env Stds Comments
#1:USEPA RSL (NOV 2021)
#2:LQM/CIEH S4ULs 2015
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=0.58 to <1.45%

	Units	Method Detection Limit	GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	-19	E-BH20						E-BH21		
Average Depth (m)				21.6	0.8		4	15.5		21.1	2.7	9.2	20.5
Date				21/12/2022	28/11/2022		29/11/2022	30/11/2022		01/12/2022	17/01/2023	18/01/2023	19/01/2023
Sample Type				Normal	Normal		Normal	Normal		Normal	Normal	Normal	Normal
Lab Report Number				22-14905	22-13308	22-13322	22-13250	22-13079	22-13082	22-12879	23-13550	23-13586	23-13599
Stratum				Clay - GTD	MADE GROUND	MADE GROUND	Clay - TFD	Sand - GTD	Sand - GTD	Sand - GTD	Clay - TFD	Silt - TFD	Gravel - GTD
Textural Class (no units)	-	0		1	-	1	-	-	1	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	2.1	-	-	-	-
Freon 113	mg/kg	0.001	28,000[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Metals, boron, sulphates in so													
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.0071	0.28 - 0.283	-	0.427 - 0.43	0.057	-	0.013 - 0.0134	0.18 - 0.181	1.17 - 1.2	0.0061
TPH													
>C5-C6 Aliphatics	mg/kg	0.001	3,200[#2]	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	7,800[#2]	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	2,000[#2]	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	9,700[#2]	<1	<1	-	<1	<1	-	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2	59,000[#2]	<2	3.4	-	<2	<2	-	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8		<8	17	-	<8	<8	-	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8		<8	48	-	<8	<8	-	<8	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	68	-	<10	<10	-	<10	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001	26,000[#2]	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	56,000[#2]	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	3,500[#2]	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	16,000[#2]	<1	2.1	-	<1	3.6	-	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	36,000[#2]	<2	6.9	-	<2	9.1	-	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10	28,000[#2]	<10	33	-	<10	13	-	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10	28,000[#2]	<10	45	-	<10	17	-	<10	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	87	-	<10	43	-	<10	<10	<10	<10
mineral oil	mg/kg	10	3,500,000[#1]	-	-	-	-	-	-	-	-	-	-
BTEX													
Benzene	mg/kg	0.001	27[#3]	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	56,000[#2]	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	5,700[#2]	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001		<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	6,600[#2]	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-
Oxygenates													
MTBE	mg/kg	0.001	7,900[#4]	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005
Chlorinated Hydrocarbons													
Chloromethane	mg/kg	0.001	1[#4]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Vinyl chloride	mg/kg	0.001	1.1[#5]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Chloroethane	mg/kg	0.001	960[#4]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,1-dichloroethene	mg/kg	0.001	26[#4]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
trans-1,2-dichloroethene	mg/kg	0.001	22[#4] I300[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,1-dichloroethane	mg/kg	0.001	280[#4]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
cis-1,2-dichloroethene	mg/kg	0.001	14[#4] I2300[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Chloroform	mg/kg	0.001	99[#2]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,1,1-trichloroethane	mg/kg	0.001	660[#2]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Carbon tetrachloride	mg/kg	0.001	2.9[#2]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Trichloroethene	mg/kg	0.001	0.73[#5]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,1,2-trichloroethane	mg/kg	0.001	94[#4]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Tetrachloroethene	mg/kg	0.001	24[#5]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
VOC													
2,2-dichloropropane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,1-dichloropropene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,2-dichloroethane	mg/kg	0.001	0.67[#2]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,2-dichloropropane	mg/kg	0.001	3.3[#4]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Dibromomethane	mg/kg	0.001	99[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Bromodichloromethane	mg/kg	0.001	1.3[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
cis-1,3-dichloropropene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-
trans-1,3-dichloropropene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,3-dichloropropane	mg/kg	0.001	23,000[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Chlorodibromomethane	mg/kg	0.001	39[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.001	110[#2]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Styrene	mg/kg	0.001	3,300[#4]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Bromoform	mg/kg	0.001	760[#4]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Isopropylbenzene	mg/kg	0.001	1,400[#4]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.001	270[#2]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
n-propylbenzene	mg/kg	0.001	4,100[#4]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,3,5-trimethylbenzene	mg/kg	0.001	1,500[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
tert-butylbenzene	mg/kg	0.001	120,000[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,2,4-trimethylbenzene	mg/kg	0.001	42[#4]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
sec-butylbenzene	mg/kg	0.001	120,000[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
p-isopropyltoluene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-
n-butylbenzene	mg/kg	0.001	58,000[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.001	0.064[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
Hexachlorobutadiene	mg/kg	0.001	31[#2]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
PAH													
Naphthalene	mg/kg	0.00005	190[#2]	<0.05	<0.0001 - 1.4	-	<0.0001	1	-	0.12	<0.0001	<0.05	<0.05
Acenaphthylene	mg/kg	0.05	83,000[#2]	<0.05	0.06	-	<0.05	0.25	-	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	84,000[#2]	<0.05	1.1	-	<0.05	0.22	-	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	63,000[#2]	<0.05	1.2	-	<0.05	0.51	-	0.07	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	22,000[#2]	<0.05	11	-	0.3	1.5	-	0.33	0.21	0.07	0.07
Anthracene	mg/kg	0.05	520,000[#2]	<0.05	3.2	-	0.07	0.42	-	0.07	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	23,000[#2]	<0.05	18	-	0.39	0.86	-	0.36	0.27	<0.05	0.05
Pyrene	mg/kg	0.05	54,000[#2]	<0.05	17	-	0.38	0.61	-	0.32	0.22	<0.05	0.05
Benz(a)anthracene	mg/kg	0.05	170[#2]	<0.05	6.8	-	0.17	0.31	-	0.16	0.12	<0.05	<0.05
Chrysene	mg/kg	0.05	350[#2]	<0.05	6.3	-	0.19	0.27	-	0.1	0.15	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05	35[#2]	<0.05	4.1	-	0.1	0.2	-	0.09	0.09	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	500[#2]	<0.05	1.7	-	<0.05	0.1	-	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05	3.5[#2]	<0.05	0.39	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	3,900[#2]	<0.05	1.8	-	<0.05	0.12	-	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	44[#2]	<0.05	4.4	-	0.11	0.23	-	0.11	0.1	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	1,200[#2]	<0.05	2.8	-	0.08	0.12	-	0.07	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	81.4	-	1.79	6.75	-	1.8	1.16	<0.85	<0.85
SVOC													
Coronene	mg/kg	0.05		<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1	3,000[#1]	-	0.9	-	<0.1	-	-	-	<0.1	-	-
4-bromophenyl phenyl ether	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-	<0.2	-	-
4-chlorophenyl phenyl ether	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	<0.3	-	-
Azobenzene	mg/kg	0.3	26[#1]	-	<0.3	-	<0.3	-	-	-	<0.3	-	-
Bis(2-chloroethoxy) methane	mg/kg	0.3	2,500[#1]	-	<0.3	-	<0.3	-	-	-	<0.3	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	1[#1]	-	<0.2	-	<0.2	-	-	-	<0.2	-	-
Carbazole	mg/kg	0.3		-	1.1	-	<0.3	-	-	-	<0.3	-	-
Dibenzofuran	mg/kg	0.2	1,200[#1]	-	1	-	<0.2	-	-	-	<0.2	-	-
Hexachloroethane	mg/kg	0.05	22[#4]	-	<0.05	-	<0.05	-	-	-	<0.05	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1	47,000[#1]	-	<0.1	-	<0.1	-	-	-	<0.1	-	-
9,10-Anthracenedione	mg/kg	0.3	57[#1]	-	<0.3	-	<0.3	-	-	-	<0.3	-	-
Phenolics													
2-methylphenol	mg/kg	0.3	160,000	-	<0.3	-	<0.3	-	-	-	<0.3	-	-
2-nitrophenol	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	<0.3	-	-
2,4-dimethylphenol	mg/kg	0.3	16,000[#4]	-	<0.3	-	<0.3	-	-	-	<0.3	-	-
4-chloro-3-methylphenol	mg/kg	0.1	82,000[#1]	-	<0.1	-	<0.1	-	-	-	<0.1	-	-
4-methylphenol	mg/kg	0.2	160,000	-	<0.2	-	<0.2	-	-	-	<0.2	-	-
Phenol	mg/kg	0.2	440[#2]	-	<0.2	-	<0.2	-	-	-	<0.2	-	-
2-chloronaphthalene	mg/kg	0.1	390[#4]	-	<0.1	-	<0.1	-	-	-	<0.1	-	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	-	<1	<1	-	<1	<1	<1	<1
PCBs													
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001	0.16[#1]	-	<0.001	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001	0.048[#1]	-	<0.001	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001	0.49[#1]	-	<0.001	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001	0.5[#1]	-	<0.001	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001	0.49[#1]	-	<0.001	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001	0.49[#1]	-	<0.001	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001	0.00015[#1]	-	<0.001	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001	0.5[#1]	-	<0.001	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001	0.5[#1]	-	<0.001	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001	0.51[#1]	-	<0.001	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001	0.00051[#1]	-	<0.001	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001	0.52[#1]	-	<0.001	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	<0.012	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-
PCB 52	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-
PCB 101	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-
PCB 138	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-
PCB 153	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-
PCB 180	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007	0.94[#1]	-	<0.007	-	-	-	-	-	-	-	-
Anilines													
Aniline	mg/kg	0.1	400[#1]	-	<0.1	-	<0.1	-	-	-	<0.1	-	-
4-chloroaniline	mg/kg	0.1	11[#1]	-	<0.1	-	<0.1	-	-	-	<0.1	-	-
4-nitroaniline	mg/kg	0.2	110[#1]	-	<0.2	-	<0.2	-	-	-	<0.2	-	-
Explosives													
2,4-Dinitrotoluene	mg/kg	0.2	3,700[#4]	-	<0.2	-	<0.2	-	-	-	<0.2	-	-
2,6-dinitrotoluene	mg/kg	0.1	1,900[#4]	-	<0.1	-	<0.1	-	-	-	<0.1	-	-
Nitrobenzene	mg/kg	0.3	22[#1]	-	<0.3	-	<0.3	-	-	-	<0.3	-	-
Halogenated Benzenes													
Chlorobenzene	mg/kg	0.001	56[#2]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
2-chlorotoluene	mg/kg	0.001	23,000[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
4-chlorotoluene	mg/kg	0.001	23,000[#1]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,3-dichlorobenzene	mg/kg	0.001	30[#2]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,4-dichlorobenzene	mg/kg	0.001	4,400[#2]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-
1,2-dichlorobenzene	mg/kg	0.001	2,000[#2]	-	<0.005	-	<0.005	-	-	-	<0.005	-	-

Location	E-BH22						E-BH23		E-BH24				E-BH25					
Average Depth (m)	0.6	1.2		12.4		26.7	2.5	26.5	0.8		5.1	25.6	0	0.5	1.1		3	9.5
Date	29/11/2022	05/12/2022		06/12/2022		22/12/2022	12/12/2022	20/12/2022	07/12/2022		12/12/2022	15/12/2022	29/11/2022	29/11/2022	29/11/2022		06/12/2022	07/12/2022
Sample Type	Normal	Normal		Normal		Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal		Normal	Normal
Lab Report Number	22-13250	22-13280	22-13282	22-13291	22-13294	22-14937	22-13376	22-14872	22-13605	22-13608	22-13376	22-14107	22-13250	22-13250	22-13250	22-13359	22-13291	22-13605
Stratum	MADE GROUND	MADE GROUND	MADE GROUND	Clay - GTD	Clay - GTD	Chalk	Clay - TFD	Chalk	MADE GROUND	MADE GROUND	Clay - TFD	Chalk	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD
Textural Class (no units)	-	-	1	-	1	-	-	1	-	1	-	-	-	-	-	1	-	-
Loss on ignition	-	-	3	-	2	-	-	-	-	2.9	-	-	-	-	-	2.6	-	-
Freon 113	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Metals, boron, sulphates in so																		
Water Soluble Sulphate (2:1 Leachate Equivalent)	1.4 - 1.41	0.6 - 0.603	-	0.11 - 0.111	-	0.016 - 0.0164	0.15	0.0285 - 0.029	0.32	-	0.26 - 0.261	0.012	-	0.227 - 0.23	0.286 - 0.29	-	0.32 - 0.322	0.31 - 0.312
TPH																		
>C5-C6 Aliphatics	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001
>C6-C8 Aliphatics	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001
>C8-C10 Aliphatics	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001
>C10-C12 Aliphatics	<1	<1	-	<1	-	<1	<1	<1	3.2	-	<1	<1	-	<1	<1	-	<1	<1
>C12-C16 Aliphatics	2.8	<2	-	2.1	-	<2	<2	<2	12	-	<2	<2	-	<2	4.5	-	<2	<2
>C16-C21 Aliphatics	18	<8	-	<8	-	<8	<8	<8	20	-	<8	<8	-	<8	<8	-	<8	<8
>C21-C35 Aliphatics	190	15	-	<8	-	<8	<8	<8	39	-	<8	<8	-	400	11	-	<8	<8
>C5-C35 Aliphatics	210	15	-	<10	-	<10	<10	<10	74	-	<10	<10	-	400	22	-	<10	<10
>EC5-EC7 Aromatics	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001
>EC7-EC8 Aromatics	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001
>EC8-EC10 Aromatics	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001
>EC10-EC12 Aromatics	<1	<1	-	<1	-	<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1	<1
>EC12-EC16 Aromatics	17	5.5	-	<2	-	<2	<2	<2	7.3	-	<2	<2	-	6.3	2.4	-	<2	<2
>EC16-EC21 Aromatics	150	15	-	<10	-	<10	<10	<10	12	-	<10	<10	-	11	<10	-	<10	<10
>EC21-EC35 Aromatics	430	25	-	<10	-	<10	<10	<10	17	-	<10	<10	-	500	18	-	<10	<10
>EC5-EC35 Aromatics	590	45	-	<10	-	<10	<10	<10	36	-	<10	<10	-	520	26	-	<10	<10
mineral oil	-	-	37	-	<10	-	-	-	-	-	-	-	-	-	-	<10	-	-
BTEX																		
Benzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	-	-	<0.005	-	<0.005	-	-	-	-	-	-	-	-	-	-	<0.005	-	-
Oxygenates																		
MTBE	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005
Chlorinated Hydrocarbons																		
Chloromethane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Vinyl chloride	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Chloroethane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,1-dichloroethene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
trans-1,2-dichloroethene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,1-dichloroethane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
cis-1,2-dichloroethene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Chloroform	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,1,1-trichloroethane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Carbon tetrachloride	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Trichloroethene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,1,2-trichloroethane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Tetrachloroethene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
VOC																		
2,2-dichloropropane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,1-dichloropropene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,2-dichloroethane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,2-dichloropropane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Dibromomethane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Bromodichloromethane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
cis-1,3-dichloropropene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
trans-1,3-dichloropropene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,3-dichloropropane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Chlorodibromomethane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,1,1,2-tetrachloroethane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Styrene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Bromoform	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Isopropylbenzene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,1,2,2-tetrachloroethane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
n-propylbenzene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,3,5-trimethylbenzene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
tert-butylbenzene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,2,4-trimethylbenzene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
sec-butylbenzene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
p-isopropyltoluene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
n-butylbenzene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,2-dibromo-3-chloropropane	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
Hexachlorobutadiene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
PAH																		
Naphthalene	1.5	0.21	0.21	<0.05	<0.05	<0.05	<0.0001	<0.05	<0.0001 - 0.18	-	0.06	<0.05	-	0.35	<0.0001 - 0.14	0.14	<0.05	<0.0001
Acenaphthylene	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	-	<0.05	<0.05	-	0.09	<0.05	<0.05	<0.05	<0.05
Acenaphthene	3.9	0.56	0.57	<0.05	<0.05	<0.05	<0.05	<0.05	0.17	-	<0.05	<0.05	-	0.1	0.08	0.08	<0.05	<0.05
Fluorene	5.5	0.53	0.55	<0.05	<0.05	<0.05	<0.05	<0.05	0.3	-	<0.05	<0.05	-	0.15	0.08	0.08	<0.05	<0.05
Phenanthrene	40	4.6	4.8	0.09	0.06	<0.05	0.14	<0.05	2.7	-	0.05	<0.05	-	1.4	0.72	0.73	0.1	0.1
Anthracene	12	1.1	1.2	<0.05	<0.05	<0.05	<0.05	<0.05	0.73	-	<0.05	<0.05	-	0.4	0.21	0.21	<0.05	<0.05
Fluoranthene	38	6.8	6.9	0.06	0.06	<0.05	0.29	<0.05	3.3	-	<0.05	<0.05	-	1.9	1.2	1.3	0.16	0.06
Pyrene	30	5.4	5.6	0.08	0.07	<0.05	0.24	<0.05	2.4	-	0.05	<0.05	-	1.6	1	1	0.14	0.06
Benz(a)anthracene	16	3.1	3.6	<0.05	<0.05	<0.05	0.1	<0.05	1.2	-	<0.05	<0.05	-	0.83	0.62	0.54	0.06	<0.05
Chrysene	14	2.8	2.5	<0.05	<0.05	<0.05	0.09	<0.05	0.87	-	<0.05	<0.05	-	1.1	0.56	0.59	0.13	<0.05
Benzo(a) pyrene	11	2.2	2.3	<0.05	<0.05	<0.05	0.06	<0.05	0.78	-	<0.05	<0.05	-	0.87	0.51	0.53	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	4.4	1.1	1.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.32	-	<0.05	<0.05	-	0.35	0.28	0.29	<0.05	<0.05
Dibenz(a,h)anthracene	1.3	0.26	0.34	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	-	<0.05	<0.05	-	0.12	0.06	0.05	<0.05	<0.05
Benzo(g,h,i)perylene	5.1	1.2	1.2	<0.05	<0.05	<0.05	<0.05	<0.05	0.36	-	<0.05	<0.05	-	0.4	0.3	0.3	<0.05	<0.05
Benzo(b)fluoranthene	14	3	3.1	<0.05	<0.05	<0.05	0.11	<0.05	1	-	<0.05	<0.05	-	1	0.59	0.61	0.08	<0.05
Benzo(k)fluoranthene	5.1	1.1	1	<0.05	<0.05	<0.05	0.08	<0.05	0.44	-	<0.05	<0.05	-	0.56	0.32	0.29	0.08	<0.05
PAH 17 Total	201	34	35	<0.85	<0.85	<0.85	1.11	<0.85	14.9	-	<0.85	<0.85	-	11.3	6.7	6.72	<0.85	<0.85
SVOC																		
Coronene	1.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	-	-	-	-	-	-	<0.1	-	0.3	-	-	-	-	-	<0.1	-	-	<0.1
4-bromophenyl phenyl ether	-	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2
4-chlorophenyl phenyl ether	-	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3
Azobenzene	-	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3
Bis(2-chloroethoxy) methane	-	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3
Bis(2-chloroethyl)ether	-	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2
Carbazole	-	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3
Dibenzofuran	-	-	-	-	-	-	<0.2	-	0.3	-	-	-	-	-	<0.2	-	-	<0.2
Hexachloroethane	-	-	-	-	-	-	<0.05	-	<0.05	-	-	-	-	-	<0.05	-	-	<0.05
Bis(2-chloroisopropyl) ether	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1
9,10-Anthracenedione	-	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3
Phenolics																		
2-methylphenol	-	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3
2-nitrophenol	-	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3
2,4-dimethylphenol	-	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3
4-chloro-3-methylphenol	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1
4-methylphenol	-	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2
Phenol	-	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2
2-chloronaphthalene	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1
Total Monohydric Phenols (S) Corrected	<1	<1	-	<1	-	<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1	<1
PCBs																		
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
PCB 118	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Total PCB WHO 12	-	<0.012	-	<0.012	-	-	-	-	-	-	-	-	-	-	<0.012	-	-	-
PCB 28	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-
PCB 52	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-
PCB 101	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-
PCB 138	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-
PCB 153	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-
PCB 180	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-
PCBs (Sum of total)	-	<0.007	<0.007	<0.007	<0.007	-	-	-	-	-	-	-	-	-	<0.007	<0.007	-	-
Anilines																		
Aniline	-	-	-	-	-	-	0.4	-	0.3	-	-	-	-	-	<0.1	-	-	0.7
4-chloroaniline	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1
4-nitroaniline	-	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2
Explosives																		
2,4-Dinitrotoluene	-	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2
2,6-dinitrotoluene	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1
Nitrobenzene	-	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3
Halogenated Benzenes																		
Chlorobenzene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
2-chlorotoluene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
4-chlorotoluene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,3-dichlorobenzene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,4-dichlorobenzene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005
1,2-dichlorobenzene	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005

			GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location	E-BH20						E-BH21			E-BH22						E-BH23		E-BH24			E-BH25					
				Average Depth (m)	21.6	0.8		4	15.5		21.1	2.7	9.2	20.5	0.6	1.2		12.4		26.7	2.5	26.5	0.8	5.1	25.6	0	0.5	1.1		3	9.5
				Date	21/12/2022	28/11/2022		29/11/2022	30/11/2022		01/12/2022	17/01/2023	18/01/2023	19/01/2023	29/11/2022	05/12/2022		06/12/2022		22/12/2022	12/12/2022	20/12/2022	07/12/2022	12/12/2022	15/12/2022	29/11/2022	29/11/2022	29/11/2022		06/12/2022	07/12/2022
				Sample Type	Normal	Normal		Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal		Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal
				Lab Report Number	22-14905	22-13308	22-13322	22-13250	22-13079	22-13082	22-12879	23-13550	23-13586	23-13599	22-13250	22-13280	22-13282	22-13291	22-13294	22-14937	22-13376	22-14872	22-13605	22-13608	22-13376	22-14107	22-13250	22-13250	22-13250	22-13359	22-13291	22-13605
	Units	Method Detection Limit		Stratum	Clay - GTD	MADE GROUND	MADE GROUND	Clay - TRD	Sand - GTD	Sand - GTD	Sand - GTD	Clay - TRD	Silt - TRD	Gravel - GTD	MADE GROUND	MADE GROUND	MADE GROUND	Clay - GTD	MADE GROUND	Chalk	Clay - TRD	Chalk	MADE GROUND	MADE GROUND	Clay - TRD	Chalk	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TRD	Clay - TRD	Clay - TRD
1,2,4-trichlorobenzene	mg/kg	0.001	220[#2]		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	<0.005
1,2,3-trichlorobenzene	mg/kg	0.001	102[#2]		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	<0.005
Hexachlorobenzene	mg/kg	0.3	110[#2]		-	<0.3	-	<0.3	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3
Hexabromobenzene	mg/kg	0.001	7.30[#1]		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	<0.005
Halogenated Hydrocarbons																															
Bromomethane	mg/kg	0.001	30[#1]		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	<0.005
Trichlorofluoromethane	mg/kg	0.001	350,000[#3]		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	<0.005
1,2-dibromoethane	mg/kg	0.001	0.16[#1]		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	<0.005
Halogenated Phenols																															
2-chlorophenol	mg/kg	0.1	5,900[#1]		-	<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1
2,4-dichlorophenol	mg/kg	0.3	2,500[#1]		-	<0.3	-	<0.3	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3
2,4,5-trichlorophenol	mg/kg	0.2	82,000[#1]		-	<0.2	-	<0.2	-	-	-	<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2
2,4,6-trichlorophenol	mg/kg	0.1	210[#1]		-	<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1
Phthalates																															
Butyl benzyl phthalate	mg/kg	0.3	940,000[#4]		-	<0.3	-	<0.3	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3
Di-n-butyl phthalate	mg/kg	0.2	15,000[#4]		-	<0.2	-	<0.2	-	-	-	<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2
Diethylphthalate	mg/kg	0.2	150,000[#4]		-	<0.2	-	<0.2	-	-	-	<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2
Dimethyl phthalate	mg/kg	0.1			-	<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1
Solvents																															
Isophorone	mg/kg	0.2	2,400[#1]		-	<0.2	-	<0.2	-	-	-	<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2
Metals																															
Arsenic	mg/kg	1	640[#3]		13	11	-	15	7.1	-	9.3	14	17	3.5	18	12	-	9.5	-	1.3	16	1.9	8.8	-	12	1.1	-	9.9	12	-	18	13
Barium	mg/kg	1	22,000[#4]		93	77	-	110	120	-	76	110	66	18	160	190	-	81	-	9.8	120	9.7	110	-	140	9.4	-	240	140	-	110	95
Beryllium	mg/kg	0.06	12[#3]		1.1	0.89	-	1.2	0.64	-	0.82	0.93	1.3	0.2	2.2	2.4	-	0.67	-	0.07	1.1	0.07	1.6	-	0.97	0.09	-	1.1	3.4	-	1.3	0.93
Boron	mg/kg	0.2	240,000[#2]		0.6	0.9	-	3.5	0.4	-	1	2.4	4.8	<0.2	2.4	5.3	-	2	-	<0.2	7.6	<0.2	1	-	4.6	<0.2	-	2.8	3.6	-	9.2	4.3
Cadmium	mg/kg	0.2	410[#3]		<0.2	0.4	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	0.3	<0.2	0.4	<0.2	-	<0.2	<0.2	-	0.5	<0.2	-	<0.2	<0.2
Chromium (III+VI)	mg/kg	1	8,600		29	42	-	38	20	-	22	28	41	4.4	34	73	-	19	-	1.1	33	<1	50	-	29	1.1	-	610	55	-	44	27
Copper	mg/kg	1	68,000[#2]		16	38	-	14	14	-	15	14	21	8.3	30	16	-	16	-	6.3	19	4.5	47	-	14	2.4	-	25	31	-	21	16
Lead	mg/kg	1	2,330[#3]		13	23	-	21	16	-	12	19	22	3.6	32	36	-	11	-	2.5	20	3.4	41	-	18	2.3	-	26	37	-	25	14
Mercury	mg/kg	0.3	350[#1]		<0.3	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	<0.3
Nickel	mg/kg	1	980[#2]		31	53	-	34	22	-	24	29	45	6.4	26	25	-	24	-	4.5	32	19	26	-	29	3.3	-	680	26	-	40	30
Selenium	mg/kg	1	12,000[#2]		<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1	<1
Vanadium	mg/kg	1	9,000[#2]		37	140	-	52	27	-	30	44	58	9.4	51	60	-	26	-	1.7	50	1.7	59	-	48	1.9	-	77	100	-	58	39
Zinc	mg/kg	1	730,000[#3]		53	82	-	84	49	-	46	70	110	16	73	67	-	49	-	11	79	16	250	-	74	11	-	61	170	-	95	61
Chromium (hexavalent)	mg/kg	1.8	40[#3]		<1.8	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	-	<1.8	<1.8
Organics																															
TOC	%	0.1			-	-	0.9	-	-	0.6	-	-	-	-	-	-	1.3	-	1.1	-	-	-	-	0.9	-	-	-	-	-	1.5	-	-
Inorganics																															
Cyanide (Free)	mg/kg	1			<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1	<1
Cyanide Total	mg/kg	1	150[#1]		<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1	<1
Sulphide	mg/kg	1			<1	82	-	240	17	-	<1	7.7	140	4.3	580	640	-	95	-	1.2	220	1.4	7.8	-	170	<1	-	220	630	-	19	68
% Moisture	%	0.01			15	12	12	36	12	12	14	24	37	13	8.2	21	21	12	12	19	31	19	9.2	9.2	27	19	-	15	18	18	28	34
pH (Lab)	pH Units	0			8.1	11	9.8	8.3	8.6	8.1	8.7	8.3	7.4	8.4	9.9	9.4	9.3	8.1	8.5	8.7	7.8	8.7	10.9	10.9	8	8.6	-	11	9.3	8.7	8.1	7.8
Asbestos																															
Asbestos Type	None	0			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Asbestos fibres	-	0			Not-detected	Not-detected	-	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	1	Not-detected	Not-detected	-	Not-detected	Not-detected
Particle Size																															
Stones content (>50mm)	%	0.1			<0.1	-	<0.1	-	-	<0.1	-	-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-

Env Stds Comments
#1:USEPA RSL (NOV 2021)
#2:LQM/CIEH S4ULs 2015
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=0.58 to <1.45%

Location	Units	Method Detection Limit	GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC			E-BH26	E-BH26A		W-BH28	E-CPT06	E-CPT11	E-CPT15	E-CPT16	E-CPT19	E-CPT23	E-TP01	E-TP02	E-TP03		E-TP04	W-BH01	W-BH02		W-BH03				W-BH04		W-BH05	
Average Depth (m)				17	25.7	2.5	0.2	20.2	0.1	0.1	0.9	1.6	0	0.8	0.1	0.1	0.1	0.8	2.2	2.3	0.4	0.5	2.5	0.1	12	16.5	20.8	6.5	20	2.1	4.4
Date				21/12/2022	09/12/2022	15/11/2022	09/11/2022	22/11/2022	21/12/2022	18/01/2023	20/01/2023	17/11/2022	15/11/2022	19/01/2023	15/11/2022	16/12/2022	12/12/2022	09/01/2023	09/01/2023	13/12/2022	26/01/2023	18/01/2023	19/01/2023	11/01/2023	13/01/2023	13/01/2023	30/01/2023	06/01/2023	10/01/2023	25/01/2023	25/01/2023
Sample Type				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Lab Report Number				22-14905	22-13361	22-98836	22-96532	22-11249	22-14905	23-13586	23-14015	22-98887	22-98836	23-13599	22-98836	22-14647	22-13376	23-11626	23-11626	22-13738	23-15173	23-13586	23-13599	23-12169	23-12265	23-12265	23-15977	23-11626	23-12169	23-14638	23-14638
Stratum	Units	Method Detection Limit		Clay - GTD	Chalk	Clay	MADE GROUND	Clay - GTD	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Silt	Clay - GTD	Sand - GTD	Silt - GTD	Clay - GTD	Chalk	Clay - TFD	Clay - TFD
Textural Class (no units)	-	0		1	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001	28.000[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Metals, boron, sulphates in so																															
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.0168 - 0.017	0.015 - 0.0151	0.0907 - 0.091	1.55 - 1.6	0.042 - 0.0421	0.0158 - 0.016	0.083 - 0.0833	0.15 - 0.152	0.12 - 0.124	1.2	0.377 - 0.38	0.49 - 0.491	0.026 - 0.0263	0.016 - 0.0161	0.0448 - 0.045	0.36 - 0.363	0.468 - 0.47	0.015 - 0.0151	0.0126 - 0.013	0.858 - 0.86	0.0196 - 0.02	0.06 - 0.0601	0.011 - 0.0113	0.055 - 0.0551	0.046	0.0033	1.4 - 1.45	-
TPH																															
>C5-C6 Aliphatics	mg/kg	0.001	3.200[#2]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>C6-C8 Aliphatics	mg/kg	0.001	7.800[#2]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>C8-C10 Aliphatics	mg/kg	0.001	2.000[#2]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>C10-C12 Aliphatics	mg/kg	1	9.700[#2]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
>C12-C16 Aliphatics	mg/kg	2	59.000[#2]	<2	<2	<2	4.1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.9	-
>C16-C21 Aliphatics	mg/kg	8		<8	<8	<8	18	<8	<8	8.2	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	-
>C21-C35 Aliphatics	mg/kg	8		<8	<8	<8	270	<8	<8	38	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	46	-
>C5-C35 Aliphatics	mg/kg	10		<10	<10	<10	290	<10	<10	46	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	52	-
>EC5-EC7 Aromatics	mg/kg	0.001	26.000[#2]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>EC7-EC8 Aromatics	mg/kg	0.001	56.000[#2]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>EC8-EC10 Aromatics	mg/kg	0.001	3.500[#2]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>EC10-EC12 Aromatics	mg/kg	1	16.000[#2]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
>EC12-EC16 Aromatics	mg/kg	2	36.000[#2]	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-
>EC16-EC21 Aromatics	mg/kg	10	28.000[#2]	<10	<10	<10	34	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>EC21-EC35 Aromatics	mg/kg	10	28.000[#2]	<10	<10	<10	620	<10	<10	21	<10	<10	26	<10	<10	<10	17	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	660	<10	<10	24	<10	<10	37	<10	<10	<10	24	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
mineral oil	mg/kg	10	3.500.000[#1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX																															
Benzene	mg/kg	0.001	27[#3]	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	56.000[#2]	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	5.700[#2]	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001		<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	6.600[#2]	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxygenates																															
MTBE	mg/kg	0.001	7.900[#4]	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chlorinated Hydrocarbons																															
Chloromethane	mg/kg	0.001	1[#4]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Vinyl chloride	mg/kg	0.001	1.1[#5]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Chloroethane	mg/kg	0.001	960[#4]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,1-dichloroethene	mg/kg	0.001	26[#4]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
trans-1,2-dichloroethene	mg/kg	0.001	22[#4] |300[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,1-dichloroethane	mg/kg	0.001	280[#4]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
cis-1,2-dichloroethene	mg/kg	0.001	14[#4] |2300[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Chloroform	mg/kg	0.001	99[#2]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,1,1-trichloroethane	mg/kg	0.001	660[#2]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Carbon tetrachloride	mg/kg	0.001	2.9[#2]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Trichloroethene	mg/kg	0.001	0.73[#5]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,1,2-trichloroethane	mg/kg	0.001	94[#4]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Tetrachloroethene	mg/kg	0.001	24[#5]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
VOC																															
2,2-dichloropropane	mg/kg	0.001		-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,1-dichloropropene	mg/kg	0.001		-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,2-dichloroethane	mg/kg	0.001	0.67[#2]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,2-dichloropropane	mg/kg	0.001	3.3[#4]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Dibromomethane	mg/kg	0.001	99[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Bromodichloromethane	mg/kg	0.001	1.3[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
cis-1,3-dichloropropene	mg/kg	0.001		-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
trans-1,3-dichloropropene	mg/kg	0.001		-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,3-dichloropropane	mg/kg	0.001	23.000[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Chlorodibromomethane	mg/kg	0.001	39[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,1,1,2-tetrachloroethane	mg/kg	0.001	110[#2]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Styrene	mg/kg	0.001	3.300[#4]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Bromoform	mg/kg	0.001	760[#4]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Isopropylbenzene	mg/kg	0.001	1.400[#4]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,1,2,2-tetrachloroethane	mg/kg	0.001	270[#2]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
n-propylbenzene	mg/kg	0.001	4.100[#4]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,3,5-trimethylbenzene	mg/kg	0.001	1.500[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
tert-butylbenzene	mg/kg	0.001	120.000[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,2,4-trimethylbenzene	mg/kg	0.001	42[#4]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
sec-butylbenzene	mg/kg	0.001	120.000[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
p-isopropyltoluene	mg/kg	0.001		-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
n-butylbenzene	mg/kg	0.001	58.000[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,2-dibromo-3-chloropropane	mg/kg	0.001	0.064[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Hexachlorobutadiene	mg/kg	0.001	31[#2]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
PAH																															
Naphthalene	mg/kg	0.00005	190[#2]	<0.05	<0.05	<0.0001 - 0.2	<0.0001 - 0.18	<0.05	<0.0001	<0.0001	<0.0001	<0.0001 - 0.14	0.32	<0.0001	<0.0001 - 0.26	<0.0001	0.15	<0.05	<0.05	<0.0001	<0.05	<0.05	<0.0001	<0.05	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.0001
Acenaphthylene	mg/kg	0.05	83.000[#2]	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Acenaphthene	mg/kg	0.05	84.000[#2]	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	0.09	<0.05	<0.05	0.08	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	63.000[#2]	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	22.000[#2]	<0.05	<0.05	0.08	1.1	<0.05	0.08	1.1	<0.05	0.14	1.1	0.2	0.93	0.2	1.4	<0.05	<0.05	0.26	<0.05	<0.05	0.09	0.08	0.07	<0.05	<0.05	<0.05	<0.05	0.07	0.19
Anthracene	mg/kg	0.05	520.000[#2]	<0.05	<0.05	<0.05	0.57	<0.05	<0.05	0.21	<0.05	<0.05	0.3	<0.05	0.28	<0.05	0.14	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	23.000[#2]	<0.05	<0.05	0.08	5.1	<0.05	0.13	1.7	<0.05	0.14	2.1	0.26	1.8	0.22	1.1	<0.05	<0.05	0.18	<0.05	<0.05	0.06	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	0.21
Pyrene	mg/kg	0.05	54.000[#2]	<0.05	<0.05	0.08	5.1	<0.05	0.11	1.5	<0.05	0.12	2.3	0.2	1.8	0.23	1.9	<0.05	<0.05	0.19	<0.05	<0.05	0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	0.22
Benz(a)anthracene	mg/kg	0.05	170[#2]	<0.05	<0.05	<0.05	2.4	<0.05	<0.05	0.74	<0.05	0.07	1.5	0.1	1.1	0.15	2.1	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.16
Chrysene	mg/kg	0.05	350[#2]	<0.05	<0.05	<0.05	3.7	<0.05	0.06	0.86	<0.05	0.06	1.5	0.14	1.2	0.28	3.9	<0.05	<0.05	0.17	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	0.27
Benzo(a) pyrene	mg/kg	0.05	35[#2]	<0.05	<0.05	<0.05	3.1	<0.05	0.06	0.66	<0.05	0.07	1.4	0.07	1.1	0.14	1.2	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.17
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	500[#2]	<0.05	<0.05	<0.05	1.5	<0.05	<0.05	0.26	<0.05	<0.05	0.85	<0.05	0.58	0.07	0.45	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06
Dibenz(a,h)anthracene	mg/kg	0.05	3.5[#2]	<0.05	<0.05	<0.05	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	0.25	<0.05	0.19	<0.05	0.39	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	3.900[#2]	<0.05	<0.05	<0.05	1.9	<0.05	<0.05	0.35	<0.05	<0.05	0.98	<0.05	0.63	0.11	0.97	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12
Benzo(b)fluoranthene	mg/kg	0.05	44[#2]	<0.05	<0.05	<0.05	2.9	<0.05	0.08	0.69	<0.05	0.08	1.8	0.09	1.3	0.17	1.5	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.19
Benzo(k)fluoranthene	mg/kg	0.05	1.200[#2]	<0.05	<0.05	<0.05	2.2	<0.05	<0.05	0.35	<0.05	<0.05	0.61	<0.05	0.51	0.05	0.36	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
PAH 17 Total	mg/kg	0.85		<0.85	<0.85	<0.85	30.5	<0.85	<0.85	8.53	<0.85	<0.85	15	1.06	11.8	1.62	15.5	<0.85	<0.85	1.07	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	-
SVOC																															
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
2-methylnaphthalene	mg/kg	0.1	3.000[#1]	-	-	<0.1	0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	0.2	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1
4-bromophenyl phenyl ether	mg/kg	0.2		-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2
4-chlorophenyl phenyl ether	mg/kg	0.3		-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3
Azobenzene	mg/kg	0.3	26[#1]	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3
Bis(2-chloroethoxy) methane	mg/kg	0.3	2.500[#1]	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3
Bis(2-chloroethyl)ether	mg/kg	0.2	1[#1]	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2
Carbazole	mg/kg	0.3		-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3
Dibenzofuran	mg/kg	0.2	1.200[#1]	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2
Hexachloroethane	mg/kg	0.05	22[#4]	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	-	-	<0.05	-	-	<0.05	-	<0.05	-	-	-	-	-	<0.05
Bis(2-chloroisopropyl) ether	mg/kg	0.1	47.000[#1]	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1
9,10-Anthracenedione	mg/kg	0.3	57[#1]	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3
Phenolics																															
2-methylphenol	mg/kg	0.3	160,000	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3
2-nitrophenol	mg/kg	0.3		-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3
2,4-dimethylphenol	mg/kg	0.3	16.000[#4]	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3
4-chloro-3-methylphenol	mg/kg	0.1	82.000[#1]	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1
4-methylphenol	mg/kg	0.2	160,000	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2
Phenol	mg/kg	0.2	440[#2]	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2
2-chloronaphthalene	mg/kg	0.1	390[#4]	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PCBs																															
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001	0.16[#1]	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001	0.048[#1]	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001	0.49[#1]	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001	0.5[#1]	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001	0.49[#1]	-	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001	0.49[#1]	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001	0.00015[#1]	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001	0.5[#1]	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001	0.5[#1]	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001	0.51[#1]	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001	0.00051[#1]	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001	0.52[#1]	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	<0.012	-	<0.012	-	-	-	-	-	-	-	-	-	-	<0.012	-	-	-	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCB 52	mg/kg	0.001		-	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCB 101	mg/kg	0.001		-	-	-	0.002	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCB 138	mg/kg	0.001		-	-	-	0.006	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCB 153	mg/kg	0.001		-	-	-	0.007	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCB 180	mg/kg	0.001		-	-	-	0.008	-	<0.001	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007	0.94[#1]	-	-	-	0.024	-	<0.007	-	-	-	-	-	-	-	-	-	-	<0.007	-	-	-	-	-	-	-	-	-	-	-
Anilines																															
Aniline	mg/kg	0.1	400[#1]	-	-	0.7	<0.1	-	<0.1	<0.1	<0.1	0.4	-	<0.1	0.5	<0.1	-	-	-	0.3	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1
4-chloroaniline	mg/kg	0.1	11[#1]	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1
4-nitroaniline	mg/kg	0.2	110[#1]	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2
Explosives																															
2,4-Dinitrotoluene	mg/kg	0.2	3.700[#4]	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2
2,6-dinitrotoluene	mg/kg	0.1	1.900[#4]	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1
Nitrobenzene	mg/kg	0.3	22[#1]	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3
Halogenated Benzenes																															
Chlorobenzene	mg/kg	0.001	56[#2]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
2-chlorotoluene	mg/kg	0.001	23.000[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
4-chlorotoluene	mg/kg	0.001	23.000[#1]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,3-dichlorobenzene	mg/kg	0.001	30[#2]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005 - 0.5	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005 - 0.3	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005 - 1
1,4-dichlorobenzene	mg/kg	0.001	4.400[#2]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,2-dichlorobenzene	mg/kg	0.001	2.000[#2]	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005

			GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location		E-BH26	E-BH26A		W-BH28	E-CPT06	E-CPT11	E-CPT15	E-CPT16	E-CPT19	E-CPT23	E-TP01	E-TP02	E-TP03		E-TP04	W-BH01	W-BH02		W-BH03				W-BH04		W-BH05	
				Average Depth (m)		2.5	0.2	20.2	0.1	0.1	0.9	1.6	0	0.8	0.1	0.1	0.1	0.8	2.2	2.3	0.4	0.5	2.5	0.1	12	16.5	20.8	6.5	20	2.1	4.4
				Date	21/12/2022	09/12/2022	15/11/2022	09/11/2022	22/11/2022	21/12/2022	18/01/2023	20/01/2023	17/11/2022	15/11/2022	19/01/2023	15/11/2022	16/12/2022	12/12/2022	09/01/2023	09/01/2023	13/12/2022	26/01/2023	18/01/2023	19/01/2023	11/01/2023	13/01/2023	13/01/2023	30/01/2023	06/01/2023	10/01/2023	25/01/2023	25/01/2023
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	22-14905	22-13361	22-98836	22-96532	22-11249	22-14905	23-13586	23-14015	22-98887	22-98836	23-13599	22-98836	22-14647	22-13376	23-11626	23-11626	22-13738	23-15173	23-13586	23-13599	23-12169	23-12265	23-12265	23-15977	23-11626	23-12169	23-14638	23-14638
				Stratum	Clay - GTD	Chalk	Clay	MADE GROUND	Clay - GTD	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Silt	Clay - GTD	Sand - GTD	Silt - GTD	Clay - GTD	Chalk	Clay - TFD	Clay - TFD
1,2,4-trichlorobenzene	mg/kg	0.001	220[#2]		-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,2,3-trichlorobenzene	mg/kg	0.001	102[#2]		-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Hexachlorobenzene	mg/kg	0.3	110[#2]		-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3
Hexabromobenzene	mg/kg	0.001	7.30[#1]		-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Halogenated Hydrocarbons																															
Bromomethane	mg/kg	0.001	30[#1]		-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Trichlorofluoromethane	mg/kg	0.001	350,000[#3]		-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
1,2-dibromoethane	mg/kg	0.001	0.16[#1]		-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-	<0.005	<0.001	<0.005	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005
Halogenated Phenols																															
2-chlorophenol	mg/kg	0.1	5,900[#1]		-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1
2,4-dichlorophenol	mg/kg	0.3	2,500[#1]		-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3
2,4,5-trichlorophenol	mg/kg	0.2	82,000[#1]		-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2
2,4,6-trichlorophenol	mg/kg	0.1	210[#1]		-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1
Phthalates																															
Butyl benzyl phthalate	mg/kg	0.3	940,000[#4]		-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3
Di-n-butyl phthalate	mg/kg	0.2	15,000[#4]		-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2
Diethylphthalate	mg/kg	0.2	150,000[#4]		-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2
Dimethyl phthalate	mg/kg	0.1			-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1
Solvents																															
Isophorone	mg/kg	0.2	2,400[#1]		-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2
Metals																															
Arsenic	mg/kg	1	640[#3]		2.9	1.9	17	4.8	3.7	20	8.3	15	16	9.3	15	10	14	14	14	22	97	15	22	9.2	16	7.1	5.3	1.8	10	1.5	17	-
Barium	mg/kg	1	22,000[#4]		17	11	110	310	25	79	82	120	97	220	110	210	83	85	59	100	56	74	77	110	68	98	26	21	94	11	84	-
Beryllium	mg/kg	0.06	12[#3]		0.2	0.14	1.1	2.1	0.24	1.5	0.65	1.1	1.5	3.5	1.1	2.2	0.99	0.94	1.1	0.89	0.95	1.3	1.6	1	1.3	0.68	0.3	0.21	0.57	0.09	1.2	-
Boron	mg/kg	0.2	240,000[#2]		<0.2	<0.2	4.9	2.7	0.3	6.2	1.3	3.4	4.2	5.6	5.6	2.8	1.4	1.5	6.7	5.7	5.4	3.4	5	3.8	6.5	0.5	<0.2	0.3	0.7	<0.2	7.6	-
Cadmium	mg/kg	0.2	410[#3]		<0.2	0.3	<0.2	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	2.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.3	<0.2	0.4	<0.2	-
Chromium (III+VI)	mg/kg	1	8,600		4.2	2.7	33	190	6	45	16	33	57	43	34	42	30	29	34	30	30	37	45	30	41	20	6.5	4.7	17	1	36	-
Copper	mg/kg	1	68,000[#2]		5.1	6.9	18	32	4.9	18	21	19	19	16	30	26	17	24	15	15	14	14	19	18	19	17	5.2	5.8	13	5	19	-
Lead	mg/kg	1	2,330[#3]		3.8	2.5	19	27	3.9	36	20	26	29	82	38	48	37	33	21	15	17	21	26	17	32	10	5.2	4.3	9.1	2.4	21	-
Mercury	mg/kg	0.3	350[#1]		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-
Nickel	mg/kg	1	980[#2]		5.5	7	29	12	7.2	38	12	31	33	10	33	13	29	28	31	29	32	40	48	30	34	22	8.1	11	21	5.8	36	-
Selenium	mg/kg	1	12,000[#2]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
Vanadium	mg/kg	1	9,000[#2]		8.3	4.3	47	150	8.5	69	30	49	67	110	52	65	46	47	51	40	46	55	70	47	63	26	11	7	24	2.6	56	-
Zinc	mg/kg	1	730,000[#2]		14	15	73	79	21	95	56	80	79	86	89	130	86	88	77	64	73	85	95	76	95	41	20	27	35	17	85	-
Chromium (hexavalent)	mg/kg	1.8	40[#3]		<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-
Organics																															
TOC	%	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inorganics																															
Cyanide (Free)	mg/kg	1			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1	150[#1]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1			3.3	3.1	9.9	870	18	<1	54	6.6	120	3,100	16	570	<1	<1	<1	230	220	2.1	<1	430	1.4	90	2.8	44	130	<1	53	-
% Moisture	%	0.01			9.8	15	21	8.6	15	24	14	22	17	13	20	12	22	20	21	25	24	22	22	32	23	14	15	18	14	19	34	35
pH (Lab)	pH Units	0			8.7	8.5	9.4	10.9	8.6	7.3	11.7	8.5	8.4	10.6	8.3	10.9	7.5	8.2	8.2	8.8	9	7.9	7.8	7.8	7.5	8.6	8.9	8.6	8.7	9	7.8	-
Asbestos																															
Asbestos Type	None	0			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0			Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-
Particle Size																															
Stones content (>50mm)	%	0.1			<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Env Stds Comments
#1:USEPA RSL (NOV 2021)
#2:LQM/CIEH S4ULs 2015
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=0.58 to <1.45%

			GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location		W-BH06			W-BH07	W-BH08		W-BH09			W-BH10	W-BH10A		W-BH11		W-BH12		W-BH13		W-BH14		W-BH15			W-BH16		W-BH17	
				Average Depth (m)	19.1	2.8	17.5	18.6	1.2	2.5	17	1.6	5.3	19.5	0.1	3	20	2.5	7.5	3.5	19.7	0.4	21.6	0.1	7.2	2.5	6.5	18.5	0.1	18	0.5	7
				Date	07/02/2023	10/01/2023	25/01/2023	25/01/2023	11/01/2023	16/01/2023	18/01/2023	01/02/2023	02/02/2023	03/02/2023	01/02/2023	02/02/2023	03/02/2023	26/01/2023	27/01/2023	24/01/2023	26/01/2023	06/01/2023	19/01/2023	04/01/2023	04/01/2023	17/01/2023	17/01/2023	20/01/2023	11/01/2023	12/01/2023	13/01/2023	16/01/2023
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	23-17124	23-11628	23-14638	23-14638	23-12169	23-13184	23-13586	23-15975	23-16960	23-17045	23-15975	23-16960	23-17045	23-15173	23-15977	23-14640	23-15173	23-11626	23-13599	23-10590	23-10590	23-13550	23-13550	23-14015	23-12169	23-12263	23-12265	23-13184
	Units	Method Detection Limit		Stratum	Gravel	Clay - TFD	Clay - GTD	Sand - GTD	Clay - TFD	Clay - TFD	Sand - GTD	Clay - TFD	Peat - TFD	Chalk	MADE GROUND	Clay - TFD	Chalk	Clay - TFD	Clay - GTD	Clay - TFD	Chalk	MADE GROUND	Chalk	MADE GROUND	Clay - GTD	Clay - TFD	Clay - GTD	Silt - GTD	MADE GROUND	Gravel - GTD	Clay - TFD	Clay - TFD
Textural Class (no units)	-	0			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loss on ignition	%	0.2			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001	28,000[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Metals, boron, sulphates in so																																
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125			0.0415 - 0.042	0.47 - 0.474	0.0306 - 0.031	0.065 - 0.0653	0.325 - 0.33	0.54	0.0048	0.22 - 0.224	0.54 - 0.542	0.013 - 0.0132	0.0139 - 0.014	1.4	0.009	2.37 - 2.4	0.115 - 0.12	2	0.0047	0.0177 - 0.018	0.0068	0.0117 - 0.012	0.25	0.5	0.176 - 0.18	0.0062	0.0105 - 0.011	0.0286 - 0.029	0.0248 - 0.025	0.0587 - 0.059
TPH																																
>C5-C6 Aliphatics	mg/kg	0.001	3,200[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	7,800[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	2,000[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	9,700[#2]		<1	<1	1.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2	59,000[#2]		<2	<2	3.1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.2	<2	<2	<2	<2	<2	<2	26	<2	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8			<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	30	<8	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8			<8	<8	8.9	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	13	<8	<8	16	<8	<8	14	63	<8	<8	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10			<10	<10	16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	23	<10	<10	17	<10	<10	14	120	<10	<10	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001	26,000[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	56,000[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	3,500[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	16,000[#2]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	36,000[#2]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	3.4	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10	28,000[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	17	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10	28,000[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	19	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	40	<10	<10	<10
mineral oil	mg/kg	10	3,500,000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX																																
Benzene	mg/kg	0.001	27[#3]		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	56,000[#2]		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	5,700[#2]		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	6,600[#2]		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxygenates																																
MTBE	mg/kg	0.001	7,900[#4]		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chlorinated Hydrocarbons																																
Chloromethane	mg/kg	0.001	1[#4]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Vinyl chloride	mg/kg	0.001	1.1[#5]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Chloroethane	mg/kg	0.001	960[#4]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1-dichloroethene	mg/kg	0.001	26[#4]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
trans-1,2-dichloroethene	mg/kg	0.001	22[#4] | 300[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1-dichloroethane	mg/kg	0.001	280[#4]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
cis-1,2-dichloroethene	mg/kg	0.001	14[#4] | 2300[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Chloroform	mg/kg	0.001	99[#2]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1,1-trichloroethane	mg/kg	0.001	660[#2]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Carbon tetrachloride	mg/kg	0.001	2.9[#2]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Trichloroethene	mg/kg	0.001	0.73[#5]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1,2-trichloroethane	mg/kg	0.001	94[#4]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Tetrachloroethene	mg/kg	0.001	24[#5]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
VOC																																
2,2-dichloropropane	mg/kg	0.001			-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1-dichloropropene	mg/kg	0.001			-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2-dichloroethane	mg/kg	0.001	0.67[#2]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2-dichloropropane	mg/kg	0.001	3.3[#4]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Dibromomethane	mg/kg	0.001	99[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Bromodichloromethane	mg/kg	0.001	1.3[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
cis-1,3-dichloropropene	mg/kg	0.001			-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
trans-1,3-dichloropropene	mg/kg	0.001			-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,3-dichloropropane	mg/kg	0.001	23,000[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Chlorodibromomethane	mg/kg	0.001	39[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1,1,2-tetrachloroethane	mg/kg	0.001	110[#2]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Styrene	mg/kg	0.001	3,300[#4]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Bromoform	mg/kg	0.001	760[#4]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Isopropylbenzene	mg/kg	0.001	1,400[#4]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1,2,2-tetrachloroethane	mg/kg	0.001	270[#2]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
n-propylbenzene	mg/kg	0.001	4,100[#4]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,3,5-trimethylbenzene	mg/kg	0.001	1,500[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
tert-butylbenzene	mg/kg	0.001	120,000[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2,4-trimethylbenzene	mg/kg	0.001	42[#4]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
sec-butylbenzene	mg/kg	0.001	120,000[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
p-isopropyltoluene	mg/kg	0.001			-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
n-butylbenzene	mg/kg	0.001	58,000[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2-dibromo-3-chloropropane	mg/kg	0.001	0.064[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Hexachlorobutadiene	mg/kg	0.001	31[#2]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
PAH																																
Naphthalene	mg/kg	0.00005	190[#2]		<0.05	<0.05	<0.0001	<0.05	<0.0001	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.0001	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.0001	<0.0001	<0.05	<0.05	<0.05	<0.0001	<0.05
Acenaphthylene	mg/kg	0.05	83,000[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	84,000[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.44	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	63,000[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.46	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	22,000[#2]		<0.05	0.08	0.09	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	6.4	<0.05	<0.05	<0.05
Anthracene	mg/kg	0.05	520,000[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.2	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	23,000[#2]		<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	0.09	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	8.4	0.06	<0.05	<0.05
Pyrene	mg/kg	0.05	54,000[#2]		<0.05	<0.05	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	0.09	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	6.6	<0.05	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05	170[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	3.4	<0.05	<0.05	<0.05
Chrysene	mg/kg	0.05	350[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05	35[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	2.5	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	500[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.2	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05	3.5[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.24	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	3,900[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.3	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	44[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	1,200[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.4	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85			<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	39.5	<0.85	<0.85	<0.85
SVOC																																
Coronene	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1	3,000[#1]		-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
4-bromophenyl phenyl ether	mg/kg	0.2			-	-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
4-chlorophenyl phenyl ether	mg/kg	0.3			-	-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Azobenzene	mg/kg	0.3	26[#1]		-	-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Bis(2-chloroethoxy) methane	mg/kg	0.3	2,500[#1]		-	-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Bis(2-chloroethyl)ether	mg/kg	0.2	1[#1]		-	-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Carbazole	mg/kg	0.3			-	-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Dibenzofuran	mg/kg	0.2	1,200[#1]		-	-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Hexachloroethane	mg/kg	0.05	22[#4]		-	-	<0.05	-	<0.05	<0.05	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	-	-	-	-	<0.05	<0.05	<0.05	-	-	-	<0.05	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1	47,000[#1]		-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
9,10-Anthracenedione	mg/kg	0.3	57[#1]		-	-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Phenolics																																
2-methylphenol	mg/kg	0.3	160,000		-	-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
2-nitrophenol	mg/kg	0.3			-	-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
2,4-dimethylphenol	mg/kg	0.3	16,000[#4]		-	-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
4-chloro-3-methylphenol	mg/kg	0.1	82,000[#1]		-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
4-methylphenol	mg/kg	0.2	160,000		-	-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Phenol	mg/kg	0.2	440[#2]		-	-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
2-chloronaphthalene	mg/kg	0.1	390[#4]		-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
Total Monohydric Phenols (S) Corrected	mg/kg	1			<1	<1	<1	<1	<1	2.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PCBs																																
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001	0.16[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001	0.048[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001	0.49[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001	0.5[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001	0.49[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001	0.49[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001	0.00015[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001	0.5[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001	0.5[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001	0.51[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001	0.00051[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001	0.52[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 52	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 101	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 138	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 153	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 180	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007	0.94[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anilines																																
Aniline	mg/kg	0.1	400[#1]		-	-	<0.1	-	<0.1	1.6	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	5.8	<0.1	<0.1	-	-	-	<0.1	-
4-chloroaniline	mg/kg	0.1	11[#1]		-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
4-nitroaniline	mg/kg	0.2	110[#1]		-	-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Explosives																																
2,4-Dinitrotoluene	mg/kg	0.2	3,700[#4]		-	-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
2,6-dinitrotoluene	mg/kg	0.1	1,900[#4]		-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
Nitrobenzene	mg/kg	0.3	22[#1]		-	-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Halogenated Benzenes																																
Chlorobenzene	mg/kg	0.001	56[#2]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
2-chlorotoluene	mg/kg	0.001	23,000[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
4-chlorotoluene	mg/kg	0.001	23,000[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,3-dichlorobenzene	mg/kg	0.001	30[#2]		-	-	<0.005	-	<0.005	<0.005 - 0.3	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005 - 1.3	<0.005	<0.005	-	-	-	<0.005	-
1,4-dichlorobenzene	mg/kg	0.001	4,400[#2]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2-dichlorobenzene	mg/kg	0.001	2,000[#2]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-

			GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location	W-BH06			W-BH07	W-BH08		W-BH09			W-BH10	W-BH10A		W-BH11		W-BH12		W-BH13		W-BH14		W-BH15			W-BH16		W-BH17	
				Average Depth (m)	19.1	2.8	17.5	18.6	1.2	2.5	17	1.6	5.3	19.5	0.1	3	20	2.5	7.5	3.5	19.7	0.4	21.6	0.1	7.2	2.5	6.5	18.5	0.1	18	0.5	7
				Date	07/02/2023	10/01/2023	25/01/2023	25/01/2023	11/01/2023	16/01/2023	18/01/2023	01/02/2023	02/02/2023	03/02/2023	01/02/2023	02/02/2023	03/02/2023	26/01/2023	27/01/2023	24/01/2023	26/01/2023	06/01/2023	19/01/2023	04/01/2023	04/01/2023	17/01/2023	17/01/2023	20/01/2023	11/01/2023	12/01/2023	13/01/2023	16/01/2023
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	23-17124	23-11628	23-14638	23-14638	23-12169	23-13184	23-13586	23-15975	23-16960	23-17045	23-15975	23-16960	23-17045	23-15173	23-15977	23-14640	23-15173	23-11626	23-13599	23-10590	23-10590	23-13550	23-13550	23-14015	23-12169	23-12263	23-12265	23-13184
				Stratum	Gravel	Clay - TFD	Clay - GTD	Sand - GTD	Clay - TFD	Clay - TFD	Chalk	Clay - TFD	Peat - TFD	Chalk	MADE GROUND	Clay - TFD	Chalk	Clay - TFD	Clay - GTD	Clay - TFD	Chalk	MADE GROUND	Chalk	MADE GROUND	Clay - GTD	Clay - TFD	Clay - GTD	Silt - GTD	MADE GROUND	Gravel - GTD	Clay - TFD	Clay - TFD
1,2,4-trichlorobenzene	mg/kg	0.001	220[#2]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2,3-trichlorobenzene	mg/kg	0.001	102[#2]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Hexachlorobenzene	mg/kg	0.3	110[#2]		-	-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Hexabromobenzene	mg/kg	0.001	7.30[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Halogenated Hydrocarbons																															
Bromomethane	mg/kg	0.001	30[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	-
Trichlorofluoromethane	mg/kg	0.001	350,000[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2-dibromoethane	mg/kg	0.001	0.16[#1]		-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Halogenated Phenols																															
2-chlorophenol	mg/kg	0.1	5,900[#1]		-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
2,4-dichlorophenol	mg/kg	0.3	2,500[#1]		-	-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
2,4,5-trichlorophenol	mg/kg	0.2	82,000[#1]		-	-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
2,4,6-trichlorophenol	mg/kg	0.1	210[#1]		-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
Phthalates																															
Butyl benzyl phthalate	mg/kg	0.3	940,000[#4]		-	-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Di-n-butyl phthalate	mg/kg	0.2	15,000[#4]		-	-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Diethylphthalate	mg/kg	0.2	150,000[#4]		-	-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Dimethyl phthalate	mg/kg	0.1			-	-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
Solvents																															
Isophorone	mg/kg	0.2	2,400[#1]		-	-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Metals																															
Arsenic	mg/kg	1	640[#3]		5.3	13	6.4	5.3	15	11	4.6	14	5.1	2.5	17	25	1.6	7	9.4	13	2.6	17	1.5	15	8.8	12	12	1.9	16	4.6	15	11
Barium	mg/kg	1	22,000[#4]		32	110	85	37	120	100	11	120	130	26	80	70	13	86	110	120	11	68	13	70	81	120	79	19	84	20	110	120
Beryllium	mg/kg	0.06	12[#3]		0.29	1	0.65	0.38	1.4	0.86	0.18	1.1	0.49	0.18	1.4	1.2	0.11	0.89	0.73	0.92	0.1	1.3	0.1	1.2	0.65	0.81	0.72	0.16	1.4	0.3	1	0.72
Boron	mg/kg	0.2	240,000[#2]		0.6	4.3	0.4	0.5	7.6	2.2	<0.2	1.7	4.8	<0.2	2.2	16	<0.2	2.9	1.5	7.3	<0.2	5	0.2	5.1	1.8	3.7	2.3	<0.2	4.4	<0.2	3.4	1.4
Cadmium	mg/kg	0.2	410[#3]		0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.3	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	0.3	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2
Chromium (III+VI)	mg/kg	1	8,600		6.9	32	19	9.1	36	23	6.6	32	13	4	41	35	2.3	26	22	28	1.8	43	2	37	19	26	23	3.5	42	4.8	31	19
Copper	mg/kg	1	68,000[#2]		7	18	12	9.4	20	21	4.4	15	15	8.2	16	16	7.2	11	14	14	2.5	20	3	20	15	16	16	6.6	16	6.4	15	20
Lead	mg/kg	1	2,330[#3]		4.7	18	11	6	22	15	3.8	18	10	3.1	33	20	2.6	14	12	23	2.3	30	3.1	26	12	13	14	3.3	31	4.7	18	11
Mercury	mg/kg	0.3	350[#1]		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	980[#2]		9.1	32	22	12	39	28	6	33	16	5.3	37	35	4.4	27	29	28	11	31	6.3	32	23	25	25	8.2	34	6.5	37	24
Selenium	mg/kg	1	12,000[#2]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1	9,000[#2]		13	46	26	15	59	35	8.6	49	20	6.5	64	62	3.8	41	29	43	3.1	67	3.3	58	31	35	29	4.9	64	11	47	28
Zinc	mg/kg	1	730,000[#2]		22	70	41	26	87	66	13	80	45	21	100	83	18	65	52	78	18	86	18	90	44	69	46	20	100	17	71	53
Chromium (hexavalent)	mg/kg	1.8	40[#3]		<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Organics																															
TOC	%	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inorganics																															
Cyanide (Free)	mg/kg	1			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1	150[#1]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1			65	180	25	13	<1	65	2.8	4	110	9	2.2	120	6	61	99	180	<1	<1	<1	1.7	61	150	87	3.8	1.6	53	1.4	6.9
% Moisture	%	0.01			10	35	14	9.8	26	30	12	26	41	19	25	39	19	31	18	33	18	22	17	25	18	28	20	16	23	12	17	16
pH (Lab)	pH Units	0			8.5	8	8.2	8.9	8	8.3	8.1	8.1	7.5	8.7	7.5	7.4	9.2	7	8.9	7.9	8.7	8	8.1	7.9	8.8	8.6	8.2	8.8	8	9.8	7.8	9
Asbestos																															
Asbestos Type	None	0			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0			Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Particle Size																															
Stones content (>50mm)	%	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Env Stds Comments
#1:USEPA RSL (NOV 2021)
#2:LQM/CIEH S4ULs 2015
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=0.58 to <1.45%

	Units	Method Detection Limit	GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location		W-BH18			W-BH19			W-BH20			W-BH21		W-BH22		W-BH23	W-BH24		W-BH25	W-BH26	W-BH27			W-BH28		W-BH29			
				Average Depth (m)	21.5	0.1	6.1	18.1	3	7	21	0.1	7	22	0.1	7.5	0.1	20.5	0.1	0.5	20	4	0.1	0.8	2	16	17	23.2	0	2.4	5.4	18.5
				Date	24/01/2023	04/01/2023	05/01/2023	06/01/2023	18/01/2023	19/01/2023	24/01/2023	02/02/2023	03/02/2023	03/02/2023	07/02/2023	08/02/2023	03/02/2023	08/02/2023	19/01/2023	08/02/2023	09/02/2023	20/12/2022	23/11/2022	15/12/2022	16/12/2022	20/12/2022	22/12/2022	11/01/2023	23/11/2022	23/11/2022	23/11/2022	09/12/2022
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	23-14640	23-10590	23-10748	23-11626	23-13586	23-13599	23-14640	23-16960	23-17045	23-17045	23-17124	23-17119	23-17045	23-17119	23-13599	23-17119	23-17144	22-14872	22-11231	22-14107	22-14647	22-14872	22-14937	23-12169	22-11231	22-11231	22-11231	22-13361
				Stratum	Chalk	Clay	Clay - TFD	GTD	Clay - TFD	Clay - GTD	Chalk	Clay	Clay - TFD	Chalk	Clay	Silt - TFD	MADE GROUND	Chalk	MADE GROUND	Clay - TFD	Chalk	Clay - TFD	Clay	Clay - TFD	Clay - TFD	Gravel - GTD	Clay - GTD	Chalk	Clay	Clay - TFD	Clay - TFD	Chalk
Textural Class (no units)	-	0			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-
Loss on ignition	%	0.2			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001	28.000[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Metals, boron, sulphates in so																																
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125			0.0066	0.01 - 0.0104	0.028 - 0.0282	0.0043	1.25 - 1.3	0.0877 - 0.088	0.0266 - 0.027	0.0599 - 0.06	0.19 - 0.193	0.0032	0.0083	0.51 - 0.515	0.017	0.008	0.0125 - 0.013	0.0115 - 0.012	0.0168 - 0.017	0.48 - 0.483	0.0196 - 0.02	0.05	0.865 - 0.87	0.0185 - 0.019	0.018 - 0.0181	0.0042	0.055	0.81	-	0.009
TPH																																
>C5-C6 Aliphatics	mg/kg	0.001	3.200[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	7.800[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	2.000[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.92	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	9.700[#2]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2	59.000[#2]		<2	<2	<2	<2	<2	<2	<2	<2	20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8			<8	<8	<8	<8	<8	<8	<8	<8	28	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8			<8	<8	<8	<8	<8	<8	<8	<8	14	<8	<8	19	8.3	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	62	<10	<10	22	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001	26.000[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	56.000[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	3.500[#2]		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	16.000[#2]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	36.000[#2]		<2	<2	<2	<2	<2	<2	<2	<2	12	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10	28.000[#2]		<10	<10	<10	<10	<10	<10	<10	<10	20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10	28.000[#2]		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10			<10	<10	<10	<10	<10	<10	<10	<10	41	<10	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
mineral oil	mg/kg	10	3.500.000[#1]		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX																																
Benzene	mg/kg	0.001	27[#3]		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.005
Toluene	mg/kg	0.001	56.000[#2]		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.005
Ethylbenzene	mg/kg	0.001	5.700[#2]		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.005
Xylene (m & p)	mg/kg	0.001			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.005
Xylene (o)	mg/kg	0.001	6.600[#2]		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.005
Total BTEX	mg/kg	0.005			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxygenates																																
MTBE	mg/kg	0.001	7.900[#4]		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.005
Chlorinated Hydrocarbons																																
Chloromethane	mg/kg	0.001	1[#4]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Vinyl chloride	mg/kg	0.001	1.1[#5]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Chloroethane	mg/kg	0.001	960[#4]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,1-dichloroethene	mg/kg	0.001	26[#4]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
trans-1,2-dichloroethene	mg/kg	0.001	22[#4] l300[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,1-dichloroethane	mg/kg	0.001	280[#4]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
cis-1,2-dichloroethene	mg/kg	0.001	14[#4] l2300[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Chloroform	mg/kg	0.001	99[#2]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,1,1-trichloroethane	mg/kg	0.001	660[#2]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Carbon tetrachloride	mg/kg	0.001	2.9[#2]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Trichloroethene	mg/kg	0.001	0.73[#5]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,1,2-trichloroethane	mg/kg	0.001	94[#4]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Tetrachloroethene	mg/kg	0.001	24[#5]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
VOC																																
2,2-dichloropropane	mg/kg	0.001			-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,1-dichloropropene	mg/kg	0.001			-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,2-dichloroethane	mg/kg	0.001	0.67[#2]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,2-dichloropropane	mg/kg	0.001	3.3[#4]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Dibromomethane	mg/kg	0.001	99[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Bromodichloromethane	mg/kg	0.001	1.3[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
cis-1,3-dichloropropene	mg/kg	0.001			-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
trans-1,3-dichloropropene	mg/kg	0.001			-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,3-dichloropropane	mg/kg	0.001	23.000[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Chlorodibromomethane	mg/kg	0.001	39[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.001	110[#2]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Styrene	mg/kg	0.001	3.300[#4]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Bromoform	mg/kg	0.001	760[#4]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Isopropylbenzene	mg/kg	0.001	1.400[#4]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.001	270[#2]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
n-propylbenzene	mg/kg	0.001	4.100[#4]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,3,5-trimethylbenzene	mg/kg	0.001	1.500[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
tert-butylbenzene	mg/kg	0.001	120.000[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,2,4-trimethylbenzene	mg/kg	0.001	42[#4]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
sec-butylbenzene	mg/kg	0.001	120.000[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
p-isopropyltoluene	mg/kg	0.001			-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
n-butylbenzene	mg/kg	0.001	58.000[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.001	0.064[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Hexachlorobutadiene	mg/kg	0.001	31[#2]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
PAH																																
Naphthalene	mg/kg	0.00005	190[#2]		<0.05	<0.05	<0.05	<0.05	<0.0001	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.05	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.0001 - 0.05	<0.0001 - 0.14	<0.0001	<0.05	<0.05	<0.0001	<0.05	<0.0001	<0.05	<0.05
Acenaphthylene	mg/kg	0.05	83.000[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.34	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	84.000[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	63.000[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	22.000[#2]		<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	0.83	0.18	0.25	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	0.14	0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05
Anthracene	mg/kg	0.05	520.000[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	23.000[#2]		<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	1	0.32	0.43	<0.05	0.13	<0.05	<0.05	<0.05	0.05	0.09	0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05	<0.05
Pyrene	mg/kg	0.05	54.000[#2]		<0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	0.93	0.25	0.36	<0.05	0.12	<0.05	<0.05	<0.05	0.05	0.1	0.06	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05	170[#2]		<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.38	<0.05	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05
Chrysene	mg/kg	0.05	350[#2]		<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.45	<0.05	0.23	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05	35[#2]		<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.35	<0.05	0.22	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	500[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05	3.5[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	3.900[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.19	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	44[#2]		<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	0.41	<0.05	0.3	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	1.200[#2]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	0.13	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85			<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	5.21	<0.85	2.28	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	1.11	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85
SVOC																																
Coronene	mg/kg	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1	3.000[#1]		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	0.1	<0.1	-	-	<0.1	-	<0.1	-	-
4-bromophenyl phenyl ether	mg/kg	0.2			-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-
4-chlorophenyl phenyl ether	mg/kg	0.3			-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-
Azobenzene	mg/kg	0.3	26[#1]		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-
Bis(2-chloroethoxy) methane	mg/kg	0.3	2.500[#1]		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	1[#1]		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-
Carbazole	mg/kg	0.3			-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-
Dibenzofuran	mg/kg	0.2	1.200[#1]		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-
Hexachloroethane	mg/kg	0.05	22[#4]		-	-	-	-	<0.05	<0.05	-	-	-	-	<0.05	-	<0.05	-	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	<0.05	-	<0.05	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1	47.000[#1]		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-
9,10-Anthracenedione	mg/kg	0.3	57[#1]		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-
Phenolics																																
2-methylphenol	mg/kg	0.3	160,000		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-
2-nitrophenol	mg/kg	0.3			-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-
2,4-dimethylphenol	mg/kg	0.3	16.000[#4]		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-
4-chloro-3-methylphenol	mg/kg	0.1	82.000[#1]		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-
4-methylphenol	mg/kg	0.2	160,000		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-
Phenol	mg/kg	0.2	440[#2]		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-
2-chloronaphthalene	mg/kg	0.1	390[#4]		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-
Total Monohydric Phenols (S) Corrected	mg/kg	1			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1
PCBs																																
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001	0.16[#1]		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001	0.048[#1]		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001	0.49[#1]		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001	0.5[#1]		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
PCB 118	mg/kg	0.001	0.49[#1]		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001	0.49[#1]		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001	0.00015[#1]		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001	0.5[#1]		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001	0.5[#1]		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001	0.51[#1]		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001	0.00051[#1]		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001	0.52[#1]		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-
Total PCB WHO 12	mg/kg	0.012			-	-	<0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.012	-	-	-
PCB 28	mg/kg	0.001			-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-
PCB 52	mg/kg	0.001			-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-
PCB 101	mg/kg	0.001			-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-
PCB 138	mg/kg	0.001			-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-
PCB 153	mg/kg	0.001			-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-
PCB 180	mg/kg	0.001			-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-
PCBs (Sum of total)	mg/kg	0.007	0.94[#1]		-	-	<0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.007	-	-	-	-	-	-	<0.007	-	-	-
Anilines																																
Aniline	mg/kg	0.1	400[#1]		-	-	-	-	<0.1	<0.1	-	-	-	-	0.2	-	<0.1	-	-	-	-	1.1	0.4	<0.1	<0.1	-	-	<0.1	-	0.6	-	-
4-chloroaniline	mg/kg	0.1	11[#1]		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-
4-nitroaniline	mg/kg	0.2	110[#1]		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-
Explosives																																
2,4-Dinitrotoluene	mg/kg	0.2	3.700[#4]		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-
2,6-dinitrotoluene	mg/kg	0.1	1.900[#4]		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-
Nitrobenzene	mg/kg	0.3	22[#1]		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-
Halogenated Benzenes																																
Chlorobenzene	mg/kg	0.001	56[#2]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
2-chlorotoluene	mg/kg	0.001	23.000[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
4-chlorotoluene	mg/kg	0.001	23.000[#1]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,3-dichlorobenzene	mg/kg	0.001	30[#2]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,4-dichlorobenzene	mg/kg	0.001	4.400[#2]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,2-dichlorobenzene	mg/kg	0.001	2.000[#2]		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-

			GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location	W-BH18			W-BH19		W-BH20			W-BH21		W-BH22		W-BH23	W-BH24		W-BH25	W-BH26	W-BH27			W-BH28		W-BH29			
				Average Depth (m)	0.1	6.1	18.1	3	7	21	0.1	7	22	0.1	7.5	0.1	20.5	0.1	0.5	20	4	0.1	0.8	2	16	17	23.2	0	2.4	5.4	18.5
				Date	04/01/2023	05/01/2023	06/01/2023	18/01/2023	19/01/2023	24/01/2023	02/02/2023	03/02/2023	03/02/2023	07/02/2023	08/02/2023	03/02/2023	08/02/2023	19/01/2023	08/02/2023	09/02/2023	20/12/2022	23/11/2022	15/12/2022	16/12/2022	20/12/2022	22/12/2022	11/01/2023	23/11/2022	23/11/2022	23/11/2022	09/12/2022
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	23-14640	23-10590	23-10748	23-13586	23-13599	23-14640	23-16960	23-17045	23-17045	23-17124	23-17119	23-17045	23-17119	23-13599	23-17119	23-17144	22-14872	22-11231	22-14107	22-14647	22-14872	22-14937	23-12169	22-11231	22-11231	22-11231	22-11231	22-13361
				Stratum	Chalk	Clay	Clay - TFD	Clay - GTD	Clay - GTD	Chalk	Clay	Clay - TFD	Chalk	Clay	Silt - TFD	MADE GROUND	Chalk	MADE GROUND	Clay - TFD	Chalk	Clay - TFD	Clay	Clay - TFD	Clay - TFD	Gravel - GTD	Clay - GTD	Chalk	Clay	Clay - TFD	Clay - TFD	Chalk
1,2,4-trichlorobenzene	mg/kg	0.001	220[#2]		-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,2,3-trichlorobenzene	mg/kg	0.001	102[#2]		-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Hexachlorobenzene	mg/kg	0.3	110[#2]		-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-
Hexabromobenzene	mg/kg	0.001	7.30[#1]		-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Halogenated Hydrocarbons																															
Bromomethane	mg/kg	0.001	30[#1]		-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Trichlorofluoromethane	mg/kg	0.001	350,000[#3]		-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
1,2-dibromoethane	mg/kg	0.001	0.16[#1]		-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-
Halogenated Phenols																															
2-chlorophenol	mg/kg	0.1	5,900[#1]		-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-
2,4-dichlorophenol	mg/kg	0.3	2,500[#1]		-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-
2,4,5-trichlorophenol	mg/kg	0.2	82,000[#1]		-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-
2,4,6-trichlorophenol	mg/kg	0.1	210[#1]		-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-
Phthalates																															
Butyl benzyl phthalate	mg/kg	0.3	940,000[#4]		-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-
Di-n-butyl phthalate	mg/kg	0.2	15,000[#4]		-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-
Diethylphthalate	mg/kg	0.2	150,000[#4]		-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-
Dimethyl phthalate	mg/kg	0.1			-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-
Solvents																															
Isophorone	mg/kg	0.2	2,400[#1]		-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-
Metals																															
Arsenic	mg/kg	1	640[#3]		1.4	15	14	2.8	21	10	1.9	22	18	1.7	17	16	13	3.2	17	16	3.7	13	18	21	15	3.9	2.7	<1	18	18	-	1.4
Barium	mg/kg	1	22,000[#4]		9.5	61	100	14	96	110	16	100	120	9.7	78	110	48	15	66	61	33	120	83	160	80	16	16	11	72	110	-	8.9
Beryllium	mg/kg	0.06	12[#3]		0.08	1.2	0.97	0.17	1.1	0.66	0.14	1.9	1	0.09	1.3	1.2	1.2	0.17	1.3	1.4	0.3	1.1	1.3	1.3	0.81	0.21	0.15	0.08	1.6	1	-	0.09
Boron	mg/kg	0.2	240,000[#2]		0.2	3.9	6.2	<0.2	5.4	1.3	0.3	5.4	2.9	<0.2	4.4	14	4	<0.2	4.1	3.2	<0.2	3.2	1.5	4.8	3.3	0.3	<0.2	<0.2	2.1	4	-	<0.2
Cadmium	mg/kg	0.2	410[#3]		0.3	<0.2	<0.2	0.2	<0.2	<0.2	0.3	0.4	<0.2	0.3	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	0.4	<0.2	<0.2	-	0.4
Chromium (III+VI)	mg/kg	1	8,600		<1	36	29	4.3	36	18	3.1	57	26	1.5	40	33	36	3.4	39	40	7.9	31	40	38	24	5	2.8	<1	46	31	-	<1
Copper	mg/kg	1	68,000[#2]		6.2	16	13	4.8	18	16	7	21	13	5.9	19	21	16	6.8	20	17	8	17	18	18	13	4.2	3.2	3.9	19	14	-	7.7
Lead	mg/kg	1	2,330[#3]		2.4	32	16	3.6	19	10	4.1	43	15	2.2	29	28	29	3.9	31	24	4.7	18	30	24	15	3.4	2.6	2.3	31	17	-	2.9
Mercury	mg/kg	0.3	350[#1]		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3
Nickel	mg/kg	1	980[#2]		5.5	31	30	5	34	23	6.5	48	30	6.4	36	33	28	6.8	35	44	10	32	36	50	24	7	4.5	3.8	41	30	-	3.4
Selenium	mg/kg	1	12,000[#2]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1
Vanadium	mg/kg	1	9,000[#2]		1.9	56	45	6.5	53	28	5.1	92	42	3	64	54	56	6.9	61	62	12	45	61	63	39	11	4.7	1.6	68	47	-	1.5
Zinc	mg/kg	1	730,000[#3]		15	76	75	12	85	42	21	120	96	17	89	100	87	21	90	86	27	76	100	95	62	21	13	14	95	75	-	15
Chromium (hexavalent)	mg/kg	1.8	40[#3]		<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8
Organics																															
TOC	%	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inorganics																															
Cyanide (Free)	mg/kg	1			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1
Cyanide Total	mg/kg	1	150[#1]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1
Sulphide	mg/kg	1			<1	<1	140	5.9	730	87	1.5	1.8	570	<1	<1	130	2.4	8.4	<1	<1	62	88	11	<1	170	8.6	2.6	<1	8.8	110	-	<1
% Moisture	%	0.01			18	27	42	14	31	13	15	27	25	17	24	53	32	17	24	21	19	35	22	24	33	14	16	17	24	31	40	17
pH (Lab)	pH Units	0			8.4	7.1	8.1	8	7.5	9.1	8.5	7.4	8.4	8.8	7.8	7.3	6.2	8.8	7.7	8.3	8.5	8.4	7.8	7.9	7.6	8.7	9	9.2	7.2	7.9	-	8.4
Asbestos																															
Asbestos Type	None	0			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0			Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected
Particle Size																															
Stones content (>50mm)	%	0.1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-

Env Stds Comments
#1:USEPA RSL (NOV 2021)
#2:LQM/CIEH S4ULs 2015
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=0.58 to <1.45%

	Units	Method Detection Limit	GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	W-BH30		W-BH31		W-BH32		
Average Depth (m)				0.7	2	3.2	19.2	0.8	16.2	
Date				08/12/2022	09/12/2022	05/12/2022	07/12/2022	29/11/2022	01/12/2022	
Sample Type				Normal	Normal	Normal	Normal	Normal	Normal	
Lab Report Number				22-13360	22-13361	22-13280	23-10020	22-13250	22-12879	22-12883
Stratum				Clay	Silt - TFD	Clay - TFD	Silt - GTD	Clay - TFD	Sand - GTD	Sand - GTD
Textural Class (no units)	-	0		-	-	-	-	-	-	1
Loss on ignition	%	0.2		-	-	-	-	-	-	1.2
Freon 113	mg/kg	0.001	28.000[#1]	-	-	-	-	-	<0.005	-
Metals, boron, sulphates in so										
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.15 - 0.151	1.27 - 1.3	0.46 - 0.465	0.025 - 0.0253	0.28 - 0.283	0.024 - 0.0243	-
TPH										
>C5-C6 Aliphatics	mg/kg	0.001	3.200[#2]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>C6-C8 Aliphatics	mg/kg	0.001	7.800[#2]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>C8-C10 Aliphatics	mg/kg	0.001	2.000[#2]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>C10-C12 Aliphatics	mg/kg	1	9.700[#2]	<1	<1	<1	<1	<1	<1	-
>C12-C16 Aliphatics	mg/kg	2	59.000[#2]	3.2	<2	<2	<2	<2	<2	-
>C16-C21 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	-
>C21-C35 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	-
>C5-C35 Aliphatics	mg/kg	10		16	<10	<10	<10	<10	<10	-
>EC5-EC7 Aromatics	mg/kg	0.001	26.000[#2]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>EC7-EC8 Aromatics	mg/kg	0.001	56.000[#2]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>EC8-EC10 Aromatics	mg/kg	0.001	3.500[#2]	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>EC10-EC12 Aromatics	mg/kg	1	16.000[#2]	<1	<1	<1	<1	<1	<1	-
>EC12-EC16 Aromatics	mg/kg	2	36.000[#2]	<2	<2	<2	<2	<2	<2	-
>EC16-EC21 Aromatics	mg/kg	10	28.000[#2]	<10	<10	<10	<10	<10	<10	-
>EC21-EC35 Aromatics	mg/kg	10	28.000[#2]	<10	<10	<10	<10	<10	<10	-
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	-
mineral oil	mg/kg	10	3.500.000[#1]	-	-	-	-	-	-	<10
BTEX										
Benzene	mg/kg	0.001	27[#3]	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	56.000[#2]	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	5.700[#2]	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	6.600[#2]	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	<0.005
Oxygenates										
MTBE	mg/kg	0.001	7.900[#4]	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-
Chlorinated Hydrocarbons										
Chloromethane	mg/kg	0.001	1[#4]	-	-	-	-	-	<0.005	-
Vinyl chloride	mg/kg	0.001	1.1[#5]	-	-	-	-	-	<0.005	-
Chloroethane	mg/kg	0.001	960[#4]	-	-	-	-	-	<0.005	-
1,1-dichloroethene	mg/kg	0.001	26[#4]	-	-	-	-	-	<0.005	-
trans-1,2-dichloroethene	mg/kg	0.001	22[#4] l300[#1]	-	-	-	-	-	<0.005	-
1,1-dichloroethane	mg/kg	0.001	280[#4]	-	-	-	-	-	<0.005	-
cis-1,2-dichloroethene	mg/kg	0.001	14[#4] l2300[#1]	-	-	-	-	-	<0.005	-
Chloroform	mg/kg	0.001	99[#2]	-	-	-	-	-	<0.005	-
1,1,1-trichloroethane	mg/kg	0.001	660[#2]	-	-	-	-	-	<0.005	-
Carbon tetrachloride	mg/kg	0.001	2.9[#2]	-	-	-	-	-	<0.005	-
Trichloroethene	mg/kg	0.001	0.73[#5]	-	-	-	-	-	<0.005	-
1,1,2-trichloroethane	mg/kg	0.001	94[#4]	-	-	-	-	-	<0.005	-
Tetrachloroethene	mg/kg	0.001	24[#5]	-	-	-	-	-	<0.005	-
VOC										
2,2-dichloropropane	mg/kg	0.001		-	-	-	-	-	<0.005	-
1,1-dichloropropene	mg/kg	0.001		-	-	-	-	-	<0.005	-
1,2-dichloroethane	mg/kg	0.001	0.67[#2]	-	-	-	-	-	<0.005	-
1,2-dichloropropane	mg/kg	0.001	3.3[#4]	-	-	-	-	-	<0.005	-
Dibromomethane	mg/kg	0.001	99[#1]	-	-	-	-	-	<0.005	-
Bromodichloromethane	mg/kg	0.001	1.3[#1]	-	-	-	-	-	<0.005	-
cis-1,3-dichloropropene	mg/kg	0.001		-	-	-	-	-	<0.005	-
trans-1,3-dichloropropene	mg/kg	0.001		-	-	-	-	-	<0.005	-
1,3-dichloropropane	mg/kg	0.001	23.000[#1]	-	-	-	-	-	<0.005	-
Chlorodibromomethane	mg/kg	0.001	39[#1]	-	-	-	-	-	<0.005	-
1,1,1,2-tetrachloroethane	mg/kg	0.001	110[#2]	-	-	-	-	-	<0.005	-
Styrene	mg/kg	0.001	3.300[#4]	-	-	-	-	-	<0.005	-
Bromoform	mg/kg	0.001	760[#4]	-	-	-	-	-	<0.005	-
Isopropylbenzene	mg/kg	0.001	1.400[#4]	-	-	-	-	-	<0.005	-
1,1,2,2-tetrachloroethane	mg/kg	0.001	270[#2]	-	-	-	-	-	<0.005	-
n-propylbenzene	mg/kg	0.001	4.100[#4]	-	-	-	-	-	<0.005	-
1,3,5-trimethylbenzene	mg/kg	0.001	1.500[#1]	-	-	-	-	-	<0.005	-
tert-butylbenzene	mg/kg	0.001	120.000[#1]	-	-	-	-	-	<0.005	-
1,2,4-trimethylbenzene	mg/kg	0.001	42[#4]	-	-	-	-	-	<0.005	-
sec-butylbenzene	mg/kg	0.001	120.000[#1]	-	-	-	-	-	<0.005	-
p-isopropyltoluene	mg/kg	0.001		-	-	-	-	-	<0.005	-
n-butylbenzene	mg/kg	0.001	58.000[#1]	-	-	-	-	-	<0.005	-
1,2-dibromo-3-chloropropane	mg/kg	0.001	0.064[#1]	-	-	-	-	-	<0.005	-
Hexachlorobutadiene	mg/kg	0.001	31[#2]	-	-	-	-	-	<0.005	-
PAH										
Naphthalene	mg/kg	0.00005	190[#2]	<0.05	<0.05	<0.05	<0.05	0.15	<0.0001	0.48
Acenaphthylene	mg/kg	0.05	83.000[#2]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	84.000[#2]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	63.000[#2]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	22.000[#2]	<0.05	<0.05	0.1	<0.05	0.08	<0.05	0.17
Anthracene	mg/kg	0.05	520.000[#2]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	23.000[#2]	<0.05	<0.05	0.08	<0.05	0.07	<0.05	0.12
Pyrene	mg/kg	0.05	54.000[#2]	<0.05	<0.05	0.07	<0.05	0.07	<0.05	0.12
Benz(a)anthracene	mg/kg	0.05	170[#2]	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	0.05
Chrysene	mg/kg	0.05	350[#2]	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	0.07
Benzo(a) pyrene	mg/kg	0.05	35[#2]	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	500[#2]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05	3.5[#2]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	3.900[#2]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	44[#2]	<0.05	<0.05	<0.05	<0.05	<0.05	0.11	0.05
Benzo(k)fluoranthene	mg/kg	0.05	1.200[#2]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	1.06
SVOC										
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1	3.000[#1]	-	-	-	-	-	0.1	-
4-bromophenyl phenyl ether	mg/kg	0.2		-	-	-	-	-	<0.2	-
4-chlorophenyl phenyl ether	mg/kg	0.3		-	-	-	-	-	<0.3	-
Azobenzene	mg/kg	0.3	26[#1]	-	-	-	-	-	<0.3	-
Bis(2-chloroethoxy) methane	mg/kg	0.3	2.500[#1]	-	-	-	-	-	<0.3	-
Bis(2-chloroethyl)ether	mg/kg	0.2	1[#1]	-	-	-	-	-	<0.2	-
Carbazole	mg/kg	0.3		-	-	-	-	-	<0.3	-
Dibenzofuran	mg/kg	0.2	1.200[#1]	-	-	-	-	-	<0.2	-
Hexachloroethane	mg/kg	0.05	22[#4]	-	-	-	-	-	<0.05	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1	47.000[#1]	-	-	-	-	-	<0.1	-
9,10-Anthracenedione	mg/kg	0.3	57[#1]	-	-	-	-	-	<0.3	-
Phenolics										
2-methylphenol	mg/kg	0.3	160,000	-	-	-	-	-	<0.3	-
2-nitrophenol	mg/kg	0.3		-	-	-	-	-	<0.3	-
2,4-dimethylphenol	mg/kg	0.3	16.000[#4]	-	-	-	-	-	<0.3	-
4-chloro-3-methylphenol	mg/kg	0.1	82.000[#1]	-	-	-	-	-	<0.1	-
4-methylphenol	mg/kg	0.2	160,000	-	-	-	-	-	<0.2	-
Phenol	mg/kg	0.2	440[#2]	-	-	-	-	-	<0.2	-
2-chloronaphthalene	mg/kg	0.1	390[#4]	-	-	-	-	-	<0.1	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	<1	<1	-
PCBs										
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001	0.16[#1]	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001	0.048[#1]	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001	0.49[#1]	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001	0.5[#1]	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001	0.49[#1]	-	-	-	-	-	<0.001	<0.001
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001	0.49[#1]	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001	0.00015[#1]	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001	0.5[#1]	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001	0.5[#1]	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001	0.51[#1]	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001	0.00051[#1]	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001	0.52[#1]	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	<0.012	-
PCB 28	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001
PCB 52	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001
PCB 101	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001
PCB 138	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001
PCB 153	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001
PCB 180	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001
PCBs (Sum of total)	mg/kg	0.007	0.94[#1]	-	-	-	-	-	<0.007	<0.007
Anilines										
Aniline	mg/kg	0.1	400[#1]	-	-	-	-	-	0.4	-
4-chloroaniline	mg/kg	0.1	11[#1]	-	-	-	-	-	<0.1	-
4-nitroaniline	mg/kg	0.2	110[#1]	-	-	-	-	-	<0.2	-
Explosives										
2,4-Dinitrotoluene	mg/kg	0.2	3.700[#4]	-	-	-	-	-	<0.2	-
2,6-dinitrotoluene	mg/kg	0.1	1.900[#4]	-	-	-	-	-	<0.1	-
Nitrobenzene	mg/kg	0.3	22[#1]	-	-	-	-	-	<0.3	-
Halogenated Benzenes										
Chlorobenzene	mg/kg	0.001	56[#2]	-	-	-	-	-	<0.005	-
2-chlorotoluene	mg/kg	0.001	23.000[#1]	-	-	-	-	-	<0.005	-
4-chlorotoluene	mg/kg	0.001	23.000[#1]	-	-	-	-	-	<0.005	-
1,3-dichlorobenzene	mg/kg	0.001	30[#2]	-	-	-	-	-	<0.005	-
1,4-dichlorobenzene	mg/kg	0.001	4.400[#2]	-	-	-	-	-	<0.005	-
1,2-dichlorobenzene	mg/kg	0.001	2.000[#2]	-	-	-	-	-	<0.005	-

Location	W-BH33		W-BH34		W-BH35				W-BH36	
Average Depth (m)	3.4	16.5	0.1	4.7	0.1		5.5	18.9	2.5	17.5
Date	14/12/2022	16/12/2022	23/11/2022	24/11/2022	22/11/2022		23/11/2022	07/12/2022	07/02/2023	09/02/2023
Sample Type	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal
Lab Report Number	22-13842	22-14647	22-11275	22-11195	22-11249	22-11250	22-11231	22-13605	23-17124	23-17144
Stratum	Clay - TFD	Gravel - GTD	MADE GROUND	Peat - TFD	MADE GROUND	MADE GROUND	Clay - GTD	Chalk	Clay - TFD	Gravel - GTD
Textural Class (no units)	-	-	-	-	-	1	-	-	-	-
Loss on ignition	-	-	-	-	-	7.2	-	-	-	-
Freon 113	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Metals, boron, sulphates in so										
Water Soluble Sulphate (2:1 Leachate Equivalent)	0.35 - 0.354	0.0176 - 0.018	0.0158 - 0.016	3.19 - 3.2	0.019	-	0.0685 - 0.069	0.0095	0.45	0.0058
TPH										
>C5-C6 Aliphatics	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	<1	<1	<1	<1	<1	-	<1	<1	<1	<1
>C12-C16 Aliphatics	<2	<2	<2	<2	<2	-	<2	<2	<2	<2
>C16-C21 Aliphatics	<8	<8	<8	<8	<8	-	<8	<8	<8	<8
>C21-C35 Aliphatics	<8	<8	<8	<8	<8	-	<8	<8	<8	<8
>C5-C35 Aliphatics	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
>EC5-EC7 Aromatics	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	<1	<1	<1	<1	<1	-	<1	<1	<1	<1
>EC12-EC16 Aromatics	<2	<2	<2	<2	<2	-	<2	<2	<2	<2
>EC16-EC21 Aromatics	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
>EC21-EC35 Aromatics	<10	<10	<10	<10	<10	-	<10	11	<10	<10
>EC5-EC35 Aromatics	<10	<10	<10	<10	<10	-	<10	16	<10	<10
mineral oil	-	-	-	-	-	-	-	-	-	-
BTEX										
Benzene	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005
Toluene	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005
Ethylbenzene	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005
Xylene (m & p)	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005
Xylene (o)	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005
Total BTEX	-	-	-	-	-	-	-	-	-	-
Oxygenates										
MTBE	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005
Chlorinated Hydrocarbons										
Chloromethane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Vinyl chloride	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Chloroethane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,1-dichloroethene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
trans-1,2-dichloroethene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,1-dichloroethane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
cis-1,2-dichloroethene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Chloroform	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,1,1-trichloroethane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Carbon tetrachloride	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Trichloroethene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,1,2-trichloroethane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Tetrachloroethene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
VOC										
2,2-dichloropropane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,1-dichloropropene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,2-dichloroethane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,2-dichloropropane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Dibromomethane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Bromodichloromethane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
cis-1,3-dichloropropene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
trans-1,3-dichloropropene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,3-dichloropropane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Chlorodibromomethane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,1,1,2-tetrachloroethane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Styrene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Bromoform	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Isopropylbenzene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,1,2,2-tetrachloroethane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
n-propylbenzene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,3,5-trimethylbenzene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
tert-butylbenzene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,2,4-trimethylbenzene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
sec-butylbenzene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
p-isopropyltoluene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
n-butylbenzene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,2-dibromo-3-chloropropane	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
Hexachlorobutadiene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
PAH										
Naphthalene	<0.05	<0.05	<0.0001 - 0.05	<0.0001 - 0.19	<0.0001 - 0.07	-	<0.0001	<0.05	0.08	<0.05
Acenaphthylene	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
Acenaphthene	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
Fluorene	<0.05	<0.05	0.08	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
Phenanthrene	<0.05	<0.05	0.12	0.1	0.11	-	<0.05	<0.05	0.11	<0.05
Anthracene	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
Fluoranthene	<0.05	<0.05	0.17	0.05	0.2	-	<0.05	<0.05	0.08	<0.05
Pyrene	<0.05	<0.05	0.17	0.05	0.2	-	<0.05	<0.05	0.09	<0.05
Benz(a)anthracene	<0.05	<0.05	0.1	<0.05	0.11	-	<0.05	<0.05	0.07	<0.05
Chrysene	<0.05	<0.05	0.09	<0.05	0.08	-	<0.05	<0.05	<0.05	<0.05
Benzo(a) pyrene	<0.05	<0.05	0.08	<0.05	0.1	-	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	<0.05	<0.05	0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	<0.05	<0.05	0.07	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	<0.05	<0.05	0.11	<0.05	0.1	-	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	<0.05	<0.05	0.05	<0.05	0.06	-	<0.05	<0.05	<0.05	<0.05
PAH 17 Total	<0.85	<0.85	1.14	<0.85	1.03	-	<0.85	<0.85	<0.85	<0.85
SVOC										
Coronene	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	-	-	0.1	<0.1	<0.1	-	<0.1	-	-	-
4-bromophenyl phenyl ether	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-
4-chlorophenyl phenyl ether	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-
Azobenzene	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-
Bis(2-chloroethoxy) methane	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-
Bis(2-chloroethyl)ether	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-
Carbazole	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-
Dibenzofuran	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-
Hexachloroethane	-	-	<0.05	<0.05	<0.05	-	<0.05	-	-	-
Bis(2-chloroisopropyl) ether	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
9,10-Anthracenedione	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-
Phenolics										
2-methylphenol	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-
2-nitrophenol	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-
2,4-dimethylphenol	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-
4-chloro-3-methylphenol	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
4-methylphenol	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-
Phenol	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-
2-chloronaphthalene	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
Total Monohydric Phenols (S) Corrected	<1	<1	<1	<1	<1	-	<1	<1	<1	<1
PCBs										
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	-	-	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	-	-	-	-	-	-	-	-	-	-
PCB 118	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	-	-	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	-	-	-	-	-	-	-	-	-	-
Total PCB WHO 12	-	-	-	-	-	-	-	-	-	-
PCB 28	-	-	-	-	-	-	-	-	-	-
PCB 52	-	-	-	-	-	-	-	-	-	-
PCB 101	-	-	-	-	-	-	-	-	-	-
PCB 138	-	-	-	-	-	-	-	-	-	-
PCB 153	-	-	-	-	-	-	-	-	-	-
PCB 180	-	-	-	-	-	-	-	-	-	-
PCBs (Sum of total)	-	-	-	-	-	-	-	-	-	-
Anilines										
Aniline	-	-	<0.1	2	<0.1	-	2.2	-	-	-
4-chloroaniline	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
4-nitroaniline	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-
Explosives										
2,4-Dinitrotoluene	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-
2,6-dinitrotoluene	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-
Nitrobenzene	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-
Halogenated Benzenes										
Chlorobenzene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
2-chlorotoluene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
4-chlorotoluene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,3-dichlorobenzene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,4-dichlorobenzene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-
1,2-dichlorobenzene	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-

Location	W-BH37	W-TP01	W-TP02	W-TP03	W-TP04		W-TP05	W-TP06	W-TP07	W-TP08	W-TP09
Average Depth (m)	0.1	0.1	0.8	2.3	0.1	0.8	0.1	0.6	0.1	0.1	0.6
Date	23/01/2023	11/01/2023	11/01/2023	11/01/2023	18/01/2023	18/01/2023	12/01/2023	12/01/2023	23/01/2023	18/01/2023	30/11/2022
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Lab Report Number	23-14634	23-12169	23-12169	23-12169	23-13586	23-13586	23-12263	23-12263	23-14634	23-13586	22-13079
Stratum	Clay	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	Clay	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND
Textural Class (no units)	-	-	-	-	-	-	-	-	-	-	-
Loss on ignition	-	-	-	-	-	-	-	-	-	-	-
Freon 113	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Metals, boron, sulphates in so											
Water Soluble Sulphate (2:1 Leachate Equivalent)	0.169 - 0.17	0.0072	0.0087	2.27 - 2.3	0.0497 - 0.05	0.031 - 0.0312	0.0149 - 0.015	0.0446 - 0.045	0.0478 - 0.048	0.017 - 0.0171	-
TPH											
>C5-C6 Aliphatics	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>C6-C8 Aliphatics	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>C8-C10 Aliphatics	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>C10-C12 Aliphatics	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
>C12-C16 Aliphatics	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-
>C16-C21 Aliphatics	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	-
>C21-C35 Aliphatics	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	-
>C5-C35 Aliphatics	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>EC5-EC7 Aromatics	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>EC7-EC8 Aromatics	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>EC8-EC10 Aromatics	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
>EC10-EC12 Aromatics	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
>EC12-EC16 Aromatics	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-
>EC16-EC21 Aromatics	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>EC21-EC35 Aromatics	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>EC5-EC35 Aromatics	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
mineral oil	-	-	-	-	-	-	-	-	-	-	-
BTEX											
Benzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-
Toluene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-
Ethylbenzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-
Xylene (m & p)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-
Xylene (o)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-
Total BTEX	-	-	-	-	-	-	-	-	-	-	-
Oxygenates											
MTBE	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-
Chlorinated Hydrocarbons											
Chloromethane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Vinyl chloride	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Chloroethane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,1-dichloroethene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
trans-1,2-dichloroethene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,1-dichloroethane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
cis-1,2-dichloroethene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Chloroform	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,1,1-trichloroethane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Carbon tetrachloride	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Trichloroethene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,1,2-trichloroethane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Tetrachloroethene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
VOC											
2,2-dichloropropane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,1-dichloropropene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,2-dichloroethane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,2-dichloropropane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Dibromomethane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Bromodichloromethane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
cis-1,3-dichloropropene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
trans-1,3-dichloropropene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,3-dichloropropane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Chlorodibromomethane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,1,1,2-tetrachloroethane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Styrene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Bromoform	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Isopropylbenzene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,1,2,2-tetrachloroethane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
n-propylbenzene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,3,5-trimethylbenzene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
tert-butylbenzene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,2,4-trimethylbenzene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
sec-butylbenzene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
p-isopropyltoluene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
n-butylbenzene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,2-dibromo-3-chloropropane	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
Hexachlorobutadiene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
PAH											
Naphthalene	<0.0001	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	<0.0001	-
Acenaphthylene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	-
Acenaphthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
Fluorene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	-
Phenanthrene	<0.05	<0.05	<0.05	0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.32	-
Anthracene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	-
Fluoranthene	<0.05	0.06	<0.05	<0.05	0.07	<0.05	0.09	<0.05	<0.05	0.49	-
Pyrene	<0.05	0.06	<0.05	<0.05	0.06	<0.05	0.08	<0.05	<0.05	0.41	-
Benz(a)anthracene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.2	-
Chrysene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	-
Benzo(a) pyrene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.18	-
Indeno(1,2,3-c,d)pyrene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
Dibenz(a,h)anthracene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
Benzo(g,h,i)perylene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	-
Benzo(k)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	-
PAH 17 Total	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	2.21	-
SVOC											
Coronene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
2-methylnaphthalene	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	-
4-bromophenyl phenyl ether	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	-
4-chlorophenyl phenyl ether	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	-
Azobenzene	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	-
Bis(2-chloroethoxy) methane	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	-
Bis(2-chloroethyl)ether	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	-
Carbazole	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	-
Dibenzofuran	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	-
Hexachloroethane	<0.05	<0.05	-	-	-	-	-	-	-	<0.05	-
Bis(2-chloroisopropyl) ether	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	-
9,10-Anthracenedione	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	-
Phenolics											
2-methylphenol	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	-
2-nitrophenol	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	-
2,4-dimethylphenol	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	-
4-chloro-3-methylphenol	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	-
4-methylphenol	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	-
Phenol	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	-
2-chloronaphthalene	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	-
Total Monohydric Phenols (S) Corrected	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
PCBs											
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	-	<0.001	-	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	-	<0.001	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	-	<0.001	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	-	<0.001	-	-	-	-	-	-	-	-	-
PCB 118	-	<0.001	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	-	<0.001	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	-	<0.001	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	-	<0.001	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	-	<0.001	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	-	<0.001	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	-	<0.001	-	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	-	<0.001	-	-	-	-	-	-	-	-	-
Total PCB WHO 12	-	<0.012	-	-	-	-	-	-	-	-	-
PCB 28	-	<0.001	-	-	-	-	-	-	-	-	-
PCB 52	-	<0.001	-	-	-	-	-	-	-	-	-
PCB 101	-	<0.001	-	-	-	-	-	-	-	-	-
PCB 138	-	<0.001	-	-	-	-	-	-	-	-	-
PCB 153	-	<0.001	-	-	-	-	-	-	-	-	-
PCB 180	-	<0.001	-	-	-	-	-	-	-	-	-
PCBs (Sum of total)	-	<0.007	-	-	-	-	-	-	-	-	-
Anilines											
Aniline	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	-
4-chloroaniline	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	-
4-nitroaniline	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	-
Explosives											
2,4-Dinitrotoluene	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	-
2,6-dinitrotoluene	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	-
Nitrobenzene	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	-
Halogenated Benzenes											
Chlorobenzene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
2-chlorotoluene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
4-chlorotoluene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,3-dichlorobenzene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,4-dichlorobenzene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-
1,2-dichlorobenzene	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	-

			GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location	W-BH30		W-BH31		W-BH32			W-BH33		W-BH34		W-BH35			W-BH36		W-BH37	W-TP01	W-TP02	W-TP03	W-TP04		W-TP05	W-TP06	W-TP07	W-TP08	W-TP09
				Average Depth (m)	0.7	2	3.2	19.2	0.8	16.2		3.4	16.5	0.1	4.7	0.1	5.5	18.9	2.5	17.5	0.1	0.1	0.8	2.3	0.1	0.8	0.1	0.6	0.1	0.1	0.1	30/11/2022
				Date	08/12/2022	09/12/2022	05/12/2022	07/12/2022	29/11/2022	01/12/2022		14/12/2022	16/12/2022	23/11/2022	24/11/2022	22/11/2022		23/11/2022	07/12/2022	07/02/2023	09/02/2023	23/01/2023	11/01/2023	11/01/2023	11/01/2023	18/01/2023	18/01/2023	12/01/2023	12/01/2023	23/01/2023	18/01/2023	
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	22-13360	22-13361	22-13280	23-10020	22-13250	22-12879	22-12883	22-13842	22-14647	22-11275	22-11195	22-11249	22-11250	22-11231	22-13605	23-17124	23-17144	23-14634	23-12169	23-12169	23-12169	23-13586	23-13586	23-12263	23-12263	23-14634	23-13586	22-13079
	Units	Method Detection Limit		Stratum	Clay	Silt - TFD	Clay - TFD	Silt - GTD	Clay - TFD	Sand - GTD	Sand - GTD	Clay - TFD	Gravel - GTD	MADE GROUND	Peat - TFD	MADE GROUND	MADE GROUND	Clay - GTD	Chalk	Clay - TFD	Gravel - GTD	Clay	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	Clay	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND
1,2,4-trichlorobenzene	mg/kg	0.001	220[#2]		-	-	-	-	<0.005	-		-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-	-	-	-	-	<0.005	-
1,2,3-trichlorobenzene	mg/kg	0.001	102[#2]		-	-	-	-	<0.005	-		-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-	-	-	-	-	<0.005	-
Hexachlorobenzene	mg/kg	0.3	110[#2]		-	-	-	-	<0.3	-		-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-	-	-	-	-	<0.3	-
Hexabromobenzene	mg/kg	0.001	2.30[#1]		-	-	-	-	<0.005	-		-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-	-	-	-	-	<0.005	-
Halogenated Hydrocarbons																															
Bromomethane	mg/kg	0.001	30[#1]		-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-	-	-	-	-	<0.005	-
Trichlorofluoromethane	mg/kg	0.001	350,000[#5]		-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-	-	-	-	-	<0.005	-
1,2-dibromoethane	mg/kg	0.001	0.16[#1]		-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-	-	-	-	-	<0.005	-
Halogenated Phenols																															
2-chlorophenol	mg/kg	0.1	5,900[#1]		-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-
2,4-dichlorophenol	mg/kg	0.3	2,500[#1]		-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-	-	-	-	-	<0.3	-
2,4,5-trichlorophenol	mg/kg	0.2	82,000[#1]		-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	<0.2	-
2,4,6-trichlorophenol	mg/kg	0.1	210[#1]		-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-
Phthalates																															
Butyl benzyl phthalate	mg/kg	0.3	940,000[#4]		-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-	-	-	-	-	<0.3	-
Di-n-butyl phthalate	mg/kg	0.2	15,000[#4]		-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	<0.2	-
Diethylphthalate	mg/kg	0.2	150,000[#4]		-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	<0.2	-
Dimethyl phthalate	mg/kg	0.1			-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-	-	-	-	-	<0.1	-
Solvents																															
Isophorone	mg/kg	0.2	2,400[#1]		-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	<0.2	-
Metals																															
Arsenic	mg/kg	1	640[#3]		16	19	11	1.9	17	5.1	-	20	2.5	16	3.3	20	-	13	1.5	11	2.9	24	18	2.5	13	19	20	21	19	17	20	-
Barium	mg/kg	1	22,000[#4]		110	110	120	14	100	44	-	93	12	75	12	76	-	90	11	130	15	87	96	11	120	86	97	93	96	110	100	-
Beryllium	mg/kg	0.06	12[#3]		1.2	1.1	1	0.15	1.4	0.4	-	0.81	0.14	1.1	0.28	1.6	-	0.73	0.09	0.75	0.17	1.4	1.4	0.12	1.1	1.5	1.3	1.6	1.5	1.4	1.5	-
Boron	mg/kg	0.2	240,000[#2]		5.1	3.5	5.2	<0.2	6.4	0.3	-	1	0.2	3.4	140	5.2	-	1.8	<0.2	1.1	<0.2	2.9	4.6	<0.2	4.2	6.8	3.1	7.1	11	5.1	5.4	-
Cadmium	mg/kg	0.2	410[#3]		<0.2	<0.2	<0.2	0.3	<0.2	0.3	-	<0.2	<0.2	<0.2	0.3	<0.2	-	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-
Chromium (III+VI)	mg/kg	1	8,600		35	31	32	3	42	10	-	36	2.7	30	5.5	47	-	21	1.2	23	3.2	38	40	3.2	33	46	40	49	43	40	45	-
Copper	mg/kg	1	68,000[#2]		18	16	16	5.9	16	10	-	350	2.6	15	19	21	-	18	2	17	5.2	20	20	6.8	18	19	20	20	19	18	22	-
Lead	mg/kg	1	2,330[#3]		21	18	18	3.3	24	7.2	-	31	2.4	32	4.3	34	-	11	2.1	16	3.4	26	28	2.6	18	33	23	39	24	24	35	-
Mercury	mg/kg	0.3	350[#1]		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-
Nickel	mg/kg	1	980[#2]		36	32	31	6.7	42	12	-	31	4.1	28	13	42	-	27	3.1	24	4.8	46	38	4.1	34	40	40	43	41	48	41	-
Selenium	mg/kg	1	12,000[#2]		<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
Vanadium	mg/kg	1	9,000[#2]		52	48	48	4.6	63	15	-	48	5.4	51	11	72	-	30	2.2	37	6.8	60	62	4.1	52	71	61	74	62	63	70	-
Zinc	mg/kg	1	730,000[#5]		81	76	79	17	93	28	-	560	14	87	27	99	-	47	13	67	14	94	97	11	81	96	89	120	92	90	110	-
Chromium (hexavalent)	mg/kg	1.8	40[#3]		<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-
Organics																															
TOC	%	0.1			-	-	-	-	-	-	0.2	-	-	-	-	-	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inorganics																															
Cyanide (Free)	mg/kg	1			<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
Cyanide Total	mg/kg	1	150[#1]		<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
Sulphide	mg/kg	1			1.7	82	170	6.7	2.7	13	-	130	4.3	21	170	<1	-	120	2.7	180	3.7	<1	1.1	1.7	430	<1	2	13	<1	<1	<1	-
% Moisture	%	0.01			19	24	36	13	25	15	15	27	11	21	78	24	24	14	18	27	14	24	20	5.2	31	21	20	25	21	28	23	-
pH (Lab)	pH Units	0			7.5	7.7	8.2	8.3	7.6	8.7	8.4	7.9	8.3	8.2	-	7.5	7.2	8.6	8.3	8.5	8.6	7.4	8.1	9.3	7.7	7.7	7.9	7.8	8.4	7.7	7.5	-
Asbestos																															
Asbestos Type	None	0			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0			Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Particle Size																															
Stones content (>50mm)	%	0.1			-	-	-	-	-	-	15	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Env Stds Comments
#1:USEPA RSL (NOV 2021)
#2:LQM/CIEH S4ULs 2015
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=0.58 to <1.45%

	Units	Method Detection Limit	GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC																												
Location				W-TP09A		W-TP10	W-TP11		W-TP12	W-TP13	W-TP14	W-TP14A	W-TP15		W-TP16	W-TP17		W-TP18		W-TP19A	W-TP21		W-TP23	W-TP24		W-TP26	W-TP27A	W-TP28	W-TP28A	W-TP29	
Average Depth (m)				2.6		0.6	0.6		0.1	0.1	0.5	1.6	0.6	1.6	0.8	0.1	2.2	0.1	2.2	0.1	0.6	2.8	0.1	0.6		0.8	2.5	0.5	2.6	0.3	
Date				30/11/2022		13/12/2022	02/12/2022		24/01/2023	19/01/2023	24/11/2022	01/12/2022	06/12/2022	06/12/2022	26/01/2023	20/01/2023	20/01/2023	25/01/2023	25/01/2023	19/01/2023	24/01/2023	24/01/2023	25/01/2023	01/12/2022		05/12/2022	24/11/2022	23/11/2022	23/11/2022	06/12/2022	
Sample Type				Normal		Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	
Lab Report Number				22-13079	22-13082	22-13738	22-12937	22-12939	23-14640	23-13599	22-11195	22-12879	22-13291	22-13291	23-15173	23-14015	23-14015	23-14638	23-14638	23-13599	23-14640	23-14640	23-14638	22-12879	22-12883	22-13280	22-11195	22-11231	22-11231	22-13291	22-13294
Stratum				Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Silt	Clay	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	MADE GROUND	Clay - TFD	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD
Textural Class (no units)	-	0		-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
Loss on ignition	%	0.2		-	5.3	-	-	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	-	-	-	-	-	5.4
Freon 113	mg/kg	0.001	28,000[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Metals, boron, sulphates in so																															
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.507 - 0.51	-	0.02 - 0.0203	0.51 - 0.513	-	0.16 - 0.163	0.026 - 0.0263	0.042 - 0.0424	2.29 - 2.3	0.11 - 0.111	0.43 - 0.434	0.27 - 0.271	0.026	0.675 - 0.68	0.15	0.739 - 0.74	0.0157 - 0.016	0.147 - 0.15	0.777 - 0.78	0.036	0.0316 - 0.032	-	0.47 - 0.474	0.46 - 0.461	0.0246 - 0.025	0.656 - 0.66	0.0539 - 0.054	-
TPH																															
>C5-C6 Aliphatics	mg/kg	0.001	3,200[#2]	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-
>C6-C8 Aliphatics	mg/kg	0.001	7,800[#2]	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-
>C8-C10 Aliphatics	mg/kg	0.001	2,000[#2]	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-
>C10-C12 Aliphatics	mg/kg	1	9,700[#2]	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-
>C12-C16 Aliphatics	mg/kg	2	59,000[#2]	<2	-	<2	<2	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	-
>C16-C21 Aliphatics	mg/kg	8		<8	-	<8	<8	-	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	-	<8	<8	<8	<8	<8	-
>C21-C35 Aliphatics	mg/kg	8		<8	-	<8	<8	-	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	-	<8	<8	<8	<8	<8	-
>C5-C35 Aliphatics	mg/kg	10		<10	-	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-
>EC5-EC7 Aromatics	mg/kg	0.001	26,000[#2]	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-
>EC7-EC8 Aromatics	mg/kg	0.001	56,000[#2]	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-
>EC8-EC10 Aromatics	mg/kg	0.001	3,500[#2]	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-
>EC10-EC12 Aromatics	mg/kg	1	16,000[#2]	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.7	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-
>EC12-EC16 Aromatics	mg/kg	2	36,000[#2]	3.5	-	<2	<2	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	10	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	-
>EC16-EC21 Aromatics	mg/kg	10	28,000[#2]	<10	-	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	58	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-
>EC21-EC35 Aromatics	mg/kg	10	28,000[#2]	12	-	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	11	<10	<10	<10	70	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-
>EC5-EC35 Aromatics	mg/kg	10		24	-	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	19	<10	<10	<10	140	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-
mineral oil	mg/kg	10	3,500,000[#1]	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	<10
BTEX																															
Benzene	mg/kg	0.001	27[#3]	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005
Toluene	mg/kg	0.001	56,000[#2]	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	5,700[#2]	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001		<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005
Xylene (o)	mg/kg	0.001	6,600[#2]	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	<0.005
Oxygenates																															
MTBE	mg/kg	0.001	7,900[#4]	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.001	<0.005	-
Chlorinated Hydrocarbons																															
Chloromethane	mg/kg	0.001	1[#4]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Vinyl chloride	mg/kg	0.001	1.1[#5]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Chloroethane	mg/kg	0.001	960[#4]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,1-dichloroethene	mg/kg	0.001	26[#4]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
trans-1,2-dichloroethene	mg/kg	0.001	22[#4] |300[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,1-dichloroethane	mg/kg	0.001	280[#4]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
cis-1,2-dichloroethene	mg/kg	0.001	14[#4] |2300[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Chloroform	mg/kg	0.001	99[#2]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,1,1-trichloroethane	mg/kg	0.001	660[#2]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Carbon tetrachloride	mg/kg	0.001	2.9[#2]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Trichloroethene	mg/kg	0.001	0.73[#5]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,1,2-trichloroethane	mg/kg	0.001	94[#4]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Tetrachloroethene	mg/kg	0.001	24[#5]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
VOC																															
2,2-dichloropropane	mg/kg	0.001		<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,1-dichloropropene	mg/kg	0.001		<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,2-dichloroethane	mg/kg	0.001	0.67[#2]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,2-dichloropropane	mg/kg	0.001	3.3[#4]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Dibromomethane	mg/kg	0.001	99[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Bromodichloromethane	mg/kg	0.001	1.3[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
cis-1,3-dichloropropene	mg/kg	0.001		<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
trans-1,3-dichloropropene	mg/kg	0.001		<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,3-dichloropropane	mg/kg	0.001	23,000[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Chlorodibromomethane	mg/kg	0.001	39[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,1,1,2-tetrachloroethane	mg/kg	0.001	110[#2]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Styrene	mg/kg	0.001	3,300[#4]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Bromoform	mg/kg	0.001	760[#4]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Isopropylbenzene	mg/kg	0.001	1,400[#4]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,1,2,2-tetrachloroethane	mg/kg	0.001	270[#2]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
n-propylbenzene	mg/kg	0.001	4,100[#4]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,3,5-trimethylbenzene	mg/kg	0.001	1,500[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
tert-butylbenzene	mg/kg	0.001	120,000[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,2,4-trimethylbenzene	mg/kg	0.001	42[#4]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
sec-butylbenzene	mg/kg	0.001	120,000[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
p-isopropyltoluene	mg/kg	0.001		<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
n-butylbenzene	mg/kg	0.001	58,000[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,2-dibromo-3-chloropropane	mg/kg	0.001	0.064[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Hexachlorobutadiene	mg/kg	0.001	31[#2]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
PAH																															
Naphthalene	mg/kg	0.00005	190[#2]	<0.0001 - 0.32	-	<0.05	<0.0001 - 0.19	0.18	<0.0001	<0.0001	<0.05	0.11	<0.05	<0.05	<0.0001	0.07	<0.0001	0.15	<0.05	0.51	<0.0001	<0.05	0.06	<0.0001	0.58	<0.05	<0.0001 - 0.06	<0.05	<0.0001 - 0.07	<0.0001	<0.05
Acenaphthylene	mg/kg	0.05	83,000[#2]	0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	0.06	0.33	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	84,000[#2]	0.05	-	<0.05	0.07	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.06	<0.05	0.73	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	63,000[#2]	0.14	-	<0.05	0.09	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	0.06	<0.05	0.84	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	22,000[#2]	0.41	-	0.11	0.45	0.45	0.21	0.12	<0.05	0.16	<0.05	<0.05	<0.05	0.71	0.07	0.32	0.11	9	0.17	<0.05	0.1	<0.05	0.12	0.06	0.07	0.05	0.23	0.11	0.1
Anthracene	mg/kg	0.05	520,000[#2]	0.11	-	<0.05	0.12	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	0.09	<0.05	2.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	23,000[#2]	0.23	-	0.1	0.46	0.43	0.21	0.12	<0.05	0.12	<0.05	<0.05	<0.05	0.96	0.09	0.34	0.13	14	0.28	<0.05	0.18	<0.05	0.09	0.05	0.05	0.05	0.19	0.14	0.13
Pyrene	mg/kg	0.05	54,000[#2]	0.19	-	0.06	0.42	0.36	0.21	0.09	<0.05	0.12	<0.05	<0.05	<0.05	0.83	0.08	0.28	0.11	12	0.25	<0.05	0.14	<0.05	0.08	<0.05	0.06	0.07	0.19	0.12	0.12
Benz(a)anthracene	mg/kg	0.05	170[#2]	0.1	-	<0.05	0.21	0.19	0.09	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	0.45	<0.05	0.13	<0.05	6.1	0.15	<0.05	0.06	0.08	<0.05	<0.05	<0.05	<0.05	0.08	0.05	0.05
Chrysene	mg/kg	0.05	350[#2]	0.08	-	<0.05	0.25	0.24	0.17	0.07	<0.05	0.06	<0.05	<0.05	<0.05	0.41	<0.05	0.17	<0.05	5.8	0.17	<0.05	0.08	0.08	<0.05	<0.05	<0.05	<0.05	0.07	0.08	0.08
Benzo(a) pyrene	mg/kg	0.05	35[#2]	0.07	-	<0.05	0.17	0.11	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.33	<0.05	0.15	<0.05	6	0.13	<0.05	0.08	0.06	<0.05	<0.05	<0.05	<0.05	0.07	0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	500[#2]	<0.05	-	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.24	<0.05	<0.05	<0.05	2.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05	3.5[#2]	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.77	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	3,900[#2]	<0.05	-	<0.05	0.14	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	<0.05	<0.05	<0.05	2.7	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	44[#2]	0.09	-	<0.05	0.26	0.17	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.47	<0.05	0.15	<0.05	5.7	0.16	<0.05	0.08	0.09	<0.05	<0.05	<0.05	<0.05	0.06	0.07	0.09
Benzo(k)fluoranthene	mg/kg	0.05	1,200[#2]	<0.05	-	<0.05	0.06	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05	3.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		1.84	-	<0.85	2.99	2.51	1.12	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	5.08	<0.85	1.98	<0.85	72.4	1.44	<0.85	0.85	<0.85	0.87	<0.85	<0.85	<0.85	1.08	<0.85	<0.85
SVOC																															
Coronene	mg/kg	0.05		<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1	3,000[#1]	0.2	-	-	0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	0.1	<0.1	-
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-
Azobenzene	mg/kg	0.3	26[#1]	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-
Bis(2-chloroethoxy) methane	mg/kg	0.3	2,500[#1]	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-
Bis(2-chloroethyl)ether	mg/kg	0.2	1[#1]	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-
Carbazole	mg/kg	0.3		<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-
Dibenzofuran	mg/kg	0.2	1,200[#1]	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-
Hexachloroethane	mg/kg	0.05	22[#4]	<0.05	-	-	<0.05	-	<0.05	<0.05	-	-	-	-	<0.05	-	<0.05	-	-	-	<0.05	-	-	<0.05	-	-	<0.05	-	<0.05	<0.05	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1	47,000[#1]	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-
9,10-Anthracenedione	mg/kg	0.3	57[#1]	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-
Phenolics																															
2-methylphenol	mg/kg	0.3	160,000	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-
2-nitrophenol	mg/kg	0.3		<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-
2,4-dimethylphenol	mg/kg	0.3	16,000[#4]	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-
4-chloro-3-methylphenol	mg/kg	0.1	82,000[#1]	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-
4-methylphenol	mg/kg	0.2	160,000	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-
Phenol	mg/kg	0.2	440[#2]	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-
2-chloronaphthalene	mg/kg	0.1	390[#4]	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-
PCBs																															
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001	0.16[#1]	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001	0.048[#1]	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001	0.49[#1]	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001	0.5[#1]	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
PCB 118	mg/kg	0.001	0.49[#1]	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001	0.49[#1]	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001	0.00015[#1]	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001	0.5[#1]	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001	0.5[#1]	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001	0.51[#1]	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001	0.00051[#1]	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001	0.52[#1]	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		<0.012	-	-	<0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.012	-	-	-	-
PCB 28	mg/kg	0.001		<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001
PCB 52	mg/kg	0.001		<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001
PCB 101	mg/kg	0.001		<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001
PCB 138	mg/kg	0.001		<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001
PCB 153	mg/kg	0.001		<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001
PCB 180	mg/kg	0.001		<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001
PCBs (Sum of total)	mg/kg	0.007	0.94[#1]	<0.007	-	-	<0.007	<0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.007	-	<0.007	-	-	-	<0.007
Anilines																															
Aniline	mg/kg	0.1	400[#1]	<0.1	-	-	<0.1	-	1.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	1.3	-	0.6	<0.1	-
4-chloroaniline	mg/kg	0.1	11[#1]	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-
4-nitroaniline	mg/kg	0.2	110[#1]	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-
Explosives																															
2,4-Dinitrotoluene	mg/kg	0.2	3,700[#4]	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-
2,6-dinitrotoluene	mg/kg	0.1	1,900[#4]	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-
Nitrobenzene	mg/kg	0.3	22[#1]	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-
Halogenated Benzenes																															
Chlorobenzene	mg/kg	0.001	56[#2]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
2-chlorotoluene	mg/kg	0.001	23,000[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
4-chlorotoluene	mg/kg	0.001	23,000[#1]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,3-dichlorobenzene	mg/kg	0.001	30[#2]	<0.005	-	-	<0.005 - 0.2	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,4-dichlorobenzene	mg/kg	0.001	4,400[#2]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,2-dichlorobenzene	mg/kg	0.001	2,000[#2]	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-

			GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location	W-TP09A		W-TP10	W-TP11		W-TP12	W-TP13	W-TP14	W-TP14A	W-TP15		W-TP16	W-TP17		W-TP18		W-TP19A	W-TP21		W-TP23	W-TP24		W-TP26	W-TP27A	W-TP28	W-TP28A	W-TP29	
				Average Depth (m)	2.6		0.6	0.6		0.1	0.1	0.5	1.6	0.6	1.6	0.8	0.1	2.2	0.1	2.2	0.1	0.6	2.8	0.1	0.6		0.8	2.5	0.5	2.6	0.3	
				Date	30/11/2022		13/12/2022	02/12/2022		24/01/2023	19/01/2023	24/11/2022	01/12/2022	06/12/2022	06/12/2022	26/01/2023	20/01/2023	20/01/2023	25/01/2023	25/01/2023	19/01/2023	24/01/2023	24/01/2023	25/01/2023	01/12/2022		05/12/2022	24/11/2022	23/11/2022	23/11/2022	06/12/2022	
				Sample Type	Normal		Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	
				Lab Report Number	22-13079	22-13082	22-13738	22-12937	22-12939	23-14640	23-13599	22-11195	22-12879	22-13291	22-13291	23-15173	23-14015	23-14015	23-14638	23-14638	23-13599	23-14640	23-14640	23-14638	22-12879	22-12883	22-13280	22-11195	22-11231	22-11231	22-13291	22-13294
	Units	Method Detection Limit		Stratum	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Silt	Clay	MADE GROUND		Clay - TFD	Clay - TFD	Clay - TFD	MADE GROUND	Clay - TFD	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD		Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	
1,2,4-trichlorobenzene	mg/kg	0.001	220[#2]		<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,2,3-trichlorobenzene	mg/kg	0.001	102[#2]		<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Hexachlorobenzene	mg/kg	0.3	110[#2]		<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-	<0.2	-	-	<0.3	-	<0.3	<0.3	-
Hexabromobenzene	mg/kg	0.001	2.30[#1]		<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Halogenated Hydrocarbons																																
Bromomethane	mg/kg	0.001	30[#1]		<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Trichlorofluoromethane	mg/kg	0.001	350,000[#5]		<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
1,2-dibromoethane	mg/kg	0.001	0.16[#1]		<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-
Halogenated Phenols																																
2-chlorophenol	mg/kg	0.1	5,900[#1]		<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-
2,4-dichlorophenol	mg/kg	0.3	2,500[#1]		<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-
2,4,5-trichlorophenol	mg/kg	0.2	82,000[#1]		<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-
2,4,6-trichlorophenol	mg/kg	0.1	210[#1]		<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-
Phthalates																																
Butyl benzyl phthalate	mg/kg	0.3	940,000[#4]		<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-
Di-n-butyl phthalate	mg/kg	0.2	15,000[#4]		<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-
Diethylphthalate	mg/kg	0.2	150,000[#4]		<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-
Dimethyl phthalate	mg/kg	0.1			<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-
Solvents																																
Isophorone	mg/kg	0.2	2,400[#1]		<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-
Metals																																
Arsenic	mg/kg	1	640[#3]		12	-	16	15	-	17	19	18	29	16	13	16	18	21	18	27	17	18	11	16	16	-	14	11	23	14	18	-
Barium	mg/kg	1	22,000[#4]		120	-	92	79	-	74	79	160	120	130	120	82	71	100	73	79	74	73	98	58	100	-	80	100	88	100	77	-
Beryllium	mg/kg	0.06	12[#3]		0.96	-	1.4	1.5	-	1.4	1.4	1.2	1.4	1.3	1.1	1.2	1.5	1.1	1.4	1.3	1.5	1.4	0.87	1.3	1.3	-	1.4	0.7	1.4	1.1	1.7	-
Boron	mg/kg	0.2	240,000[#2]		8.3	-	3.4	7.4	-	6.9	3.3	1.2	8.2	4.3	3.6	4.8	7.4	9.5	5.6	13	5	2.5	3.4	4.1	3.1	-	3.4	4.4	3.6	5.6	15	-
Cadmium	mg/kg	0.2	410[#3]		<0.2	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-
Chromium (III+VI)	mg/kg	1	8,600		29	-	41	43	-	43	42	36	39	37	32	32	43	32	42	36	41	41	26	41	37	-	40	22	42	33	47	-
Copper	mg/kg	1	68,000[#2]		17	-	16	17	-	20	20	15	20	18	21	13	21	17	19	18	22	19	15	18	19	-	18	10	21	17	21	-
Lead	mg/kg	1	2,330[#3]		18	-	23	24	-	33	32	23	27	36	18	18	33	20	33	21	33	33	15	32	22	-	23	13	26	21	35	-
Mercury	mg/kg	0.3	350[#1]		<0.3	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	-
Nickel	mg/kg	1	980[#2]		30	-	40	40	-	38	37	42	38	38	32	36	39	33	38	39	36	37	27	34	37	-	38	22	43	33	43	-
Selenium	mg/kg	1	12,000[#2]		<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-
Vanadium	mg/kg	1	9,000[#2]		47	-	59	63	-	62	67	57	63	54	48	51	68	56	65	58	66	62	38	62	55	-	56	35	63	49	64	-
Zinc	mg/kg	1.00	730,000[#5]		69	-	87	97	-	92	95	81	95	82	76	76	97	83	93	84	95	94	66	86	87	-	90	58	100	77	97	-
Chromium (hexavalent)	mg/kg	1.8	40[#3]		<1.8	-	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	-
Organics																																
TOC	%	0.1			-	2.7	-	-	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	-	-	-	2
Inorganics																																
Cyanide (Free)	mg/kg	1			<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-
Cyanide Total	mg/kg	1	150[#1]		<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-
Sulphide	mg/kg	1			750	-	2	<1	-	2	7.9	<1	12	1.2	1.4	<1	1.5	820	6.5	130	2.9	1.4	89	2.1	1.3	-	3.1	210	7.6	110	2.2	-
% Moisture	%	0.01			30	30	20	23	23	21	24	20	28	23	26	26	25	39	28	37	24	24	30	25	20	20	27	25	22	29	28	28
pH (Lab)	pH Units	0			8.2	8	8.4	7.6	7.9	7.8	7.9	8.3	7.1	7.9	8	7.9	7.1	8.3	7.2	7.7	7.8	7.7	7.7	6.6	8.3	8.3	8.3	8.5	8.1	8.1	7.5	8
Asbestos																																
Asbestos Type	None	0			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0			Not detected	-	Not detected	Not detected	-	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	-	Not detected	Not detected	Not detected	Not detected	Not detected	-
Particle Size																																
Stones content (>50mm)	%	0.1			-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	<0.1

Env Stds Comments
#1:USEPA RSL (NOV 2021)
#2:LQM/CIEH S4ULs 2015
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=0.58 to <1.45%

	Units	Method Detection Limit	GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location	W-TP30	W-TP31	Number of Results	Number of Detects	Minimum Concentration	Minimum Detect	Maximum Concentration	Maximum Detect	Average Concentration	Geometric Average	Median Concentration	Standard Deviation	Geometric Standard Deviation	Number of Guideline Exceedances	Number of Guideline Exceedances (Detects Only)	% of Results at or above the Detect Limit	% of Results below the Detect Limit	% of Detects at or above Guidelines	% of Results below Guidelines or Non-Detect
				Average Depth (m)	0.6	0.3																	
				Date	14/12/2022	22/11/2022																	
				Sample Type	Normal	Normal																	
				Lab Report Number	22-13842	22-11249																	
				Stratum	Clay - TFD	Clay - TFD																	
Textural Class (no units)	-	0			-	-	27	27	1	1	1	1	1	1	1	0		0	0	100	0	0	100
Loss on ignition	%	0.2			-	-	17	17	0.5	0.5	41.1	41.1	6.2	3.8	3.2	9.4	2.6	0	0	100	0	0	100
Freon 113	mg/kg	0.001	28,000[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Metals, boron, sulphates in so																							
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125			0.2 - 0.203	0.029 - 0.0294	196	196	0.0032	0.0032	3.2	3.2	0.32	0.087	0.080525	0.55	5.8	0	0	100	0	0	100
TPH																							
>C5-C6 Aliphatics	mg/kg	0.001	3,200[#2]		<0.001	<0.001	197	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		0	0	0	100	0	100
>C6-C8 Aliphatics	mg/kg	0.001	7,800[#2]		<0.001	<0.001	197	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		0	0	0	100	0	100
>C8-C10 Aliphatics	mg/kg	0.001	2,000[#2]		<0.001	<0.001	197	1	<0.001	0.92	0.92	0.92	0.0057	0.001	0.001	0.065	1.6	0	0	1	99	0	100
>C10-C12 Aliphatics	mg/kg	1	9,700[#2]		<1	<1	197	5	<1	1.1	6.3	6.3	1.1	1	1	0.53	1.2	0	0	3	97	0	100
>C12-C16 Aliphatics	mg/kg	2	59,000[#2]		<2	<2	197	22	<2	2.1	26	26	2.5	2.2	2	2.6	1.5	0	0	11	89	0	100
>C16-C21 Aliphatics	mg/kg	8			<8	<8	197	16	<8	8.2	30	30	8.8	8.5	8	3.2	1.2	0	0	8	92	0	100
>C21-C35 Aliphatics	mg/kg	8			<8	<8	197	31	<8	8.3	1400	1400	24	10	8	107	2.1	0	0	16	84	0	100
>C5-C35 Aliphatics	mg/kg	10			<10	<10	197	31	<10	10	1500	1500	28	13	10	114	2.1	0	0	16	84	0	100
>EC5-EC7 Aromatics	mg/kg	0.001	26,000[#2]		<0.001	<0.001	197	1	<0.001	0.036	0.036	0.036	0.0012	0.001	0.001	0.0025	1.3	0	0	1	99	0	100
>EC7-EC8 Aromatics	mg/kg	0.001	56,000[#2]		<0.001	<0.001	197	1	<0.001	0.058	0.058	0.058	0.0013	0.001	0.001	0.0041	1.3	0	0	1	99	0	100
>EC8-EC10 Aromatics	mg/kg	0.001	3,500[#2]		<0.001	<0.001	197	1	<0.001	0.027	0.027	0.027	0.0011	0.001	0.001	0.0019	1.3	0	0	1	99	0	100
>EC10-EC12 Aromatics	mg/kg	1	16,000[#2]		<1	<1	197	7	<1	1.2	3.6	3.6	1	1	1	0.3	1.2	0	0	4	96	0	100
>EC12-EC16 Aromatics	mg/kg	2	36,000[#2]		<2	<2	197	21	<2	2.3	17	17	2.5	2.2	2	1.9	1.5	0	0	11	89	0	100
>EC16-EC21 Aromatics	mg/kg	10	28,000[#2]		<10	<10	197	17	<10	11	150	150	12	11	10	11	1.4	0	0	9	91	0	100
>EC21-EC35 Aromatics	mg/kg	10	28,000[#2]		<10	<10	197	29	<10	10	1400	1400	29	12	10	119	2.1	0	0	15	85	0	100
>EC5-EC35 Aromatics	mg/kg	10			<10	<10	197	32	<10	10	1400	1400	33	13	10	124	2.3	0	0	16	84	0	100
mineral oil	mg/kg	10	3,500,000[#1]		-	-	10	3	<10	15	37	37	15	13	10	8.9	1.6	0	0	30	70	0	100
BTEX																							
Benzene	mg/kg	0.001	27[#3]		<0.005	<0.001	209	1	<0.001	0.025	0.025	0.025	0.0045	0.0039	0.005	0.002	1.8	0	0	0	100	0	100
Toluene	mg/kg	0.001	56,000[#2]		<0.005	<0.001	209	1	<0.001	0.049	0.049	0.049	0.0046	0.0039	0.005	0.0034	1.8	0	0	0	100	0	100
Ethylbenzene	mg/kg	0.001	5,700[#2]		<0.005	<0.001	209	0	<0.001	ND	<0.005	ND	0.0044	0.0039	0.005	0.0015	1.8	0	0	0	100	0	100
Xylene (m & p)	mg/kg	0.001			<0.005	<0.001	209	1	<0.001	0.012	0.012	0.012	0.0044	0.0039	0.005	0.0016	1.8	0	0	0	100	0	100
Xylene (o)	mg/kg	0.001	6,600[#2]		<0.005	<0.001	209	1	<0.001	0.0089	0.0089	0.0089	0.0044	0.0039	0.005	0.0015	1.8	0	0	0	100	0	100
Total BTEX	mg/kg	0.005			-	-	10	0	<0.005	ND	<0.01	ND	0.0055	0.0054	0.005	0.0016	1.2	0	0	0	100	0	100
Oxygenates																							
MTBE	mg/kg	0.001	7,900[#4]		<0.005	<0.001	199	0	<0.001	ND	<0.005	ND	0.0044	0.0039	0.005	0.0015	1.8	0	0	0	100	0	100
Chlorinated Hydrocarbons																							
Chloromethane	mg/kg	0.001	1[#4]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Vinyl chloride	mg/kg	0.001	1.1[#5]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Chloroethane	mg/kg	0.001	960[#4]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,1-dichloroethene	mg/kg	0.001	26[#4]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
trans-1,2-dichloroethene	mg/kg	0.001	22[#4] |300[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,1-dichloroethane	mg/kg	0.001	280[#4]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
cis-1,2-dichloroethene	mg/kg	0.001	14[#4] |2300[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Chloroform	mg/kg	0.001	99[#2]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,1,1-trichloroethane	mg/kg	0.001	660[#2]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Carbon tetrachloride	mg/kg	0.001	2.9[#2]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Trichloroethene	mg/kg	0.001	0.73[#5]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,1,2-trichloroethane	mg/kg	0.001	94[#4]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Tetrachloroethene	mg/kg	0.001	24[#5]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
VOC																							
2,2-dichloropropane	mg/kg	0.001			-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,1-dichloropropene	mg/kg	0.001			-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,2-dichloroethane	mg/kg	0.001	0.67[#2]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,2-dichloropropane	mg/kg	0.001	3.3[#4]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Dibromomethane	mg/kg	0.001	99[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Bromodichloromethane	mg/kg	0.001	1.3[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
cis-1,3-dichloropropene	mg/kg	0.001			-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
trans-1,3-dichloropropene	mg/kg	0.001			-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,3-dichloropropane	mg/kg	0.001	23,000[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Chlorodibromomethane	mg/kg	0.001	39[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,1,1,2-tetrachloroethane	mg/kg	0.001	110[#2]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Styrene	mg/kg	0.001	3,300[#4]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Bromoform	mg/kg	0.001	760[#4]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Isopropylbenzene	mg/kg	0.001	1,400[#4]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,1,2,2-tetrachloroethane	mg/kg	0.001	270[#2]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
n-propylbenzene	mg/kg	0.001	4,100[#4]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,3,5-trimethylbenzene	mg/kg	0.001	1,500[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
tert-butylbenzene	mg/kg	0.001	120,000[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,2,4-trimethylbenzene	mg/kg	0.001	42[#4]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
sec-butylbenzene	mg/kg	0.001	120,000[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
p-isopropyltoluene	mg/kg	0.001			-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
n-butylbenzene	mg/kg	0.001	58,000[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,2-dibromo-3-chloropropane	mg/kg	0.001	0.064[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
Hexachlorobutadiene	mg/kg	0.001	31[#2]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
PAH																							
Naphthalene	mg/kg	0.00005	190[#2]		<0.05	<0.05	209	60	<0.0001	0.06	2.4	2.4	0.12	0.013	0.05	0.29	22	0	0	29	71	0	100
Acenaphthylene	mg/kg	0.05	83,000[#2]		<0.05	<0.05	209	28	<0.05	0.05	0.34	0.34	0.059	0.054	0.05	0.039	1.4	0	0	13	87	0	100
Acenaphthene	mg/kg	0.05	84,000[#2]		<0.05	<0.05	209	37	<0.05	0.05	3.9	3.9	0.1	0.062	0.05	0.29	1.9	0	0	18	82	0	100
Fluorene	mg/kg	0.05	63,000[#2]		<0.05	<0.05	209	42	<0.05	0.05	5.5	5.5	0.12	0.064	0.05	0.4	2	0	0	20	80	0	100
Phenanthrene	mg/kg	0.05	22,000[#2]		0.05	0.06	209	121	<0.05	0.05	40	40	0.69	0.13	0.07	3.1	3.9	0	0	58	42	0	100
Anthracene	mg/kg	0.05	520,000[#2]		<0.05	<0.05	209	46	<0.05	0.05	12	12	0.21	0.073	0.05	0.89	2.6	0	0	22	78	0	100
Fluoranthene	mg/kg	0.05	23,000[#2]		0.07	0.09	209	119	<0.05	0.05	38	38	0.84	0.13	0.06	3.3	4.3	0	0	57	43	0	100
Pyrene	mg/kg	0.05	54,000[#2]		0.08	0.07	209	118	<0.05	0.05	30	30	0.76	0.13	0.06	2.8	4.2	0	0	56	44	0	100
Benz(a)anthracene	mg/kg	0.05	170[#2]		<0.05	<0.05	209	76	<0.05	0.05	16	16	0.43	0.096	0.05	1.4	3.6	0	0	36	64	0	100
Chrysene	mg/kg	0.05	350[#2]		<0.05	<0.05	209	78	<0.05	0.05	14	14	0.46	0.1	0.05	1.5	3.7	0	0	37	63	0	100
Benzo(a) pyrene	mg/kg	0.05	35[#2]		<0.05	<0.05	209	69	<0.05	0.05	11	11	0.35	0.09	0.05	1.1	3.3	0	0	33	67	0	100
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	500[#2]		<0.05	<0.05	209	40	<0.05	0.05	4.4	4.4	0.18	0.074	0.05	0.45	2.6	0	0	19	81	0	100
Dibenz(a,h)anthracene	mg/kg	0.05	3.5[#2]		<0.05	<0.05	209	24	<0.05	0.05	1.3	1.3	0.084	0.061	0.05	0.13	1.8	0	0	11	89	0	100
Benzo(g,h,i)perylene	mg/kg	0.05	3,900[#2]		<0.05	<0.05	209	42	<0.05	0.05	5.1	5.1	0.21	0.078	0.05	0.55	2.8	0	0	20	80	0	100
Benzo(b)fluoranthene	mg/kg	0.05	44[#2]		<0.05	0.06	209	78	<0.05	0.05	14	14	0.4	0.097	0.05	1.3	3.5	0	0	37	63	0	100
Benzo(k)fluoranthene	mg/kg	0.05	1,200[#2]		<0.05	<0.05	209	49	<0.05	0.05	5.1	5.1	0.2	0.076	0.05	0.54	2.7	0	0	23	77	0	100
PAH 17 Total	mg/kg	0.85			<0.85	<0.85	207	59	<0.85	0.85	201	201	5.2	1.5	0.85	17	3.2	0	0	29	71	0	100
SVOC																							
Coronene	mg/kg	0.05			<0.05	<0.05	207	1	<0.05	1.4	1.4	1.4	0.057	0.051	0.05	0.094	1.3	0	0	0	100	0	100
2-methylnaphthalene	mg/kg	0.1	3,000[#1]		-	-	84	18	<0.1	0.1	3.9	3.9	0.19	0.12	0.1	0.46	1.9	0	0	21	79	0	100
4-bromophenyl phenyl ether	mg/kg	0.2			-	-	84	0	<0.2	ND	<0.2	ND	0.2	0.2	0.2	0		0	0	0	100	0	100
4-chlorophenyl phenyl ether	mg/kg	0.3			-	-	84	0	<0.3	ND	<0.3	ND	0.3	0.3	0.3	0		0	0	0	100	0	100
Azobenzene	mg/kg	0.3	26[#1]		-	-	84	0	<0.3	ND	<0.3	ND	0.3	0.3	0.3	0		0	0	0	100	0	100
Bis(2-chloroethoxy) methane	mg/kg	0.3	2,500[#1]		-	-	84	0	<0.3	ND	<0.3	ND	0.3	0.3	0.3	0		0	0	0	100	0	100
Bis(2-chloroethyl)ether	mg/kg	0.2	1[#1]		-	-	84	0	<0.2	ND	<0.2	ND	0.2	0.2	0.2	0		0	0	0	100	0	100
Carbazole	mg/kg	0.3			-	-	84	2	<0.3	0.4	1.1	1.1	0.31	0.31	0.3	0.088	1.2	0	0	2	98	0	100
Dibenzofuran	mg/kg	0.2	1,200[#1]		-	-	84	6	<0.2	0.2	1	1	0.23	0.21	0.2	0.12	1.3	0	0	7	93	0	100
Hexachloroethane	mg/kg	0.05	22[#4]		-	-	84	0	<0.05	ND	<0.05	ND	0.05	0.05	0.05	0		0	0	0	100	0	100
Bis(2-chloroisopropyl) ether	mg/kg	0.1	47,000[#1]		-	-	84	0	<0.1	ND	<0.1	ND	0.1	0.1	0.1	0		0	0	0	100	0	100
9,10-Anthracenedione	mg/kg	0.3	57[#1]		-	-	84	0	<0.3	ND	<0.3	ND	0.3	0.3	0.3	0		0	0	0	100	0	100
Phenolics																							
2-methylphenol	mg/kg	0.3	160,000		-	-	84	0	<0.3	ND	<0.3	ND	0.3	0.3	0.3	0		0	0	0	100	0	100
2-nitrophenol	mg/kg	0.3			-	-	84	0	<0.3	ND	<0.3	ND	0.3	0.3	0.3	0		0	0	0	100	0	100
2,4-dimethylphenol	mg/kg	0.3	16,000[#4]		-	-	84	0	<0.3	ND	<0.3	ND	0.3	0.3	0.3	0		0	0	0	100	0	100
4-chloro-3-methylphenol	mg/kg	0.1	82,000[#1]		-	-	84	0	<0.1	ND	<0.1	ND	0.1	0.1	0.1	0		0	0	0	100	0	100
4-methylphenol	mg/kg	0.2	160,000		-	-	84	0	<0.2	ND	<0.2	ND	0.2	0.2	0.2	0		0	0	0	100	0	100
Phenol	mg/kg	0.2	440[#2]		-	-	84	0	<0.2	ND	<0.2	ND	0.2	0.2	0.2	0		0	0	0	100	0	100
2-chloronaphthalene	mg/kg	0.1	390[#4]		-	-	84	0	<0.1	ND	<0.1	ND	0.1	0.1	0.1	0		0	0	0	100	0	100
Total Monohydric Phenols (S) Corrected	mg/kg	1			<1	<1	198	3	<1	1.1	2.4	2.4	1	1	1	0.11	1.1	0	0	2	98	0	100
PCBs																							
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001	0.16[#1]		-	-	19	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		0	0	0	100	0	100
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001	0.048[#1]		-	-	19	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		0	0	0	100	0	100
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001	0.49[#1]		-	-	19	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		0	0	0	100	0	100
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001	0.5[#1]		-	-	19	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		0	0	0	100	0	100
PCB 118	mg/kg	0.001	0.49[#1]		-	-	34	1	<0.001	0.001	0.001	0.001	0.001	0.001	0.001	0		0	0	3	97	0	100
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001	0.49[#1]		-	-	19	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		0	0	0	100	0	100
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001	0.00015[#1]		-	-	19	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		19	0	0	100	0	100
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001	0.5[#1]		-	-	19	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		0	0	0	100	0	100
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001	0.5[#1]		-	-	19	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		0	0	0	100	0	100
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001	0.51[#1]		-	-	19	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		0	0	0	100	0	100
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001	0.00051[#1]		-	-	19	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		19	0	0	100	0	100
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001	0.52[#1]		-	-	19	0	<0.001	ND	<0.001	ND	0.001	0.001	0.001	0		0	0	0	100	0	100
Total PCB WHO 12	mg/kg	0.012			-	-	23	0	<0.012	ND	<0.012	ND	0.012	0.012	0.012	0		0	0	0	100	0	100
PCB 28	mg/kg	0.001			-	-	34	2	<0.001	0.004	0.009	0.009	0.0013	0.0011	0.001	0.0015	1.6	0	0	6	94	0	100
PCB 52	mg/kg	0.001			-	-	34	2	<0.001	0.002	0.002	0.002	0.0011	0.001	0.001	0.00024	1.2	0	0	6	94	0	100
PCB 101	mg/kg	0.001			-	-	34	4	<0.001	0.001	0.004	0.004	0.0012	0.0011	0.001	0.00063	1.4	0	0	12	88	0	100
PCB 138	mg/kg	0.001			-	-	34	4	<0.001	0.002	0.015	0.015	0.0019	0.0012	0.001	0.0029	1.9	0	0	12	88	0	100
PCB 153	mg/kg	0.001			-	-	34	4	<0.001	0.002	0.02	0.02	0.0021	0.0013	0.001	0.0037	2.1	0	0	12	88	0	100
PCB 180	mg/kg	0.001			-	-	34	4	<0.001	0.002	0.023	0.023	0.0022	0.0013	0.001	0.0042	2.1	0	0	12	88	0	100
PCBs (Sum of total)	mg/kg	0.007	0.94[#1]		-	-	34	4	<0.007	0.018	0.069	0.069	0.011	0.0084	0.007	0.012	1.7	0	0	12	88	0	100
Anilines																							
Aniline	mg/kg	0.1	400[#1]		-	-	84	32	<0.1	0.2	8.7	8.7	0.55	0.22	0.1	1.2	3.2	0	0	38	62	0	100
4-chloroaniline	mg/kg	0.1	11[#1]		-	-	84	0	<0.1	ND	<0.1	ND	0.1	0.1	0.1	0		0	0	0	100	0	100
4-nitroaniline	mg/kg	0.2	110[#1]		-	-	84	0	<0.2	ND	<0.2	ND	0.2	0.2	0.2	0		0	0	0	100	0	100
Explosives																							
2,4-Dinitrotoluene	mg/kg	0.2	3,700[#4]		-	-	84	0	<0.2	ND	<0.2	ND	0.2	0.2	0.2	0		0	0	0	100	0	100
2,6-dinitrotoluene	mg/kg	0.1	1,900[#4]		-	-	84	0	<0.1	ND	<0.1	ND	0.1	0.1	0.1	0		0	0	0	100	0	100
Nitrobenzene	mg/kg	0.3	22[#1]		-	-	84	0	<0.3	ND	<0.3	ND	0.3	0.3	0.3	0		0	0	0	100	0	100
Halogenated Benzenes																							
Chlorobenzene	mg/kg	0.001	56[#2]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
2-chlorotoluene	mg/kg	0.001	23,000[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
4-chlorotoluene	mg/kg	0.001	23,000[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,3-dichlorobenzene	mg/kg	0.001	30[#2]		-	-	84	10	<0.001	ND	1.3	1.3	0.035	0.0057	0.005	0.11	4.4	0	0	12	88	0	100
1,4-dichlorobenzene	mg/kg	0.001	4,400[#2]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100
1,2-dichlorobenzene	mg/kg	0.001	2,000[#2]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	100	0	100

			GAC_HH_COM/IND_SLOAM_0.58-1.45%TOC	Location	W-TP30	W-TP31	Number of Results	Number of Detects	Minimum Concentration	Minimum Detect	Maximum Concentration	Maximum Detect	Average Concentration	Geometric Average	Median Concentration	Standard Deviation	Geometric Standard Deviation	Number of Guideline Exceedances	Number of Guideline Exceedances (Detects Only)	% of Results at or above the Detect Limit	% of Results below the Detect Limit	% of Detects at or above Guidelines	% of Results below Guidelines or Non-Detect
				Average Depth (m)	0.6	0.3																	
				Date	14/12/2022	22/11/2022																	
				Sample Type	Normal	Normal																	
				Lab Report Number	22-13842	22-11249																	
	Units	Method Detection Limit		Stratum	Clay - TFD	Clay - TFD																	
1,2,4-trichlorobenzene	mg/kg	0.001	220[#2]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	0	100	0	100
1,2,3-trichlorobenzene	mg/kg	0.001	102[#2]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	0	100	0	100
Hexachlorobenzene	mg/kg	0.3	110[#2]		-	-	84	0	<0.3	ND	<0.3	ND	0.3	0.3	0.3	0		0	0	0	0	100	0	100
Hexabromobenzene	mg/kg	0.001	2.300[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	0	100	0	100
Halogenated Hydrocarbons																							
Bromomethane	mg/kg	0.001	30[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	0	100	0	100
Trichlorofluoromethane	mg/kg	0.001	350,000[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	0	100	0	100
1,2-dibromoethane	mg/kg	0.001	0.16[#1]		-	-	84	0	<0.001	ND	<0.005	ND	0.0041	0.0035	0.005	0.0017	1.9	0	0	0	0	100	0	100
Halogenated Phenols																							
2-chlorophenol	mg/kg	0.1	5,900[#1]		-	-	84	0	<0.1	ND	<0.1	ND	0.1	0.1	0.1	0		0	0	0	0	100	0	100
2,4-dichlorophenol	mg/kg	0.3	2,500[#1]		-	-	84	0	<0.3	ND	<0.3	ND	0.3	0.3	0.3	0		0	0	0	0	100	0	100
2,4,5-trichlorophenol	mg/kg	0.2	82,000[#1]		-	-	84	0	<0.2	ND	<0.2	ND	0.2	0.2	0.2	0		0	0	0	0	100	0	100
2,4,6-trichlorophenol	mg/kg	0.1	710[#1]		-	-	84	0	<0.1	ND	<0.1	ND	0.1	0.1	0.1	0		0	0	0	0	100	0	100
Phthalates																							
Butyl benzyl phthalate	mg/kg	0.3	940,000[#4]		-	-	84	0	<0.3	ND	<0.3	ND	0.3	0.3	0.3	0		0	0	0	0	100	0	100
Di-n-butyl phthalate	mg/kg	0.2	15,000[#4]		-	-	84	0	<0.2	ND	<0.2	ND	0.2	0.2	0.2	0		0	0	0	0	100	0	100
Diethylphthalate	mg/kg	0.2	150,000[#4]		-	-	84	0	<0.2	ND	<0.2	ND	0.2	0.2	0.2	0		0	0	0	0	100	0	100
Dimethyl phthalate	mg/kg	0.1			-	-	84	0	<0.1	ND	<0.1	ND	0.1	0.1	0.1	0		0	0	0	0	100	0	100
Solvents																							
Isophorone	mg/kg	0.2	2,400[#1]		-	-	84	0	<0.2	ND	<0.2	ND	0.2	0.2	0.2	0		0	0	0	0	100	0	100
Metals																							
Arsenic	mg/kg	1	640[#3]		11	23	196	195	<1	1.1	97	97	12	9.4	13	9.1	2.3	0	0	99	1	0	100
Barium	mg/kg	1	22,000[#4]		69	86	196	196	8.9	8.9	310	310	83	63	84	52	2.4	0	0	100	0	0	100
Beryllium	mg/kg	0.06	12[#3]		1.3	1.6	196	196	0.07	0.07	6.4	6.4	0.97	0.71	1	0.69	2.5	0	0	100	0	0	100
Boron	mg/kg	0.2	240,000[#2]		1.9	3.8	196	167	<0.2	0.2	140	140	4.3	1.9	3.25	10	3.9	0	0	85	15	0	100
Cadmium	mg/kg	0.2	410[#3]		<0.2	<0.2	196	41	<0.2	0.2	2.8	2.8	0.24	0.22	0.2	0.2	1.4	0	0	21	79	0	100
Chromium (III+VI)	mg/kg	1	8,600		40	44	196	192	<1	1	610	610	33	20	30	50	3.2	0	0	98	2	0	100
Copper	mg/kg	1	68,000[#2]		21	20	196	196	2	2	350	350	18	14	16	26	1.9	0	0	100	0	0	100
Lead	mg/kg	1	2,330[#3]		22	28	196	196	2.1	2.1	430	430	22	15	18.5	33	2.6	0	0	100	0	0	100
Mercury	mg/kg	0.3	350[#1]		<0.3	<0.3	196	0	<0.3	ND	<0.3	ND	0.3	0.3	0.3	0		0	0	0	0	100	0	100
Nickel	mg/kg	1	980[#2]		40	41	196	196	3.1	3.1	680	680	29	22	29	48	2.2	0	0	100	0	0	100
Selenium	mg/kg	1	12,000[#2]		<1	<1	196	1	<1	8.4	8.4	8.4	1	1	1	0.53	1.2	0	0	1	99	0	100
Vanadium	mg/kg	1	9,000[#2]		60	65	196	196	1.5	1.5	180	180	43	30	47	28	2.9	0	0	100	0	0	100
Zinc	mg/kg	1	730,000[#5]		88	96	196	196	11	11	560	560	70	56	76	50	2	0	0	100	0	0	100
Chromium (hexavalent)	mg/kg	1.8	40[#3]		<1.8	<1.8	196	1	<1.8	1.9	1.9	1.9	1.8	1.8	1.8	0.0071	1	0	0	1	99	0	100
Organics																							
TOC	%	0.1			-	-	19	19	0.2	0.2	6.7	6.7	1.5	1.1	1.1	1.4	2.2	0	0	100	0	0	100
Inorganics																							
Cyanide (Free)	mg/kg	1			<1	<1	198	0	<1	ND	<1	ND	1	1	1	0		0	0	0	0	100	0	100
Cyanide Total	mg/kg	1	150[#1]		<1	<1	198	0	<1	ND	<1	ND	1	1	1	0		0	0	0	100	0	100
Sulphide	mg/kg	1			<1	<1	196	159	<1	1.1	3100	3100	118	15	10.45	325	9.4	0	0	81	19	0	100
% Moisture	%	0.01			26	22	219	219	5.2	5.2	78	78	22	20	21	9.4	1.5	0	0	100	0	0	100
pH (Lab)	pH Units	0			8	7.7	215	215	6.2	6.2	11.9	11.9	8.4	8.4	8.3	0.91	1.1	0	0	100	0	0	100
Asbestos																							
Asbestos Type	None	0			-	-	2	2	1	1	1	1			1			0	0	100	0	0	100
Asbestos fibres	-	0			Not-detected	Not-detected	2	2	1	1	1	1			1			0	0	100	0	0	100
Particle Size																							
Stones content (>50mm)	%	0.1			-	-	27	2	<0.1	15	30	30	1.8	0.15	0.1	6.3	4.2	0	0	7	93	0	100

Env Stds Comments
#1:USEPA RSL (NOV 2021)
#2:LQM/CIEH S4ULs 2015
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=0.58 to <1.45%

Hydrocarbon Fraction	Maximum Detected Concentration	GAC	Hazard Quotient
		Comm Ind	
	(mg/kg)	(mg/kg)	
Aliphatics >C5 - C6	0	3200	0.00
Aliphatics >C6 - C8	0	7800	0.00
Aliphatics >C8 - C10	0.92	2000	0.00
Aliphatics >C10 - C12	6.3	9700	0.00
Aliphatics >C12 - C16	26	59000	0.00
Aliphatics >C16 - C21	30	1600000	0.00
Aliphatics >C21 - C35	1400	1600000	0.00
Aromatics >C5 - C7	0.036	26000	0.00
Aromatics >C7 - C8	0.058	56000	0.00
Aromatics >C8 - C10	0.027	3500	0.00
Aromatics >C10 - C12	3.6	16000	0.00
Aromatics >C12 - C16	17	36000	0.00
Aromatics >C16 - C21	150	28000	0.01
Aromatics >C21 - C35	1400	28000	0.05
		Hazard Index	**0.06**

Hydrocarbon Fraction	Maximum Detected Concentration	GAC	Hazard Quotient
		Construction Workers	
	(mg/kg)	(mg/kg)	
Aliphatics >C5 - C6	0	420410	0.00
Aliphatics >C6 - C8	0	603497	0.00
Aliphatics >C8 - C10	0.92	16835	0.00
Aliphatics >C10 - C12	6.3	17225	0.00
Aliphatics >C12 - C16	26	17415	0.00
Aliphatics >C16 - C21	30	344743	0.00
Aliphatics >C21 - C35	1400	344743	0.00
Aromatics >C5 - C7	0.036	73285	0.00
Aromatics >C7 - C8	0.058	75283	0.00
Aromatics >C8 - C10	0.027	6832	0.00
Aromatics >C10 - C12	3.6	6933	0.00
Aromatics >C12 - C16	17	6983	0.00
Aromatics >C16 - C21	150	5233	0.03
Aromatics >C21 - C35	1400	5246	0.27
		Hazard Index	**0.30**

Location				C-BH17	E-BH01		E-BH02		E-BH03			E-BH04		E-BH05		E-BH06A	E-BH06B
Average Depth (m)				0	0.1	3	9.3	18	0.1	0.5	10	0.1		0.5	10	0	0
Date				08/11/2022	04/01/2023	04/01/2023	11/01/2023	12/01/2023	25/01/2023	25/01/2023	26/01/2023	10/11/2022		16/11/2022	17/11/2022	17/11/2022	17/11/2022
Sample Type				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal
Lab Report Number				22-96579	23-10590	23-10590	23-12169	23-12263	23-14638	23-14638	23-15173	22-97150	22-97153	22-98816	22-98887	22-98889	22-98887
Stratum					MADE GROUND	Clay - TFD	Clay - TFD	Clay - GTD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND
Determinand	Units	Method Detection Limit	Construction Worker GAC														
Textural Class (no units)	-	0		-	-	-	-	-	-	-	-	-	1	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	-	6.9	-	-	-	-
Freon 113	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.69	0.16 - 0.163	0.29 - 0.293	0.976 - 0.98	0.02 - 0.0202	0.259 - 0.26	-	0.41 - 0.414	0.045 - 0.0452	-	0.0778 - 0.078	0.79 - 0.794	-	0.2 - 0.204
>C5-C6 Aliphatics	mg/kg	0.001	420410	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	603497	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	16835	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001
>C10-C12 Aliphatics	mg/kg	1	17225	<1	<1	<1	<1	<1	<1	-	<1	<1	-	6.3	<1	-	<1
>C12-C16 Aliphatics	mg/kg	2	17415	6	<2	<2	<2	<2	<2	-	<2	<2	-	15	2.7	-	<2
>C16-C21 Aliphatics	mg/kg	8	344743	11	<8	<8	<8	<8	<8	-	<8	<8	-	18	<8	-	14
>C21-C35 Aliphatics	mg/kg	8	344743	48	<8	<8	<8	<8	19	-	<8	<8	-	47	13	-	140
>C5-C35 Aliphatics	mg/kg	10		65	<10	<10	<10	<10	25	-	<10	<10	-	86	19	-	150
>EC5-EC7 Aromatics	mg/kg	0.001	73285	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	75283	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	6832	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001
>EC10-EC12 Aromatics	mg/kg	1	6933	<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1	3.1	-	<1
>EC12-EC16 Aromatics	mg/kg	2	6983	4.5	<2	<2	<2	<2	4.4	-	<2	<2	-	<2	5.4	-	<2
>EC16-EC21 Aromatics	mg/kg	10	5233	21	<10	<10	<10	<10	19	-	<10	<10	-	<10	<10	-	28
>EC21-EC35 Aromatics	mg/kg	10	5246	51	<10	<10	<10	<10	30	-	<10	33	-	<10	16	-	270
>EC5-EC35 Aromatics	mg/kg	10		76	<10	<10	<10	<10	54	-	<10	39	-	<10	30	-	300
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	171	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001
Toluene	mg/kg	0.001	75293	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001
Ethylbenzene	mg/kg	0.001	28627	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001
Xylene (m & p)	mg/kg	0.001	43628	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001
Xylene (o)	mg/kg	0.001	44350	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001
Chloromethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Vinyl chloride	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Chloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,1-dichloroethene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
trans-1,2-dichloroethene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,1-dichloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
cis-1,2-dichloroethene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Chloroform	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,1,1-trichloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Carbon tetrachloride	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Trichloroethene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,1,2-trichloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Tetrachloroethene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
2,2-dichloropropane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,1-dichloropropene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,2-dichloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,2-dichloropropane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Dibromomethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Bromodichloromethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
cis-1,3-dichloropropene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
trans-1,3-dichloropropene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,3-dichloropropane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Chlorodibromomethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,1,1,2-tetrachloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Styrene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Bromoform	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Isopropylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,1,2,2-tetrachloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
n-propylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,3,5-trimethylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
tert-butylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,2,4-trimethylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
sec-butylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
p-isopropyltoluene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
n-butylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,2-dibromo-3-chloropropane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Hexachlorobutadiene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Naphthalene	mg/kg	0.00005	6687	<0.0001 - 0.12	<0.05	<0.0001	<0.0001	<0.0001	0.28	<0.0001	<0.0001	<0.0001 - 0.72	-	0.54	<0.0001 - 1.5	-	<0.0001 - 0.36
Acenaphthylene	mg/kg	0.05	20010	0.06	<0.05	<0.05	<0.05	<0.05	0.3	<0.05	<0.05	0.05	-	<0.05	<0.05	-	0.08
Acenaphthene	mg/kg	0.05	20013	0.15	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05	0.07	-	0.09	0.39	-	0.2
Fluorene	mg/kg	0.05	13362	0.19	<0.05	<0.05	<0.05	<0.05	0.29	<0.05	<0.05	0.1	-	0.06	0.1	-	0.29
Phenanthrene	mg/kg	0.05	4178	3.4	0.41	0.06	<0.05	<0.05	3.4	0.22	<0.05	3.3	-	0.42	0.16	-	3.1
Anthracene	mg/kg	0.05	100406	0.89	0.08	<0.05	<0.05	<0.05	0.95	<0.05	<0.05	0.29	-	0.08	<0.05	-	0.88
Fluoranthene	mg/kg	0.05	4188	5.8	0.51	<0.05	<0.05	<0.05	4.6	0.25	<0.05	1.7	-	0.52	0.09	-	4.5
Pyrene	mg/kg	0.05	10052	5.6	0.42	<0.05	<0.05	<0.05	4.8	0.24	<0.05	4.2	-	0.45	0.07	-	4.8
Benz(a)anthracene	mg/kg	0.05	46.3	2.5	0.22	<0.05	<0.05	<0.05	3	0.15	<0.05	3.8	-	0.32	<0.05	-	2.7
Chrysene	mg/kg	0.05	91.9	3.2	0.34	<0.05	<0.05	<0.05	3.9	0.26	<0.05	10	-	0.35	<0.05	-	3.3
Benzo(a) pyrene	mg/kg	0.05	14.1	2.3	0.21	<0.05	<0.05	<0.05	2.5	0.13	<0.05	3.3	-	0.18	<0.05	-	2.5
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	133	1.2	0.13	<0.05	<0.05	<0.05	1.3	0.05	<0.05	1.2	-	0.1	<0.05	-	1.1
Dibenz(a,h)anthracene	mg/kg	0.05	0.946	0.32	<0.05	<0.05	<0.05	<0.05	0.47	<0.05	<0.05	0.91	-	<0.05	<0.05	-	0.35
Benzo(g,h,i)perylene	mg/kg	0.05	1060	1.4	0.16	<0.05	<0.05	<0.05	1.6	0.09	<0.05	3.1	-	0.15	<0.05	-	1.3
Benzo(b)fluoranthene	mg/kg	0.05	11.8	2.6	0.25	<0.05	<0.05	<0.05	2.5	0.16	<0.05	3.5	-	0.22	<0.05	-	3.2
Benzo(k)fluoranthene	mg/kg	0.05	313	1.5	0.15	<0.05	<0.05	<0.05	1.3	<0.05	<0.05	1.2	-	0.12	<0.05	-	0.93
PAH 17 Total	mg/kg	0.85		31.3	2.88	<0.85	<0.85	<0.85	31.2	-	<0.85	37.7	-	3.6	2.33	-	29.6
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	<0.05
2-methylnaphthalene	mg/kg	0.1		0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	0.5	-	-	0.3	-	0.3
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3
Azobenzene	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3
Bis(2-chloroethoxy) methane	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3
Bis(2-chloroethyl)ether	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2
Carbazole	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	0.4
Dibenzofuran	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	0.4	-	0.2
Hexachloroethane	mg/kg	0.05		<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	-	<0.05	-	<0.05
Bis(2-chloroisopropyl) ether	mg/kg	0.1		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1
9,10-Anthracenedione	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3
2-methylphenol	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3
2-nitrophenol	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3
2,4-dimethylphenol	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3

Determinand	Units	Method Detection Limit	Construction Worker GAC	Location	C-BH17	E-BH01		E-BH02		E-BH03			E-BH04		E-BH05		E-BH06A	E-BH06B
				Average Depth (m)	0	0.1	3	9.3	18	0.1	0.5	10	0.1		0.5	10	0	0
				Date	08/11/2022	04/01/2023	04/01/2023	11/01/2023	12/01/2023	25/01/2023	25/01/2023	26/01/2023	10/11/2022		16/11/2022	17/11/2022	17/11/2022	17/11/2022
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal
				Lab Report Number	22-96579	23-10590	23-10590	23-12169	23-12263	23-14638	23-14638	23-15173	22-97150	22-97153	22-98816	22-98887	22-98889	22-98887
				Stratum		MADE GROUND	Clay - TFD	Clay - TFD	Clay - GTD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND
4-chloro-3-methylphenol	mg/kg	0.1			<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1
4-methylphenol	mg/kg	0.2			<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2
Phenol	mg/kg	0.2	6912		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2
2-chloronaphthalene	mg/kg	0.1			<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1
Total Monohydric Phenols (S) Corrected	mg/kg	1			<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
PCB 118	mg/kg	0.001			<0.001	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
Total PCB WHO 12	mg/kg	0.012			<0.012	-	-	-	-	-	-	-	-	-	-	-	-	<0.012
PCB 28	mg/kg	0.001			<0.001	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
PCB 52	mg/kg	0.001			<0.001	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
PCB 101	mg/kg	0.001			0.003	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
PCB 138	mg/kg	0.001			0.01	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
PCB 153	mg/kg	0.001			0.011	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
PCB 180	mg/kg	0.001			0.011	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
PCBs (Sum of total)	mg/kg	0.007			0.036	-	-	-	-	-	-	-	-	-	-	-	-	<0.007
Aniline	mg/kg	0.1			0.5	-	8.7	<0.1	<0.1	-	<0.1	1.8	0.7	-	-	<0.1	-	1.1
4-chloroaniline	mg/kg	0.1			<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1
4-nitroaniline	mg/kg	0.2			<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2
2,4-Dinitrotoluene	mg/kg	0.2			<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2
2,6-dinitrotoluene	mg/kg	0.1			<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1
Nitrobenzene	mg/kg	0.3			<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3
Chlorobenzene	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
2-chlorotoluene	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
4-chlorotoluene	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,3-dichlorobenzene	mg/kg	0.001			<0.001 - 0.4	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001 - 0.2	-	-	<0.001	-	<0.001
1,4-dichlorobenzene	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,2-dichlorobenzene	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,2,4-trichlorobenzene	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,2,3-trichlorobenzene	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Hexachlorobenzene	mg/kg	0.3			<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3
Hexabromobenzene	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Bromomethane	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
Trichlorofluoromethane	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
1,2-dibromoethane	mg/kg	0.001			<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001
2-chlorophenol	mg/kg	0.1			<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1
2,4-dichlorophenol	mg/kg	0.3			<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3
2,4,5-trichlorophenol	mg/kg	0.2			<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2
2,4,6-trichlorophenol	mg/kg	0.1			<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1
Butyl benzyl phthalate	mg/kg	0.3			<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3
Di-n-butyl phthalate	mg/kg	0.2			<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2
Diethylphthalate	mg/kg	0.2			<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2
Dimethyl phthalate	mg/kg	0.1			<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1
Isophorone	mg/kg	0.2			<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2
Arsenic	mg/kg	1	117		6.6	15	13	13	3.5	10	-	13	9.2	-	16	12	-	10
Barium	mg/kg	1	4086		260	79	93	93	26	130	-	75	130	-	81	38	-	150
Beryllium	mg/kg	0.06	20.7		6.4	1	0.88	1	0.26	0.81	-	0.77	0.87	-	1.2	1	-	0.88
Boron	mg/kg	0.2	47202		3.9	7	10	20	0.4	2.6	-	6.7	0.6	-	1.1	17	-	4.1
Cadmium	mg/kg	0.2	139		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2
Chromium (III+VI)	mg/kg	1	11511		64	32	27	30	7.7	23	-	23	24	-	35	28	-	26
Copper	mg/kg	1	31202		19	19	16	15	3.9	33	-	10	40	-	22	22	-	29
Lead	mg/kg	1	429		15	35	18	17	4.7	52	-	12	30	-	38	15	-	58
Mercury	mg/kg	0.3	23.7		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3
Nickel	mg/kg	1	1591		5.9	31	28	33	9.1	15	-	24	16	-	34	29	-	15
Selenium	mg/kg	1	2443		<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1
Vanadium	mg/kg	1	3977		180	51	42	46	14	37	-	37	33	-	53	37	-	49
Zinc	mg/kg	1	152760		55	83	62	76	20	89	-	59	130	-	93	86	-	95
Chromium (hexavalent)	mg/kg	1.8	79.5		<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	-	<1.8
TOC	%	0.1			-	-	-	-	-	-	-	-	-	1.6	-	-	0.9	-
Cyanide (Free)	mg/kg	1			<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1
Cyanide Total	mg/kg	1			<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1
Sulphide	mg/kg	1			2,600	5.9	88	100	26	29	-	160	120	-	7.9	270	-	28
% Moisture	%	0.01			13	22	31	45	13	9.5	18	43	14	14	19	48	9.8	9.8
pH (Lab)	pH_Units	0			10.4	7.6	8.2	7.4	8.7	10.8	-	8.3	11.9	8.4	8	8.2	9.5	10.6
Asbestos Type	None	0			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0			Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	-	Not-detected	Not-detected	-	Not-detected
Stones content (>50mm)	%	0.1			-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-

							E-BH07			E-BH08			E-BH09	E-BH10					E-BH11	E-BH12		E-BH13
				3.5	24.9		0.1	0.7	10	0	11.5	23.4	0.8	0	1.7		21.4	25.2	21	0.1	23.5	3
				17/11/2022	30/11/2022		24/01/2023	24/01/2023	25/01/2023	09/11/2022	16/11/2022	17/11/2022	13/12/2022	11/11/2022	11/11/2022		17/11/2022	25/11/2022	03/02/2023	30/01/2023	02/02/2023	10/02/2023
				Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal
				22-98887	22-13079	22-13082	23-14640	23-14640	23-14638	22-96532	22-98816	22-98887	22-13738	22-97121	22-97121	22-97123	22-98887	22-11254	23-17045	23-15977	23-16960	23-18009
Determinand	Units	Method Detection Limit	Construction Worker GAC	Silt - TFD	Chalk	Chalk	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	Clay - GTD	Chalk	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Gravel - GTD	Chalk	Gravel - GTD	MADE GROUND	Silt - GTD	Clay - TFD
Textural Class (no units)	-	0		-	-	1	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-
Loss on ignition	%	0.2		-	-	0.5	-	-	-	-	-	-	-	-	-	2.6	-	-	-	-	-	-
Freon 113	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.175 - 0.18	0.091 - 0.0913	-	0.59	0.14 - 0.142	0.8 - 0.804	0.0567 - 0.057	0.013 - 0.0132	0.0087	0.197 - 0.2	-	0.278 - 0.28	-	0.0106 - 0.011	0.0074	0.015 - 0.0151	0.688 - 0.69	0.015 - 0.0154	0.55 - 0.554
>C5-C6 Aliphatics	mg/kg	0.001	420410	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	603497	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	16835	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	17225	<1	<1	-	<1	<1	<1	<1	5.7	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2	17415	<2	<2	-	2.6	<2	<2	<2	12	<2	<2	-	<2	-	<2	<2	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8	344743	<8	<8	-	15	<8	<8	<8	17	<8	<8	-	<8	-	<8	<8	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8	344743	<8	<8	-	43	<8	<8	<8	44	<8	<8	-	<8	-	<8	23	<8	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	<10	-	61	<10	<10	<10	78	<10	<10	-	<10	-	<10	28	<10	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001	73285	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	75283	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	6832	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	6933	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-	1.2	-	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	6983	<2	<2	-	<2	<2	<2	<2	<2	<2	<2	-	2.9	-	<2	<2	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10	5233	<10	<10	-	17	<10	<10	<10	<10	<10	<10	-	<10	-	<10	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10	5246	<10	<10	-	29	<10	<10	<10	<10	<10	<10	-	14	-	<10	20	<10	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	-	47	<10	<10	<10	<10	<10	<10	-	22	-	<10	20	<10	<10	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-
Benzene	mg/kg	0.001	171	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	75293	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	28627	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001	43628	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	44350	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.001	-	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Vinyl chloride	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Chloroethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,1-dichloroethene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
trans-1,2-dichloroethene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,1-dichloroethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
cis-1,2-dichloroethene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Chloroform	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,1,1-trichloroethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Carbon tetrachloride	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Trichloroethene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,1,2-trichloroethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Tetrachloroethene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
2,2-dichloropropane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,1-dichloropropene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,2-dichloroethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,2-dichloropropane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Dibromomethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Bromodichloromethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
cis-1,3-dichloropropene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
trans-1,3-dichloropropene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,3-dichloropropane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Chlorodibromomethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,1,1,2-tetrachloroethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Styrene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Bromoform	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Isopropylbenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,1,2,2-tetrachloroethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
n-propylbenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,3,5-trimethylbenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
tert-butylbenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,2,4-trimethylbenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
sec-butylbenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
p-isopropyltoluene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
n-butylbenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,2-dibromo-3-chloropropane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Hexachlorobutadiene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Naphthalene	mg/kg	0.00005	6687	<0.0001	0.18	-	<0.05	<0.0001	<0.0001	<0.0001	<0.0001 - 0.2	0.34	<0.0001	-	<0.0001 - 0.53	0.45	0.07	<0.05	<0.05	<0.0001	<0.05	<0.0001
Acenaphthylene	mg/kg	0.05	20010	<0.05	<0.05	-	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	0.07	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	20013	<0.05	<0.05	-	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	0.09	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	13362	<0.05	0.07	-	0.17	<0.05	<0.05	<0.05	<0.05	0.08	0.05	-	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	4178	0.11	0.21	-	2.4	0.12	0.08	<0.05	<0.05	0.16	0.32	-	0.16	0.11	0.21	<0.05	<0.05	0.72	<0.05	0.07
Anthracene	mg/kg	0.05	100406	<0.05	<0.05	-	0.65	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	-	<0.05	<0.05	0.07	<0.05	<0.05	0.16	<0.05	<0.05
Fluoranthene	mg/kg	0.05	4188	0.13	0.1	-	4.5	0.14	0.07	0.07	<0.05	0.22	0.31	-	0.15	0.09	0.56	<0.05	<0.05	1.5	<0.05	0.08
Pyrene	mg/kg	0.05	10052	0.13	0.07	-	4.4	0.13	0.08	0.07	<0.05	0.21	0.3	-	0.14	0.11	0.59	<0.05	<0.05	1.7	<0.05	0.08
Benz(a)anthracene	mg/kg	0.05	46.3	0.06	<0.05	-	2.3	0.06	0.07	<0.05	<0.05	0.17	0.17	-	0.07	<0.05	0.43	<0.05	<0.05	1.2	<0.05	<0.05
Chrysene	mg/kg	0.05	91.9	<0.05	<0.05	-	2.7	0.1	0.12	<0.05	<0.05	0.14	0.23	-	0.09	<0.05	0.4	<0.05	<0.05	1.7	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05	14.1	0.06	<0.05	-	2.3	0.05	<0.05	<0.05	<0.05	0.15	0.14	-	0.07	<0.05	0.41	<0.05	<0.05	1.3	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	133	<0.05	<0.05	-	1.2	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	-	<0.05	<0.05	0.24	<0.05	<0.05	0.78	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05	0.946	<0.05	<0.05	-	0.35	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	0.22	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	1060	<0.05	<0.05	-	1.5	0.05	<0.05	<0.05	<0.05	<0.05	0.11	-	<0.05	<0.05	0.25	<0.05	<0.05	0.96	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	11.8	0.07	<0.05	-	2.6	0.09	0.06	<0.05	<0.05	0.17	0.19	-	0.1	<0.05	0.46	<0.05	<0.05	1.4	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	313	<0.05	<0.05	-	1.1	<0.05	<0.05	<0.05	<0.05	0.07	0.06	-	<0.05	<0.05	0.26	<0.05	<0.05	0.79	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	<0.85	-	26.4	<0.85	<0.85	<0.85	<0.85	1.71	2.02	-	1.55	<0.85	4.03	<0.85	<0.85	12.3	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	0.1	-	<0.1	-	0.3	-	-	-	-	<0.1	-	<0.1
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3
Azobenzene	mg/kg	0.3		<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3
Bis(2-chloroethoxy) methane	mg/kg	0.3		<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3
Bis(2-chloroethyl)ether	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2
Carbazole	mg/kg	0.3		<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3
Dibenzofuran	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2
Hexachloroethane	mg/kg	0.05		<0.05	-	-	-	<0.05	<0.05	<0.05	<0.05	-	<0.05	-	<0.05	-	-	-	-	<0.05	-	<0.05
Bis(2-chloroisopropyl) ether	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
9,10-Anthracenedione	mg/kg	0.3		<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3
2-methylphenol	mg/kg	0.3		<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3
2-nitrophenol	mg/kg	0.3		<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3
2,4-dimethylphenol	mg/kg	0.3		<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3

							E-BH07			E-BH08			E-BH09	E-BH10						E-BH11	E-BH12		E-BH13
				3.5	24.9		0.1	0.7	10	0	11.5	23.4	0.8	0	1.7		21.4	25.2		21	0.1	23.5	3
				17/11/2022	30/11/2022		24/01/2023	24/01/2023	25/01/2023	09/11/2022	16/11/2022	17/11/2022	13/12/2022	11/11/2022	11/11/2022		17/11/2022	25/11/2022		03/02/2023	30/01/2023	02/02/2023	10/02/2023
				Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal		Normal	Normal	Normal	Normal
				22-98887	22-13079	22-13082	23-14640	23-14640	23-14638	22-96532	22-98816	22-98887	22-13738	22-97121	22-97121	22-97123	22-98887	22-11254	23-17045	23-15977	23-16960	23-18009
Determinand	Units	Method Detection Limit	Construction Worker GAC	Silt - TFD	Chalk	Chalk	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	Clay - GTD	Chalk	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Gravel - GTD	Chalk	Gravel - GTD	MADE GROUND	Silt - GTD	Clay - TFD
4-chloro-3-methylphenol	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
4-methylphenol	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2
Phenol	mg/kg	0.2	6912	<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2
2-chloronaphthalene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	1.1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	-	<0.012	-	-	<0.012	-	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-
PCB 52	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-
PCB 101	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-
PCB 138	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-
PCB 153	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-
PCB 180	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	-	-	-	<0.007	-	-	<0.007	-	-	<0.007	-	-	-	-	-	-
Aniline	mg/kg	0.1		0.7	-	-	-	<0.1	<0.1	0.6	0.4	-	<0.1	-	0.3	-	-	-	-	<0.1	-	<0.1
4-chloroaniline	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
4-nitroaniline	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2
2,4-Dinitrotoluene	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2
2,6-dinitrotoluene	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
Nitrobenzene	mg/kg	0.3		<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3
Chlorobenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
2-chlorotoluene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
4-chlorotoluene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,3-dichlorobenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,4-dichlorobenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,2-dichlorobenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,2,4-trichlorobenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,2,3-trichlorobenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Hexachlorobenzene	mg/kg	0.3		<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3
Hexabromobenzene	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Bromomethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
Trichlorofluoromethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
1,2-dibromoethane	mg/kg	0.001		<0.001	-	-	-	<0.005	<0.005	<0.001	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005
2-chlorophenol	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
2,4-dichlorophenol	mg/kg	0.3		<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3
2,4,5-trichlorophenol	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2
2,4,6-trichlorophenol	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
Butyl benzyl phthalate	mg/kg	0.3		<0.3	-	-	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3
Di-n-butyl phthalate	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2
Diethylphthalate	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2
Dimethyl phthalate	mg/kg	0.1		<0.1	-	-	-	<0.1	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1
Isophorone	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2
Arsenic	mg/kg	1	117	11	3.2	-	9.2	13	10	17	8.1	3	17	-	14	-	4.1	1.3	2.8	10	3.5	17
Barium	mg/kg	1	4086	130	13	-	150	100	81	86	100	20	79	-	140	-	17	11	10	130	22	89
Beryllium	mg/kg	0.06	20.7	0.87	0.14	-	1	0.91	0.76	1.2	0.72	0.32	1.4	-	1.1	-	0.23	0.12	0.14	1.2	0.23	1
Boron	mg/kg	0.2	47202	3.7	0.5	-	1.5	1.3	16	3.4	1.4	0.3	1.6	-	6.8	-	<0.2	<0.2	<0.2	1.8	0.2	7.2
Cadmium	mg/kg	0.2	139	<0.2	0.4	-	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	-	<0.2	-	<0.2	0.3	0.2	<0.2	0.2	<0.2
Chromium (III+VI)	mg/kg	1	11511	26	2.2	-	23	28	23	38	20	7.4	42	-	31	-	4.8	2.2	2.9	23	5.3	30
Copper	mg/kg	1	31202	11	5.1	-	34	18	14	15	17	8.5	18	-	17	-	3.1	4.2	4.8	14	6	16
Lead	mg/kg	1	429	14	3	-	72	32	15	24	11	5.4	30	-	28	-	3.8	2.3	2.4	53	3.9	18
Mercury	mg/kg	0.3	23.7	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	1591	26	14	-	13	28	25	35	20	12	37	-	29	-	5.9	12	4.7	14	7.3	32
Selenium	mg/kg	1	2443	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1	3977	38	3.5	-	36	42	37	56	27	11	62	-	47	-	9.3	3.1	6.6	38	9.1	45
Zinc	mg/kg	1	152760	60	27	-	79	74	68	79	44	24	95	-	72	-	19	19	16	96	21	73
Chromium (hexavalent)	mg/kg	1.8	79.5	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	0.2	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1		<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		230	36	-	65	1.1	130	9	18	26	<1	-	81	-	<1	<1	<1	92	24	270
% Moisture	%	0.01		22	18	18	12	17	46	22	14	14	22	-	29	29	11	18	13	13	12	30
pH (Lab)	pH_Units	0		8.8	8.5	7.9	7.9	8.1	7.4	8.8	9.1	8.4	8.8	-	8.8	8.3	8.8	8.7	8.9	10.3	8.8	8.7
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	1	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-	-	-	-	-

				E-BH14	E-BH14A		E-BH15				E-BH16			E-BH17		E-BH18						E-BH19
				0.3	1.5	3.5	0.2			10	0.9	14	24	9	20.8	0.5	2.5		4.5		27.4	0.9
				16/01/2023	13/02/2023	13/02/2023	28/11/2022			06/12/2022	25/11/2022	30/11/2022	01/12/2022	18/11/2022	22/11/2022	25/11/2022	28/11/2022		29/11/2022		13/12/2022	14/12/2022
				Normal	Normal	Normal	Normal			Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal		Normal	Normal
				23-13184	23-18009	23-18009	22-13308	22-13322	22-13291	22-13294	22-11254	22-13079	22-12879	22-98820	22-11249	22-11254	22-13308	22-13322	22-13250	22-13359	22-13738	22-13842
Determinand	Units	Method Detection Limit	Construction Worker GAC	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	MADE GROUND	Clay - GTD	Silt - GTD	Clay - TFD	Gravel - GTD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Chalk	MADE GROUND
Textural Class (no units)	-	0		-	-	-	-	1	-	1	-	-	-	-	-	-	-	1	-	1	-	-
Loss on ignition	%	0.2		-	-	-	-	41.1	-	11.6	-	-	-	-	-	-	-	-	-	3.2	-	-
Freon 113	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		3.07 - 3.1	2.6	0.33 - 0.332	0.5 - 0.503	-	1.4 - 1.43	-	0.0445 - 0.045	0.33 - 0.334	0.011 - 0.0113	0.296 - 0.3	0.015 - 0.0151	0.11 - 0.114	0.1 - 0.102	-	0.6 - 0.602	-	0.0289 - 0.029	0.468 - 0.47
>C5-C6 Aliphatics	mg/kg	0.001	420410	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	603497	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	16835	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	17225	1.3	<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
>C12-C16 Aliphatics	mg/kg	2	17415	5	2.6	<2	2.6	-	<2	-	<2	<2	<2	<2	<2	4.7	<2	-	<2	-	<2	4.6
>C16-C21 Aliphatics	mg/kg	8	344743	12	<8	<8	8.2	-	<8	-	<8	<8	<8	<8	<8	29	<8	-	<8	-	<8	14
>C21-C35 Aliphatics	mg/kg	8	344743	230	22	<8	34	-	<8	-	<8	<8	<8	<8	<8	1,400	<8	-	<8	-	8.9	78
>C5-C35 Aliphatics	mg/kg	10		250	29	<10	45	-	<10	-	<10	<10	<10	<10	<10	1,500	<10	-	<10	-	<10	96
>EC5-EC7 Aromatics	mg/kg	0.001	73285	<0.001	0.036	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	75283	<0.001	0.058	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	6832	<0.001	0.027	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	6933	<1	2.2	<1	1.9	-	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	6983	<2	8.5	<2	6.7	-	<2	-	<2	2.8	<2	<2	<2	8.8	<2	-	<2	-	<2	11
>EC16-EC21 Aromatics	mg/kg	10	5233	<10	22	<10	<10	-	<10	-	<10	<10	<10	<10	<10	42	<10	-	<10	-	<10	33
>EC21-EC35 Aromatics	mg/kg	10	5246	180	29	<10	<10	-	<10	-	<10	10	<10	<10	<10	1,400	<10	-	<10	-	<10	79
>EC5-EC35 Aromatics	mg/kg	10		190	61	<10	23	-	<10	-	<10	20	<10	<10	<10	1,400	<10	-	<10	-	<10	120
mineral oil	mg/kg	10		-	-	-	-	-	-	15	-	-	-	-	-	-	-	-	-	23	-	-
Benzene	mg/kg	0.001	171	<0.005	0.025	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	75293	<0.005	0.049	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	28627	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001	43628	<0.005	0.012	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	44350	<0.005	0.0089	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	<0.005	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	-	<0.005	-	<0.005	<0.005
Chloromethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Vinyl chloride	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Chloroethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1-dichloroethene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
trans-1,2-dichloroethene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1-dichloroethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
cis-1,2-dichloroethene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Chloroform	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1,1-trichloroethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Carbon tetrachloride	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Trichloroethene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1,2-trichloroethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Tetrachloroethene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
2,2-dichloropropane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1-dichloropropene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2-dichloroethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2-dichloropropane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Dibromomethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Bromodichloromethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
cis-1,3-dichloropropene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
trans-1,3-dichloropropene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,3-dichloropropane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Chlorodibromomethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Styrene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Bromoform	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Isopropylbenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
n-propylbenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
tert-butylbenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
sec-butylbenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
p-isopropyltoluene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
n-butylbenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Hexachlorobutadiene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Naphthalene	mg/kg	0.00005	6687	<0.0001 - 2	2.4	<0.0001	<0.0001 - 1.8	-	<0.0001	0.11	<0.0001 - 0.06	0.38	0.11	0.12	<0.05	0.89	<0.0001 - 0.06	-	<0.0001	<0.05	<0.05	2.3
Acenaphthylene	mg/kg	0.05	20010	0.16	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	0.18	<0.05	-	<0.05	<0.05	<0.05	0.08
Acenaphthene	mg/kg	0.05	20013	0.49	0.57	<0.05	0.16	-	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	0.21	<0.05	-	<0.05	<0.05	<0.05	0.84
Fluorene	mg/kg	0.05	13362	0.64	0.68	<0.05	0.52	-	<0.05	<0.05	<0.05	0.15	0.05	<0.05	<0.05	0.36	<0.05	-	<0.05	<0.05	<0.05	0.71
Phenanthrene	mg/kg	0.05	4178	2.8	5.4	0.06	2.3	-	<0.05	0.06	0.06	0.47	0.14	0.09	<0.05	1.7	0.11	-	0.15	0.14	0.07	7.1
Anthracene	mg/kg	0.05	100406	0.96	1.3	<0.05	0.5	-	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	<0.05	0.62	<0.05	-	<0.05	0.13	<0.05	1.6
Fluoranthene	mg/kg	0.05	4188	2.5	6.4	0.05	1.6	-	<0.05	<0.05	0.07	0.23	0.15	0.06	<0.05	1.8	0.09	-	0.15	0.13	0.05	7.8
Pyrene	mg/kg	0.05	10052	2.5	5.7	0.06	1.6	-	<0.05	<0.05	0.07	0.18	0.17	0.05	<0.05	1.6	0.1	-	0.13	0.13	<0.05	7.1
Benz(a)anthracene	mg/kg	0.05	46.3	1.5	3.2	<0.05	1	-	<0.05	<0.05	<0.05	0.1	0.07	<0.05	<0.05	1	<0.05	-	0.08	<0.05	<0.05	3.6
Chrysene	mg/kg	0.05	91.9	1.6	2.5	0.05	1	-	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	1.1	<0.05	-	<0.05	<0.05	<0.05	2.9
Benzo(a) pyrene	mg/kg	0.05	14.1	1.2	2.5	<0.05	0.65	-	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.84	<0.05	-	<0.05	<0.05	<0.05	2.6
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	133	0.52	1.2	<0.05	0.52	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.29	<0.05	-	<0.05	<0.05	<0.05	1.3
Dibenz(a,h)anthracene	mg/kg	0.05	0.946	0.21	0.3	<0.05	0.15	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	0.26
Benzo(g,h,i)perylene	mg/kg	0.05	1060	0.7	1.4	<0.05	0.89	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.46	<0.05	-	<0.05	<0.05	<0.05	1.4
Benzo(b)fluoranthene	mg/kg	0.05	11.8	1.6	2.9	<0.05	1.1	-	<0.05	<0.05	0.05	0.08	<0.05	<0.05	<0.05	0.88	<0.05	-	0.06	<0.05	<0.05	3.1
Benzo(k)fluoranthene	mg/kg	0.05	313	0.61	0.93	<0.05	0.6	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.46	<0.05	-	<0.05	<0.05	<0.05	1.4
PAH 17 Total	mg/kg	0.85		20	37.2	<0.85	14.4	-	<0.85	<0.85	<0.85	1.91	<0.85	<0.85	<0.85	12.4	<0.85	-	<0.85	<0.85	<0.85	44
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		1.9	-	<0.1	3.9	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Azobenzene	mg/kg	0.3		<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2		<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
Carbazole	mg/kg	0.3		<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Dibenzofuran	mg/kg	0.2		0.5	-	<0.2	0.9	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
Hexachloroethane	mg/kg	0.05		<0.05	-	<0.05	<0.05	-	<0.05	-	<0.05	-	-	-	-	-	<0.05	-	<0.05	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
9,10-Anthracenedione	mg/kg	0.3		<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
2-methylphenol	mg/kg	0.3		<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
2-nitrophenol	mg/kg	0.3		<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
2,4-dimethylphenol	mg/kg	0.3		<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-

				E-BH14	E-BH14A		E-BH15				E-BH16			E-BH17		E-BH18						E-BH19
				0.3	1.5	3.5	0.2		10		0.9	14	24	9	20.8	0.5	2.5		4.5		27.4	0.9
				16/01/2023	13/02/2023	13/02/2023	28/11/2022		06/12/2022		25/11/2022	30/11/2022	01/12/2022	18/11/2022	22/11/2022	25/11/2022	28/11/2022		29/11/2022		13/12/2022	14/12/2022
				Normal	Normal	Normal	Normal		Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal		Normal	Normal
				23-13184	23-18009	23-18009	22-13308	22-13322	22-13291	22-13294	22-11254	22-13079	22-12879	22-98820	22-11249	22-11254	22-13308	22-13322	22-13250	22-13359	22-13738	22-13842
Determinand	Units	Method Detection Limit	Construction Worker GAC	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	MADE GROUND	Clay - GTD	Silt - GTD	Clay - TFD	Gravel - GTD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Chalk	MADE GROUND
4-chloro-3-methylphenol	mg/kg	0.1		<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
4-methylphenol	mg/kg	0.2		<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
Phenol	mg/kg	0.2	6912	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
2-chloronaphthalene	mg/kg	0.1		<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	1.8	<1	<1	-	<1	-	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
PCB 118	mg/kg	0.001		0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-
Total PCB WHO 12	mg/kg	0.012		<0.012	-	-	<0.012	-	<0.012	-	-	-	-	-	-	-	<0.012	-	<0.012	-	-	-
PCB 28	mg/kg	0.001		0.004	-	-	0.009	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
PCB 52	mg/kg	0.001		0.002	-	-	0.002	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
PCB 101	mg/kg	0.001		0.004	-	-	0.001	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
PCB 138	mg/kg	0.001		0.015	-	-	0.002	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
PCB 153	mg/kg	0.001		0.02	-	-	0.002	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
PCB 180	mg/kg	0.001		0.023	-	-	0.002	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-
PCBs (Sum of total)	mg/kg	0.007		0.069	-	-	0.018	-	<0.007	<0.007	-	-	-	-	-	-	<0.007	-	<0.007	<0.007	-	-
Aniline	mg/kg	0.1		2.4	-	<0.1	<0.1	-	0.3	-	2.6	-	-	-	-	-	<0.1	-	0.4	-	-	-
4-chloroaniline	mg/kg	0.1		<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
4-nitroaniline	mg/kg	0.2		<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2		<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
2,6-dinitrotoluene	mg/kg	0.1		<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
Nitrobenzene	mg/kg	0.3		<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Chlorobenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
2-chlorotoluene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
4-chlorotoluene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,3-dichlorobenzene	mg/kg	0.001		<0.005 - 0.2	-	<0.005	<0.005 - 0.9	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,4-dichlorobenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2-dichlorobenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Hexachlorobenzene	mg/kg	0.3		<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Hexabromobenzene	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Bromomethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
Trichlorofluoromethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
1,2-dibromoethane	mg/kg	0.001		<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-	-	-	<0.005	-	<0.005	-	-	-
2-chlorophenol	mg/kg	0.1		<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
2,4-dichlorophenol	mg/kg	0.3		<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
2,4,5-trichlorophenol	mg/kg	0.2		<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
2,4,6-trichlorophenol	mg/kg	0.1		<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
Butyl benzyl phthalate	mg/kg	0.3		<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	<0.3	-	-	-
Di-n-butyl phthalate	mg/kg	0.2		<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
Diethylphthalate	mg/kg	0.2		<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
Dimethyl phthalate	mg/kg	0.1		<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	<0.1	-	-	-
Isophorone	mg/kg	0.2		<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	<0.2	-	-	-
Arsenic	mg/kg	1	117	12	28	15	7.3	-	14	-	5.9	8.1	2.5	18	4.7	7.9	15	-	11	-	1.7	43
Barium	mg/kg	1	4086	170	120	100	120	-	74	-	19	73	13	56	33	280	110	-	100	-	10	160
Beryllium	mg/kg	0.06	20.7	1.9	1.3	0.98	1	-	1.1	-	0.18	0.66	0.13	1.2	0.36	0.36	1.3	-	0.95	-	0.11	1.8
Boron	mg/kg	0.2	47202	5.1	3.6	9.5	11	-	5	-	0.3	1	0.4	6.3	<0.2	1.5	3.6	-	2.9	-	0.5	2.2
Cadmium	mg/kg	0.2	139	0.6	<0.2	<0.2	0.5	-	<0.2	-	0.3	<0.2	0.3	<0.2	<0.2	0.7	<0.2	-	<0.2	-	0.4	<0.2
Chromium (III+VI)	mg/kg	1	11511	140	29	28	270	-	34	-	2.8	16	2	35	9.1	34	49	-	29	-	2.3	71
Copper	mg/kg	1	31202	60	49	18	45	-	18	-	11	12	5.7	18	7.6	13	21	-	12	-	3.1	70
Lead	mg/kg	1	429	140	48	17	430	-	19	-	5	10	2.8	19	5.8	26	23	-	17	-	2.6	35
Mercury	mg/kg	0.3	23.7	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	<0.3
Nickel	mg/kg	1	1591	49	23	30	38	-	36	-	14	21	5.3	36	13	27	48	-	30	-	6.4	21
Selenium	mg/kg	1	2443	<1	<1	<1	8.4	-	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
Vanadium	mg/kg	1	3977	86	68	43	60	-	49	-	4.2	24	3	49	15	36	56	-	45	-	3	89
Zinc	mg/kg	1	152760	140	150	71	190	-	85	-	20	39	19	88	26	49	88	-	71	-	15	61
Chromium (hexavalent)	mg/kg	1.8	79.5	<1.8	<1.8	<1.8	<1.8	-	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	6.7	-	-	-	-	-	-	-	1.1	-	1.4	-	-
Cyanide (Free)	mg/kg	1		<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1
Sulphide	mg/kg	1		71	80	230	320	-	170	-	2.2	62	2.2	830	19	85	1.8	-	430	-	7.9	270
% Moisture	%	0.01		6.3	13	28	9.1	9.1	40	40	9.4	14	19	33	15	5.2	23	23	26	26	20	16
pH (Lab)	pH_Units	0		8.5	8.6	8.5	10.1	10	6.9	7.6	9.3	8.6	8.8	8.4	8.5	11.4	7.9	8.6	8.2	8.6	8.5	9.8
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	-	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	30	-	<0.1	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-

					E-BH20							E-BH21			E-BH22							E-BH23		E-BH24
				21.6	0.8		4	15.5		21.1	2.7	9.2	20.5	0.6	1.2		12.4		26.7	2.5	26.5	0.8
				21/12/2022	28/11/2022		29/11/2022	30/11/2022		01/12/2022	17/01/2023	18/01/2023	19/01/2023	29/11/2022	05/12/2022		06/12/2022		22/12/2022	12/12/2022	20/12/2022	07/12/2022
				Normal	Normal		Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal		Normal		Normal	Normal	Normal	Normal
				22-14905	22-13308	22-13322	22-13250	22-13079	22-13082	22-12879	23-13550	23-13586	23-13599	22-13250	22-13280	22-13282	22-13291	22-13294	22-14937	22-13376	22-14872	22-13605
Determinand	Units	Method Detection Limit	Construction Worker GAC	Clay - GTD	MADE GROUND	MADE GROUND	Clay - TFD	Sand - GTD	Sand - GTD	Sand - GTD	Clay - TFD	Silt - TFD	Gravel - GTD	MADE GROUND	MADE GROUND	MADE GROUND	Clay - GTD	Clay - GTD	Chalk	Clay - TFD	Chalk	MADE GROUND
Textural Class (no units)	-	0		1	-	1	-	-	1	-	-	-	-	-	-	1	-	1	-	-	1	-
Loss on ignition	%	0.2		-	-	-	-	-	2.1	-	-	-	-	-	-	3	-	2	-	-	-	-
Freon 113	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.0071	0.28 - 0.283	-	0.427 - 0.43	0.057	-	0.013 - 0.0134	0.18 - 0.181	1.17 - 1.2	0.0061	1.4 - 1.41	0.6 - 0.603	-	0.11 - 0.111	-	0.016 - 0.0164	0.15	0.0285 - 0.029	0.32
>C5-C6 Aliphatics	mg/kg	0.001	420410	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	603497	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	16835	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	17225	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	3.2
>C12-C16 Aliphatics	mg/kg	2	17415	<2	3.4	-	<2	<2	-	<2	<2	<2	<2	2.8	<2	-	2.1	-	<2	<2	<2	12
>C16-C21 Aliphatics	mg/kg	8	344743	<8	17	-	<8	<8	-	<8	<8	<8	<8	18	<8	-	<8	-	<8	<8	<8	20
>C21-C35 Aliphatics	mg/kg	8	344743	<8	48	-	<8	<8	-	<8	<8	<8	<8	190	15	-	<8	-	<8	<8	<8	39
>C5-C35 Aliphatics	mg/kg	10		<10	68	-	<10	<10	-	<10	<10	<10	<10	210	15	-	<10	-	<10	<10	<10	74
>EC5-EC7 Aromatics	mg/kg	0.001	73285	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	75283	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	6832	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	6933	<1	2.1	-	<1	3.6	-	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	6983	<2	6.9	-	<2	9.1	-	<2	<2	<2	<2	17	5.5	-	<2	-	<2	<2	<2	7.3
>EC16-EC21 Aromatics	mg/kg	10	5233	<10	33	-	<10	13	-	<10	<10	<10	<10	150	15	-	<10	-	<10	<10	<10	12
>EC21-EC35 Aromatics	mg/kg	10	5246	<10	45	-	<10	17	-	<10	<10	<10	<10	430	25	-	<10	-	<10	<10	<10	17
>EC5-EC35 Aromatics	mg/kg	10		<10	87	-	<10	43	-	<10	<10	<10	<10	590	45	-	<10	-	<10	<10	<10	36
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	-	37	-	<10	-	-	-	-
Benzene	mg/kg	0.001	171	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	75293	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	28627	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001	43628	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	44350	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Vinyl chloride	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Chloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,1-dichloroethene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
trans-1,2-dichloroethene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,1-dichloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
cis-1,2-dichloroethene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Chloroform	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,1,1-trichloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Carbon tetrachloride	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Trichloroethene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,1,2-trichloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Tetrachloroethene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
2,2-dichloropropane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,1-dichloropropene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,2-dichloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,2-dichloropropane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Dibromomethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Bromodichloromethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
cis-1,3-dichloropropene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
trans-1,3-dichloropropene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,3-dichloropropane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Chlorodibromomethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,1,1,2-tetrachloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Styrene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Bromoform	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Isopropylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,1,2,2-tetrachloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
n-propylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,3,5-trimethylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
tert-butylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,2,4-trimethylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
sec-butylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
p-isopropyltoluene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
n-butylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,2-dibromo-3-chloropropane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Hexachlorobutadiene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Naphthalene	mg/kg	0.00005	6687	<0.05	<0.0001 - 1.4	-	<0.0001	1	-	0.12	<0.0001	<0.05	<0.05	1.5	0.21	0.21	<0.05	<0.05	<0.05	<0.0001	<0.05	<0.0001 - 0.18
Acenaphthylene	mg/kg	0.05	20010	<0.05	0.06	-	<0.05	0.25	-	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07
Acenaphthene	mg/kg	0.05	20013	<0.05	1.1	-	<0.05	0.22	-	<0.05	<0.05	<0.05	<0.05	3.9	0.56	0.57	<0.05	<0.05	<0.05	<0.05	<0.05	0.17
Fluorene	mg/kg	0.05	13362	<0.05	1.2	-	<0.05	0.51	-	0.07	<0.05	<0.05	<0.05	5.5	0.53	0.55	<0.05	<0.05	<0.05	<0.05	<0.05	0.3
Phenanthrene	mg/kg	0.05	4178	<0.05	11	-	0.3	1.5	-	0.33	0.21	0.07	0.07	40	4.6	4.8	0.09	0.06	<0.05	0.14	<0.05	2.7
Anthracene	mg/kg	0.05	100406	<0.05	3.2	-	0.07	0.42	-	0.07	<0.05	<0.05	<0.05	12	1.1	1.2	<0.05	<0.05	<0.05	<0.05	<0.05	0.73
Fluoranthene	mg/kg	0.05	4188	<0.05	18	-	0.39	0.86	-	0.36	0.27	<0.05	0.05	38	6.8	6.9	0.06	0.06	<0.05	0.29	<0.05	3.3
Pyrene	mg/kg	0.05	10052	<0.05	17	-	0.38	0.61	-	0.32	0.22	<0.05	0.05	30	5.4	5.6	0.08	0.07	<0.05	0.24	<0.05	2.4
Benz(a)anthracene	mg/kg	0.05	46.3	<0.05	6.8	-	0.17	0.31	-	0.16	0.12	<0.05	<0.05	16	3.1	3.6	<0.05	<0.05	<0.05	0.1	<0.05	1.2
Chrysene	mg/kg	0.05	91.9	<0.05	6.3	-	0.19	0.27	-	0.1	0.15	<0.05	<0.05	14	2.8	2.5	<0.05	<0.05	<0.05	0.09	<0.05	0.87
Benzo(a) pyrene	mg/kg	0.05	14.1	<0.05	4.1	-	0.1	0.2	-	0.09	0.09	<0.05	<0.05	11	2.2	2.3	<0.05	<0.05	<0.05	0.06	<0.05	0.78
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	133	<0.05	1.7	-	<0.05	0.1	-	<0.05	<0.05	<0.05	<0.05	4.4	1.1	1.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.32
Dibenz(a,h)anthracene	mg/kg	0.05	0.946	<0.05	0.39	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	1.3	0.26	0.34	<0.05	<0.05	<0.05	<0.05	<0.05	0.08
Benzo(g,h,i)perylene	mg/kg	0.05	1060	<0.05	1.8	-	<0.05	0.12	-	<0.05	<0.05	<0.05	<0.05	5.1	1.2	1.2	<0.05	<0.05	<0.05	<0.05	<0.05	0.36
Benzo(b)fluoranthene	mg/kg	0.05	11.8	<0.05	4.4	-	0.11	0.23	-	0.11	0.1	<0.05	<0.05	14	3	3.1	<0.05	<0.05	<0.05	0.11	<0.05	1
Benzo(k)fluoranthene	mg/kg	0.05	313	<0.05	2.8	-	0.08	0.12	-	0.07	<0.05	<0.05	<0.05	5.1	1.1	1	<0.05	<0.05	<0.05	0.08	<0.05	0.44
PAH 17 Total	mg/kg	0.85		<0.85	81.4	-	1.79	6.75	-	1.8	1.16	<0.85	<0.85	201	34	35	<0.85	<0.85	<0.85	1.11	<0.85	14.9
Coronene	mg/kg	0.05		<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	1.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		-	0.9	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	-	0.3
4-bromophenyl phenyl ether	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-	<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2
4-chlorophenyl phenyl ether	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3
Azobenzene	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3
Bis(2-chloroethoxy) methane	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3
Bis(2-chloroethyl)ether	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-	<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2
Carbazole	mg/kg	0.3		-	1.1	-	<0.3	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3
Dibenzofuran	mg/kg	0.2		-	1	-	<0.2	-	-	-	<0.2	-	-	-	-	-	-	-	-	<0.2	-	0.3
Hexachloroethane	mg/kg	0.05		-	<0.05	-	<0.05	-	-	-	<0.05	-	-	-	-	-	-	-	-	<0.05	-	<0.05
Bis(2-chloroisopropyl) ether	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-	<0.1	-	<0.1
9,10-Anthracenedione	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3
2-methylphenol	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3
2-nitrophenol	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3
2,4-dimethylphenol	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3

					E-BH20							E-BH21			E-BH22						E-BH23		E-BH24
				21.6	0.8		4	15.5		21.1		2.7	9.2	20.5	0.6	1.2		12.4		26.7	2.5	26.5	0.8
				21/12/2022	28/11/2022		29/11/2022	30/11/2022		01/12/2022		17/01/2023	18/01/2023	19/01/2023	29/11/2022	05/12/2022		06/12/2022		22/12/2022	12/12/2022	20/12/2022	07/12/2022
				Normal	Normal		Normal	Normal		Normal		Normal	Normal	Normal	Normal	Normal		Normal		Normal	Normal	Normal	Normal
				22-14905	22-13308	22-13322	22-13250	22-13079	22-13082	22-12879		23-13550	23-13586	23-13599	22-13250	22-13280	22-13282	22-13291	22-13294	22-14937	22-13376	22-14872	22-13605
Determinand	Units	Method Detection Limit	Construction Worker GAC	Clay - GTD	MADE GROUND	MADE GROUND	Clay - TFD	Sand - GTD	Sand - GTD	Sand - GTD		Clay - TFD	Silt - TFD	Gravel - GTD	MADE GROUND	MADE GROUND	MADE GROUND	Clay - GTD	Clay - GTD	Chalk	Clay - TFD	Chalk	MADE GROUND
4-chloro-3-methylphenol	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-		<0.1	-	-	-	-	-	-	-	-	<0.1	-	<0.1
4-methylphenol	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-		<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2
Phenol	mg/kg	0.2	6912	-	<0.2	-	<0.2	-	-	-		<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2
2-chloronaphthalene	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-		<0.1	-	-	-	-	-	-	-	-	<0.1	-	<0.1
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	-	<1	<1	-	<1		<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
PCB 118	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	<0.012	-	-	-	-	-		-	-	-	-	<0.012	-	<0.012	-	-	-	-	-
PCB 28	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-
PCB 52	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-
PCB 101	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-
PCB 138	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-
PCB 153	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-
PCB 180	mg/kg	0.001		-	<0.001	-	-	-	-	-		-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	<0.007	-	-	-	-	-		-	-	-	-	<0.007	<0.007	<0.007	<0.007	-	-	-	-
Aniline	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-		<0.1	-	-	-	-	-	-	-	-	0.4	-	0.3
4-chloroaniline	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-		<0.1	-	-	-	-	-	-	-	-	<0.1	-	<0.1
4-nitroaniline	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-		<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2
2,4-Dinitrotoluene	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-		<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2
2,6-dinitrotoluene	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-		<0.1	-	-	-	-	-	-	-	-	<0.1	-	<0.1
Nitrobenzene	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-		<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3
Chlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-		<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
2-chlorotoluene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-		<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
4-chlorotoluene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-		<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,3-dichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-		<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,4-dichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-		<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,2-dichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-		<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,2,4-trichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-		<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,2,3-trichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-		<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Hexachlorobenzene	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-		<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3
Hexabromobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-		<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Bromomethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-		<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
Trichlorofluoromethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-		<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
1,2-dibromoethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-		<0.005	-	-	-	-	-	-	-	-	<0.005	-	<0.005
2-chlorophenol	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-		<0.1	-	-	-	-	-	-	-	-	<0.1	-	<0.1
2,4-dichlorophenol	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-		<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3
2,4,5-trichlorophenol	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-		<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2
2,4,6-trichlorophenol	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-		<0.1	-	-	-	-	-	-	-	-	<0.1	-	<0.1
Butyl benzyl phthalate	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-		<0.3	-	-	-	-	-	-	-	-	<0.3	-	<0.3
Di-n-butyl phthalate	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-		<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2
Diethylphthalate	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-		<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2
Dimethyl phthalate	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-		<0.1	-	-	-	-	-	-	-	-	<0.1	-	<0.1
Isophorone	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-		<0.2	-	-	-	-	-	-	-	-	<0.2	-	<0.2
Arsenic	mg/kg	1	117	13	11	-	15	7.1	-	9.3		14	17	3.5	18	12	-	9.5	-	1.3	16	1.9	8.8
Barium	mg/kg	1	4086	93	77	-	110	120	-	76		110	66	18	160	190	-	81	-	9.8	120	9.7	110
Beryllium	mg/kg	0.06	20.7	1.1	0.89	-	1.2	0.64	-	0.82		0.93	1.3	0.2	2.2	2.4	-	0.67	-	0.07	1.1	0.07	1.6
Boron	mg/kg	0.2	47202	0.6	0.9	-	3.5	0.4	-	1		2.4	4.8	<0.2	2.4	5.3	-	2	-	<0.2	7.6	<0.2	1
Cadmium	mg/kg	0.2	139	<0.2	0.4	-	<0.2	<0.2	-	<0.2		<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	0.3	<0.2	0.4	<0.2
Chromium (III+VI)	mg/kg	1	11511	29	42	-	38	20	-	22		28	41	4.4	34	73	-	19	-	1.1	33	<1	50
Copper	mg/kg	1	31202	16	38	-	14	14	-	15		14	21	8.3	30	16	-	16	-	6.3	19	4.5	47
Lead	mg/kg	1	429	13	23	-	21	16	-	12		19	22	3.6	32	36	-	11	-	2.5	20	3.4	41
Mercury	mg/kg	0.3	23.7	<0.3	<0.3	-	<0.3	<0.3	-	<0.3		<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	1591	31	53	-	34	22	-	24		29	45	6.4	26	25	-	24	-	4.5	32	19	26
Selenium	mg/kg	1	2443	<1	<1	-	<1	<1	-	<1		<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1
Vanadium	mg/kg	1	3977	37	140	-	52	27	-	30		44	58	9.4	51	60	-	26	-	1.7	50	1.7	59
Zinc	mg/kg	1	152760	53	82	-	84	49	-	46		70	110	16	73	67	-	49	-	11	79	16	250
Chromium (hexavalent)	mg/kg	1.8	79.5	<1.8	<1.8	-	<1.8	<1.8	-	<1.8		<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	0.9	-	-	0.6	-		-	-	-	-	-	1.3	-	1.1	-	-	-	-
Cyanide (Free)	mg/kg	1		<1	<1	-	<1	<1	-	<1		<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	-	<1	<1	-	<1		<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1
Sulphide	mg/kg	1		<1	82	-	240	17	-	<1		7.7	140	4.3	580	640	-	95	-	1.2	220	1.4	7.8
% Moisture	%	0.01		15	12	12	36	12	12	14		24	37	13	8.2	21	21	12	12	19	31	19	9.2
pH (Lab)	pH_Units	0		8.1	11	9.8	8.3	8.6	8.1	8.7		8.3	7.4	8.4	9.9	9.4	9.3	8.1	8.5	8.7	7.8	8.7	10.9
Asbestos Type	None	0		-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	-	Not-detected	Not-detected	-	Not-detected		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		<0.1	-	<0.1	-	-	<0.1	-		-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-

							E-BH25								E-BH26	E-BH26A		E-BH28	E-CPT06	E-CPT11	E-CPT15	E-CPT16
					5.1	25.6	0	0.5	1.1		3	9.5	17	25.7	2.5	0.2	20.2	0.1	0.1	0.9	1.6	0
					12/12/2022	15/12/2022	29/11/2022	29/11/2022	29/11/2022		06/12/2022	07/12/2022	21/12/2022	09/12/2022	15/11/2022	09/11/2022	22/11/2022	21/12/2022	18/01/2023	20/01/2023	17/11/2022	15/11/2022
					Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				22-13608	22-13376	22-14107	22-13250	22-13250	22-13250	22-13359	22-13291	22-13605	22-14905	22-13361	22-98836	22-96532	22-11249	22-14905	23-13586	23-14015	22-98887	22-98836
Determinand	Units	Method Detection Limit	Construction Worker GAC	MADE GROUND	Clay - TFD	Chalk	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - GTD	Chalk	Clay	MADE GROUND	Clay - GTD		MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND
Textural Class (no units)	-	0		1	-	-	-	-	-	1	-	-	1	-	-	1	-	1	-	-	-	-
Loss on ignition	%	0.2		2.9	-	-	-	-	-	2.6	-	-	-	-	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		-	0.26 - 0.261	0.012	-	0.227 - 0.23	0.286 - 0.29	-	0.32 - 0.322	0.31 - 0.312	0.0168 - 0.017	0.015 - 0.0151	0.0907 - 0.091	1.55 - 1.6	0.042 - 0.0421	0.0158 - 0.016	0.083 - 0.0833	0.15 - 0.152	0.12 - 0.124	1.2
>C5-C6 Aliphatics	mg/kg	0.001	420410	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	603497	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	16835	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	17225	-	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2	17415	-	<2	<2	-	<2	4.5	-	<2	<2	<2	<2	<2	4.1	<2	<2	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8	344743	-	<8	<8	-	<8	<8	-	<8	<8	<8	<8	<8	18	<8	<8	8.2	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8	344743	-	<8	<8	-	400	11	-	<8	<8	<8	<8	<8	270	<8	<8	38	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		-	<10	<10	-	400	22	-	<10	<10	<10	<10	<10	290	<10	<10	46	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001	73285	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	75283	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	6832	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	6933	-	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	6983	-	<2	<2	-	6.3	2.4	-	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.3
>EC16-EC21 Aromatics	mg/kg	10	5233	-	<10	<10	-	11	<10	-	<10	<10	<10	<10	<10	34	<10	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10	5246	-	<10	<10	-	500	18	-	<10	<10	<10	<10	<10	620	<10	<10	21	<10	<10	26
>EC5-EC35 Aromatics	mg/kg	10		-	<10	<10	-	520	26	-	<10	<10	<10	<10	<10	660	<10	<10	24	<10	<10	37
mineral oil	mg/kg	10		-	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	171	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
Toluene	mg/kg	0.001	75293	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
Ethylbenzene	mg/kg	0.001	28627	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
Xylene (m & p)	mg/kg	0.001	43628	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
Xylene (o)	mg/kg	0.001	44350	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
Chloromethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Vinyl chloride	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Chloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1-dichloroethene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
trans-1,2-dichloroethene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1-dichloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
cis-1,2-dichloroethene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Chloroform	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1,1-trichloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Carbon tetrachloride	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Trichloroethene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1,2-trichloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Tetrachloroethene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
2,2-dichloropropane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1-dichloropropene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2-dichloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2-dichloropropane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Dibromomethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Bromodichloromethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
cis-1,3-dichloropropene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
trans-1,3-dichloropropene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,3-dichloropropane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Chlorodibromomethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Styrene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Bromoform	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Isopropylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
n-propylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,3,5-trimethylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
tert-butylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2,4-trimethylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
sec-butylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
p-isopropyltoluene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
n-butylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Hexachlorobutadiene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Naphthalene	mg/kg	0.00005	6687	-	0.06	<0.05	-	0.35	<0.0001 - 0.14	0.14	<0.05	<0.0001	<0.05	<0.05	<0.0001 - 0.2	<0.0001 - 0.18	<0.05	<0.0001	<0.0001	<0.0001	<0.0001 - 0.14	0.32
Acenaphthylene	mg/kg	0.05	20010	-	<0.05	<0.05	-	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
Acenaphthene	mg/kg	0.05	20013	-	<0.05	<0.05	-	0.1	0.08	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	0.09	<0.05	<0.05	0.08
Fluorene	mg/kg	0.05	13362	-	<0.05	<0.05	-	0.15	0.08	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	0.09
Phenanthrene	mg/kg	0.05	4178	-	0.05	<0.05	-	1.4	0.72	0.73	0.1	0.1	<0.05	<0.05	0.08	1.1	<0.05	0.08	1.1	<0.05	0.14	1.1
Anthracene	mg/kg	0.05	100406	-	<0.05	<0.05	-	0.4	0.21	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	0.57	<0.05	<0.05	0.21	<0.05	<0.05	0.3
Fluoranthene	mg/kg	0.05	4188	-	<0.05	<0.05	-	1.9	1.2	1.3	0.16	0.06	<0.05	<0.05	0.08	5.1	<0.05	0.13	1.7	<0.05	0.14	2.1
Pyrene	mg/kg	0.05	10052	-	0.05	<0.05	-	1.6	1	1	0.14	0.06	<0.05	<0.05	0.08	5.1	<0.05	0.11	1.5	<0.05	0.12	2.3
Benz(a)anthracene	mg/kg	0.05	46.3	-	<0.05	<0.05	-	0.83	0.62	0.54	0.06	<0.05	<0.05	<0.05	<0.05	2.4	<0.05	<0.05	0.74	<0.05	0.07	1.5
Chrysene	mg/kg	0.05	91.9	-	<0.05	<0.05	-	1.1	0.56	0.59	0.13	<0.05	<0.05	<0.05	<0.05	3.7	<0.05	0.06	0.86	<0.05	0.06	1.5
Benzo(a) pyrene	mg/kg	0.05	14.1	-	<0.05	<0.05	-	0.87	0.51	0.53	<0.05	<0.05	<0.05	<0.05	<0.05	3.1	<0.05	0.06	0.66	<0.05	0.07	1.4
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	133	-	<0.05	<0.05	-	0.35	0.28	0.29	<0.05	<0.05	<0.05	<0.05	<0.05	1.5	<0.05	<0.05	0.26	<0.05	<0.05	0.85
Dibenz(a,h)anthracene	mg/kg	0.05	0.946	-	<0.05	<0.05	-	0.12	0.06	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	0.25
Benzo(g,h,i)perylene	mg/kg	0.05	1060	-	<0.05	<0.05	-	0.4	0.3	0.3	<0.05	<0.05	<0.05	<0.05	<0.05	1.9	<0.05	<0.05	0.35	<0.05	<0.05	0.98
Benzo(b)fluoranthene	mg/kg	0.05	11.8	-	<0.05	<0.05	-	1	0.59	0.61	0.08	<0.05	<0.05	<0.05	<0.05	2.9	<0.05	0.08	0.69	<0.05	0.08	1.8
Benzo(k)fluoranthene	mg/kg	0.05	313	-	<0.05	<0.05	-	0.56	0.32	0.29	0.08	<0.05	<0.05	<0.05	<0.05	2.2	<0.05	<0.05	0.35	<0.05	<0.05	0.61
PAH 17 Total	mg/kg	0.85		-	<0.85	<0.85	-	11.3	6.7	6.72	<0.85	<0.85	<0.85	<0.85	<0.85	30.5	<0.85	<0.85	8.53	<0.85	<0.85	15
Coronene	mg/kg	0.05		-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	0.1	-	<0.1	<0.1	<0.1	<0.1	-
4-bromophenyl phenyl ether	mg/kg	0.2		-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
4-chlorophenyl phenyl ether	mg/kg	0.3		-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Azobenzene	mg/kg	0.3		-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Bis(2-chloroethyl)ether	mg/kg	0.2		-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
Carbazole	mg/kg	0.3		-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Dibenzofuran	mg/kg	0.2		-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
Hexachloroethane	mg/kg	0.05		-	-	-	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
9,10-Anthracenedione	mg/kg	0.3		-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
2-methylphenol	mg/kg	0.3		-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
2-nitrophenol	mg/kg	0.3		-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
2,4-dimethylphenol	mg/kg	0.3		-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-

							E-BH25										E-BH26	E-BH26A		E-BH28	E-CPT06	E-CPT11	E-CPT15	E-CPT16
					5.1	25.6	0	0.5	1.1		3	9.5	17	25.7	2.5	0.2	20.2	0.1	0.1	0.9	1.6	0
					12/12/2022	15/12/2022	29/11/2022	29/11/2022	29/11/2022		06/12/2022	07/12/2022	21/12/2022	09/12/2022	15/11/2022	09/11/2022	22/11/2022	21/12/2022	18/01/2023	20/01/2023	17/11/2022	15/11/2022
					Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				22-13608	22-13376	22-14107	22-13250	22-13250	22-13250	22-13359	22-13291	22-13605	22-14905	22-13361	22-98836	22-96532	22-11249	22-14905	23-13586	23-14015	22-98887	22-98836
Determinand	Units	Method Detection Limit	Construction Worker GAC	MADE GROUND	Clay - TFD	Chalk	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - GTD	Chalk	Clay	MADE GROUND	Clay - GTD		MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND
4-chloro-3-methylphenol	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	-
4-methylphenol	mg/kg	0.2		-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-
Phenol	mg/kg	0.2	6912	-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-
2-chloronaphthalene	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		-	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	<0.012	-	-	-	-	-	-	<0.012	-	<0.012	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
PCB 52	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	<0.001	-	<0.001	-	-	-	-	-
PCB 101	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	0.002	-	<0.001	-	-	-	-	-
PCB 138	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	0.006	-	<0.001	-	-	-	-	-
PCB 153	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	0.007	-	<0.001	-	-	-	-	-
PCB 180	mg/kg	0.001		-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	0.008	-	<0.001	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	-	-	<0.007	<0.007	-	-	-	-	-	0.024	-	<0.007	-	-	-	-	-
Aniline	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	0.7	-	-	0.7	<0.1	-	<0.1	<0.1	<0.1	0.4	-
4-chloroaniline	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
4-nitroaniline	mg/kg	0.2		-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
2,4-Dinitrotoluene	mg/kg	0.2		-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
2,6-dinitrotoluene	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
Nitrobenzene	mg/kg	0.3		-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Chlorobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
2-chlorotoluene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
4-chlorotoluene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,3-dichlorobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005 - 0.5	<0.001	-
1,4-dichlorobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2-dichlorobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2,4-trichlorobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2,3-trichlorobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Hexachlorobenzene	mg/kg	0.3		-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Hexabromobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Bromomethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Trichlorofluoromethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2-dibromoethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
2-chlorophenol	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
2,4-dichlorophenol	mg/kg	0.3		-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
2,4,5-trichlorophenol	mg/kg	0.2		-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
2,4,6-trichlorophenol	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
Butyl benzyl phthalate	mg/kg	0.3		-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Di-n-butyl phthalate	mg/kg	0.2		-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
Diethylphthalate	mg/kg	0.2		-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
Dimethyl phthalate	mg/kg	0.1		-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
Isophorone	mg/kg	0.2		-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
Arsenic	mg/kg	1	117	-	12	1.1	-	9.9	12	-	18	13	2.9	1.9	17	4.8	3.7	20	8.3	15	16	9.3
Barium	mg/kg	1	4086	-	140	9.4	-	240	140	-	110	95	17	11	110	310	25	79	82	120	97	220
Beryllium	mg/kg	0.06	20.7	-	0.97	0.09	-	1.1	3.4	-	1.3	0.93	0.2	0.14	1.1	2.1	0.24	1.5	0.65	1.1	1.5	3.5
Boron	mg/kg	0.2	47202	-	4.6	<0.2	-	2.8	3.6	-	9.2	4.3	<0.2	<0.2	4.9	2.7	0.3	6.2	1.3	3.4	4.2	5.6
Cadmium	mg/kg	0.2	139	-	<0.2	<0.2	-	0.5	<0.2	-	<0.2	<0.2	<0.2	0.3	<0.2	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium (III+VI)	mg/kg	1	11511	-	29	1.1	-	610	55	-	44	27	4.2	2.7	33	190	6	45	16	33	57	43
Copper	mg/kg	1	31202	-	14	2.4	-	25	31	-	21	16	5.1	6.9	18	32	4.9	18	21	19	19	16
Lead	mg/kg	1	429	-	18	2.3	-	26	37	-	25	14	3.8	2.5	19	27	3.9	36	20	26	29	82
Mercury	mg/kg	0.3	23.7	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	1591	-	29	3.3	-	680	26	-	40	30	5.5	7	29	12	7.2	38	12	31	33	10
Selenium	mg/kg	1	2443	-	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1	3977	-	48	1.9	-	77	100	-	58	39	8.3	4.3	47	150	8.5	69	30	49	67	110
Zinc	mg/kg	1	152760	-	74	11	-	61	170	-	95	61	14	15	73	79	21	95	56	80	79	86
Chromium (hexavalent)	mg/kg	1.8	79.5	-	<1.8	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		0.9	-	-	-	-	-	1.5	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1		-	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		-	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		-	170	<1	-	230	630	-	19	68	3.3	3.1	9.9	870	18	<1	54	6.6	120	3,100
% Moisture	%	0.01		9.2	27	19	-	15	18	18	28	34	9.8	15	21	8.6	15	24	14	22	17	13
pH (Lab)	pH_Units	0		10.9	8	8.6	-	11	9.3	8.7	8.1	7.8	8.7	8.5	9.4	10.9	8.6	7.3	11.7	8.5	8.4	10.6
Asbestos Type	None	0		-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		-	Not-detected	Not-detected	1	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	E-CPT19	E-CPT23	E-TP01	E-TP02	E-TP03		E-TP04	W-BH01	W-BH02		W-BH03				W-BH04		W-BH05		
				0.8	0.1	0.1	0.1	0.8	2.2	2.3	0.4	0.5	2.5	0.1	12	16.5	20.8	6.5	20	2.1	4.4	19.1
				19/01/2023	15/11/2022	16/12/2022	12/12/2022	09/01/2023	09/01/2023	13/12/2022	26/01/2023	18/01/2023	19/01/2023	11/01/2023	13/01/2023	13/01/2023	30/01/2023	06/01/2023	10/01/2023	25/01/2023	25/01/2023	07/02/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-13599	22-98836	22-14647	22-13376	23-11626	23-11626	22-13738	23-15173	23-13586	23-13599	23-12169	23-12265	23-12265	23-15977	23-11626	23-12169	23-14638	23-14638	23-17124
				MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Silt	Clay - GTD	Sand - GTD	Silt - GTD	Clay - GTD	Chalk	Clay - TFD	Clay - TFD	Gravel
Textural Class (no units)	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.377 - 0.38	0.49 - 0.491	0.026 - 0.0263	0.016 - 0.0161	0.0448 - 0.045	0.36 - 0.363	0.468 - 0.47	0.015 - 0.0151	0.0126 - 0.013	0.858 - 0.86	0.0196 - 0.02	0.06 - 0.0601	0.011 - 0.0113	0.055 - 0.0551	0.046	0.0033	1.4 - 1.45	-	0.0415 - 0.042
>C5-C6 Aliphatics	mg/kg	0.001	420410	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	603497	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	16835	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001
>C10-C12 Aliphatics	mg/kg	1	17225	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1
>C12-C16 Aliphatics	mg/kg	2	17415	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.9	-	<2
>C16-C21 Aliphatics	mg/kg	8	344743	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	-	<8
>C21-C35 Aliphatics	mg/kg	8	344743	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	46	-	<8
>C5-C35 Aliphatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	52	-	<10
>EC5-EC7 Aromatics	mg/kg	0.001	73285	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	75283	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	6832	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001
>EC10-EC12 Aromatics	mg/kg	1	6933	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1
>EC12-EC16 Aromatics	mg/kg	2	6983	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2
>EC16-EC21 Aromatics	mg/kg	10	5233	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10
>EC21-EC35 Aromatics	mg/kg	10	5246	<10	<10	<10	17	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	24	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	171	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	75293	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	28627	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001	43628	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	44350	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Vinyl chloride	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Chloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,1-dichloroethene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
trans-1,2-dichloroethene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,1-dichloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
cis-1,2-dichloroethene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Chloroform	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,1,1-trichloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Carbon tetrachloride	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Trichloroethene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,1,2-trichloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Tetrachloroethene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
2,2-dichloropropane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,1-dichloropropene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,2-dichloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,2-dichloropropane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Dibromomethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Bromodichloromethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
cis-1,3-dichloropropene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
trans-1,3-dichloropropene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,3-dichloropropane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Chlorodibromomethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Styrene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Bromoform	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Isopropylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
n-propylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,3,5-trimethylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
tert-butylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,2,4-trimethylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
sec-butylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
p-isopropyltoluene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
n-butylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Hexachlorobutadiene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Naphthalene	mg/kg	0.00005	6687	<0.0001	<0.0001 - 0.26	<0.0001	0.15	<0.05	<0.05	<0.0001	<0.05	<0.05	<0.0001	<0.05	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.05
Acenaphthylene	mg/kg	0.05	20010	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05
Acenaphthene	mg/kg	0.05	20013	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	13362	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	4178	0.2	0.93	0.2	1.4	<0.05	<0.05	0.26	<0.05	<0.05	0.09	0.08	0.07	<0.05	<0.05	<0.05	<0.05	0.07	0.19	<0.05
Anthracene	mg/kg	0.05	100406	<0.05	0.28	<0.05	0.14	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	4188	0.26	1.8	0.22	1.1	<0.05	<0.05	0.18	<0.05	<0.05	0.06	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	0.21	<0.05
Pyrene	mg/kg	0.05	10052	0.2	1.8	0.23	1.9	<0.05	<0.05	0.19	<0.05	<0.05	0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	0.22	<0.05
Benz(a)anthracene	mg/kg	0.05	46.3	0.1	1.1	0.15	2.1	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05
Chrysene	mg/kg	0.05	91.9	0.14	1.2	0.28	3.9	<0.05	<0.05	0.17	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	0.27	<0.05
Benzo(a) pyrene	mg/kg	0.05	14.1	0.07	1.1	0.14	1.2	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.17	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	133	<0.05	0.58	0.07	0.45	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05	0.946	<0.05	0.19	<0.05	0.39	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	1060	<0.05	0.63	0.11	0.97	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	11.8	0.09	1.3	0.17	1.5	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.19	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	313	<0.05	0.51	0.05	0.36	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
PAH 17 Total	mg/kg	0.85		1.06	11.8	1.62	15.5	<0.85	<0.85	1.07	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	-	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
2-methylnaphthalene	mg/kg	0.1		<0.1	0.2	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-
Azobenzene	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-
Bis(2-chloroethyl)ether	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-
Carbazole	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-
Dibenzofuran	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-
Hexachloroethane	mg/kg	0.05		<0.05	<0.05	<0.05	-	-	-	<0.05	-	-	<0.05	-	<0.05	-	-	-	-	-	<0.05	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-
9,10-Anthracenedione	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-
2-methylphenol	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-
2-nitrophenol	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-
2,4-dimethylphenol	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-

				E-CPT19	E-CPT23	E-TP01	E-TP02	E-TP03		E-TP04	W-BH01	W-BH02		W-BH03				W-BH04		W-BH05		
				0.8	0.1	0.1	0.1	0.8	2.2	2.3	0.4	0.5	2.5	0.1	12	16.5	20.8	6.5	20	2.1	4.4	19.1
				19/01/2023	15/11/2022	16/12/2022	12/12/2022	09/01/2023	09/01/2023	13/12/2022	26/01/2023	18/01/2023	19/01/2023	11/01/2023	13/01/2023	13/01/2023	30/01/2023	06/01/2023	10/01/2023	25/01/2023	25/01/2023	07/02/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-13599	22-98836	22-14647	22-13376	23-11626	23-11626	22-13738	23-15173	23-13586	23-13599	23-12169	23-12265	23-12265	23-15977	23-11626	23-12169	23-14638	23-14638	23-17124
Determinand	Units	Method Detection Limit	Construction Worker GAC	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Silt	Clay - GTD	Sand - GTD	Silt - GTD	Clay - GTD	Chalk	Clay - TFD	Clay - TFD	Gravel
4-chloro-3-methylphenol	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-
4-methylphenol	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-
Phenol	mg/kg	0.2	6912	<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-
2-chloronaphthalene	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	-	<0.012	-	-	-	-	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
PCB 52	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
PCB 101	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
PCB 138	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
PCB 153	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
PCB 180	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	-	-	-	<0.007	-	-	-	-	-	-	-	-	-	-	-	-
Aniline	mg/kg	0.1		<0.1	0.5	<0.1	-	-	-	0.3	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-
4-chloroaniline	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-
4-nitroaniline	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-
2,4-Dinitrotoluene	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-
2,6-dinitrotoluene	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-
Nitrobenzene	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-
Chlorobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
2-chlorotoluene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
4-chlorotoluene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,3-dichlorobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005 - 0.3	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005 - 1	-
1,4-dichlorobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,2-dichlorobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,2,4-trichlorobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,2,3-trichlorobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Hexachlorobenzene	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-
Hexabromobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Bromomethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
Trichlorofluoromethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
1,2-dibromoethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-
2-chlorophenol	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-
2,4-dichlorophenol	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-
2,4,5-trichlorophenol	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-
2,4,6-trichlorophenol	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-
Butyl benzyl phthalate	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-
Di-n-butyl phthalate	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-
Diethylphthalate	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-
Dimethyl phthalate	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-
Isophorone	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-
Arsenic	mg/kg	1	117	15	10	14	14	14	22	97	15	22	9.2	16	7.1	5.3	1.8	10	1.5	17	-	5.3
Barium	mg/kg	1	4086	110	210	83	85	59	100	56	74	77	110	68	98	26	21	94	11	84	-	32
Beryllium	mg/kg	0.06	20.7	1.1	2.2	0.99	0.94	1.1	0.89	0.95	1.3	1.6	1	1.3	0.68	0.3	0.21	0.57	0.09	1.2	-	0.29
Boron	mg/kg	0.2	47202	5.6	2.8	1.4	1.5	6.7	5.7	5.4	3.4	5	3.8	6.5	0.5	<0.2	0.3	0.7	<0.2	7.6	-	0.6
Cadmium	mg/kg	0.2	139	<0.2	2.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.3	<0.2	0.4	<0.2	-	0.3
Chromium (III+VI)	mg/kg	1	11511	34	42	30	29	34	30	30	37	45	30	41	20	6.5	4.7	17	1	36	-	6.9
Copper	mg/kg	1	31202	30	26	17	24	15	15	14	14	19	18	19	17	5.2	5.8	13	5	19	-	7
Lead	mg/kg	1	429	38	48	37	33	21	15	17	21	26	17	32	10	5.2	4.3	9.1	2.4	21	-	4.7
Mercury	mg/kg	0.3	23.7	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3
Nickel	mg/kg	1	1591	33	13	29	28	31	29	32	40	48	30	34	22	8.1	11	21	5.8	36	-	9.1
Selenium	mg/kg	1	2443	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1
Vanadium	mg/kg	1	3977	52	65	46	47	51	40	46	55	70	47	63	26	11	7	24	2.6	56	-	13
Zinc	mg/kg	1	152760	89	130	86	88	77	64	73	85	95	76	95	41	20	27	35	17	85	-	22
Chromium (hexavalent)	mg/kg	1.8	79.5	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		16	570	<1	<1	<1	230	220	2.1	<1	430	1.4	90	2.8	44	130	<1	53	-	65
% Moisture	%	0.01		20	12	22	20	21	25	24	22	22	32	23	14	15	18	14	19	34	35	10
pH (Lab)	pH_Units	0		8.3	10.9	7.5	8.2	8.2	8.8	9	7.9	7.8	7.8	7.5	8.6	8.9	8.6	8.7	9	7.8	-	8.5
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	W-BH06			W-BH07	W-BH08		W-BH09			W-BH10	W-BH10A		W-BH11		W-BH12		W-BH13		W-BH14
				2.8	17.5	18.6	1.2	2.5	17	1.6	5.3	19.5	0.1	3	20	2.5	7.5	3.5	19.7	0.4	21.6	0.1
				10/01/2023	25/01/2023	25/01/2023	11/01/2023	16/01/2023	18/01/2023	01/02/2023	02/02/2023	03/02/2023	01/02/2023	02/02/2023	03/02/2023	26/01/2023	27/01/2023	24/01/2023	26/01/2023	06/01/2023	19/01/2023	04/01/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-11628	23-14638	23-14638	23-12169	23-13184	23-13586	23-15975	23-16960	23-17045	23-15975	23-16960	23-17045	23-15173	23-15977	23-14640	23-15173	23-11626	23-13599	23-10590
				Clay - TFD	Clay - GTD	Sand - GTD	Clay - TFD	Clay - TFD	Sand - GTD	Clay - TFD	Peat - TFD	Chalk	MADE GROUND	Clay - TFD	Chalk	Clay - TFD	Clay - GTD	Clay - TFD	Chalk	MADE GROUND	Chalk	MADE GROUND
Textural Class (no units)	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.47 - 0.474	0.0306 - 0.031	0.065 - 0.0653	0.325 - 0.33	0.54	0.0048	0.22 - 0.224	0.54 - 0.542	0.013 - 0.0132	0.0139 - 0.014	1.4	0.009	2.37 - 2.4	0.115 - 0.12	2	0.0047	0.0177 - 0.018	0.0068	0.0117 - 0.012
>C5-C6 Aliphatics	mg/kg	0.001	420410	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	603497	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	16835	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	17225	<1	1.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2	17415	<2	3.1	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.2	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8	344743	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8	344743	<8	8.9	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	13	<8	<8	16	<8
>C5-C35 Aliphatics	mg/kg	10		<10	16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	23	<10	<10	17	<10
>EC5-EC7 Aromatics	mg/kg	0.001	73285	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	75283	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	6832	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	6933	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	6983	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10	5233	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10	5246	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	171	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	75293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	28627	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001	43628	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	44350	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Vinyl chloride	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Chloroethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,1-dichloroethene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,1-dichloroethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Chloroform	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Carbon tetrachloride	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Trichloroethene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Tetrachloroethene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
2,2-dichloropropane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,1-dichloropropene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,2-dichloroethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,2-dichloropropane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Dibromomethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Bromodichloromethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,3-dichloropropane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Chlorodibromomethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Styrene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Bromoform	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Isopropylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
n-propylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
tert-butylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
sec-butylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
p-isopropyltoluene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
n-butylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Hexachlorobutadiene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Naphthalene	mg/kg	0.00005	6687	<0.05	<0.0001	<0.05	<0.0001	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.0001	<0.0001	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	mg/kg	0.05	20010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	20013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	13362	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	4178	0.08	0.09	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	0.07
Anthracene	mg/kg	0.05	100406	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	4188	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	0.09	<0.05	0.1
Pyrene	mg/kg	0.05	10052	<0.05	0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	0.09	<0.05	0.09
Benz(a)anthracene	mg/kg	0.05	46.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	0.07
Chrysene	mg/kg	0.05	91.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	0.05
Benzo(a) pyrene	mg/kg	0.05	14.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	133	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05	0.946	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	1060	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	11.8	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	0.08
Benzo(k)fluoranthene	mg/kg	0.05	313	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.2		-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.3		-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-
Azobenzene	mg/kg	0.3		-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2		-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
Carbazole	mg/kg	0.3		-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-
Dibenzofuran	mg/kg	0.2		-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
Hexachloroethane	mg/kg	0.05		-	<0.05	-	<0.05	<0.05	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
9,10-Anthracenedione	mg/kg	0.3		-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-
2-methylphenol	mg/kg	0.3		-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-
2-nitrophenol	mg/kg	0.3		-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-
2,4-dimethylphenol	mg/kg	0.3		-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-

				W-BH06			W-BH07	W-BH08		W-BH09			W-BH10	W-BH10A		W-BH11		W-BH12		W-BH13		W-BH14
				2.8	17.5	18.6	1.2	2.5	17	1.6	5.3	19.5	0.1	3	20	2.5	7.5	3.5	19.7	0.4	21.6	0.1
				10/01/2023	25/01/2023	25/01/2023	11/01/2023	16/01/2023	18/01/2023	01/02/2023	02/02/2023	03/02/2023	01/02/2023	02/02/2023	03/02/2023	26/01/2023	27/01/2023	24/01/2023	26/01/2023	06/01/2023	19/01/2023	04/01/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-11628	23-14638	23-14638	23-12169	23-13184	23-13586	23-15975	23-16960	23-17045	23-15975	23-16960	23-17045	23-15173	23-15977	23-14640	23-15173	23-11626	23-13599	23-10590
Determinand	Units	Method Detection Limit	Construction Worker GAC	Clay - TFD	Clay - GTD	Sand - GTD	Clay - TFD	Clay - TFD	Sand - GTD	Clay - TFD	Peat - TFD	Chalk	MADE GROUND	Clay - TFD	Chalk	Clay - TFD	Clay - GTD	Clay - TFD	Chalk	MADE GROUND	Chalk	MADE GROUND
4-chloro-3-methylphenol	mg/kg	0.1		-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
4-methylphenol	mg/kg	0.2		-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
Phenol	mg/kg	0.2	6912	-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
2-chloronaphthalene	mg/kg	0.1		-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	2.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 52	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 101	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 138	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 153	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 180	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aniline	mg/kg	0.1		-	<0.1	-	<0.1	1.6	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
4-chloroaniline	mg/kg	0.1		-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
4-nitroaniline	mg/kg	0.2		-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2		-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.1		-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
Nitrobenzene	mg/kg	0.3		-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-
Chlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
2-chlorotoluene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
4-chlorotoluene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005 - 0.3	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Hexachlorobenzene	mg/kg	0.3		-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-
Hexabromobenzene	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Bromomethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
Trichlorofluoromethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
1,2-dibromoethane	mg/kg	0.001		-	<0.005	-	<0.005	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-
2-chlorophenol	mg/kg	0.1		-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
2,4-dichlorophenol	mg/kg	0.3		-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.2		-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.1		-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3		-	<0.3	-	<0.3	<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.2		-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
Diethylphthalate	mg/kg	0.2		-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
Dimethyl phthalate	mg/kg	0.1		-	<0.1	-	<0.1	<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-
Isophorone	mg/kg	0.2		-	<0.2	-	<0.2	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-
Arsenic	mg/kg	1	117	13	6.4	5.3	15	11	4.6	14	5.1	2.5	17	25	1.6	7	9.4	13	2.6	17	1.5	15
Barium	mg/kg	1	4086	110	85	37	120	100	11	120	130	26	80	70	13	86	110	120	11	68	13	70
Beryllium	mg/kg	0.06	20.7	1	0.65	0.38	1.4	0.86	0.18	1.1	0.49	0.18	1.4	1.2	0.11	0.89	0.73	0.92	0.1	1.3	0.1	1.2
Boron	mg/kg	0.2	47202	4.3	0.4	0.5	7.6	2.2	<0.2	1.7	4.8	<0.2	2.2	16	<0.2	2.9	1.5	7.3	<0.2	5	0.2	5.1
Cadmium	mg/kg	0.2	139	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.3	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	0.3	<0.2	0.4	<0.2
Chromium (III+VI)	mg/kg	1	11511	32	19	9.1	36	23	6.6	32	13	4	41	35	2.3	26	22	28	1.8	43	2	37
Copper	mg/kg	1	31202	18	12	9.4	20	21	4.4	15	15	8.2	16	16	7.2	11	14	14	2.5	20	3	20
Lead	mg/kg	1	429	18	11	6	22	15	3.8	18	10	3.1	33	20	2.6	14	12	23	2.3	30	3.1	26
Mercury	mg/kg	0.3	23.7	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	1591	32	22	12	39	28	6	33	16	5.3	37	35	4.4	27	29	28	11	31	6.3	32
Selenium	mg/kg	1	2443	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1	3977	46	26	15	59	35	8.6	49	20	6.5	64	62	3.8	41	29	43	3.1	67	3.3	58
Zinc	mg/kg	1	152760	70	41	26	87	66	13	80	45	21	100	83	18	65	52	78	18	86	18	90
Chromium (hexavalent)	mg/kg	1.8	79.5	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		180	25	13	<1	65	2.8	4	110	9	2.2	120	6	61	99	180	<1	<1	<1	1.7
% Moisture	%	0.01		35	14	9.8	26	30	12	26	41	19	25	39	19	31	18	33	18	22	17	25
pH (Lab)	pH_Units	0		8	8.2	8.9	8	8.3	8.1	8.1	7.5	8.7	7.5	7.4	9.2	7	8.9	7.9	8.7	8	8.1	7.9
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	W-BH15			W-BH16		W-BH17			W-BH18			W-BH19			W-BH20			W-BH21
				7.2	2.5	6.5	18.5	0.1	18	0.5	7	21.5	0.1	6.1	18.1	3	7	21	0.1	7	22	0.1
				04/01/2023	17/01/2023	17/01/2023	20/01/2023	11/01/2023	12/01/2023	13/01/2023	16/01/2023	24/01/2023	04/01/2023	05/01/2023	06/01/2023	18/01/2023	19/01/2023	24/01/2023	02/02/2023	03/02/2023	03/02/2023	07/02/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-10590	23-13550	23-13550	23-14015	23-12169	23-12263	23-12265	23-13184	23-14640	23-10590	23-10748	23-11626	23-13586	23-13599	23-14640	23-16960	23-17045	23-17045	23-17124
				Clay - GTD	Clay - TFD	Clay - GTD	Silt - GTD	MADE GROUND	Gravel - GTD	Clay - TFD	Clay - TFD	Chalk	Clay	Clay - TFD	GTD	Clay - TFD	Clay - GTD	Chalk	Clay	Clay - TFD	Chalk	Clay
Textural Class (no units)	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.25	0.5	0.176 - 0.18	0.0062	0.0105 - 0.011	0.0286 - 0.029	0.0248 - 0.025	0.0587 - 0.059	0.0066	0.01 - 0.0104	0.028 - 0.0282	0.0043	1.25 - 1.3	0.0877 - 0.088	0.0266 - 0.027	0.0599 - 0.06	0.19 - 0.193	0.0032	0.0083
>C5-C6 Aliphatics	mg/kg	0.001	420410	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	603497	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	16835	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.92	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	17225	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2	17415	<2	<2	26	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	20	<2	<2
>C16-C21 Aliphatics	mg/kg	8	344743	<8	<8	30	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	28	<8	<8
>C21-C35 Aliphatics	mg/kg	8	344743	<8	14	63	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	14	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	14	120	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	62	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001	73285	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	75283	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	6832	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	6933	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	6983	<2	<2	<2	<2	3.4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	12	<2	<2
>EC16-EC21 Aromatics	mg/kg	10	5233	<10	<10	<10	<10	17	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	20	<10	<10
>EC21-EC35 Aromatics	mg/kg	10	5246	<10	<10	<10	<10	19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	40	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	41	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	171	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	75293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	28627	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001	43628	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	44350	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Vinyl chloride	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Chloroethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,1-dichloroethene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
trans-1,2-dichloroethene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,1-dichloroethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
cis-1,2-dichloroethene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Chloroform	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,1,1-trichloroethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Carbon tetrachloride	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Trichloroethene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,1,2-trichloroethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Tetrachloroethene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
2,2-dichloropropane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,1-dichloropropene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,2-dichloroethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,2-dichloropropane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Dibromomethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Bromodichloromethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
cis-1,3-dichloropropene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
trans-1,3-dichloropropene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,3-dichloropropane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Chlorodibromomethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,1,1,2-tetrachloroethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Styrene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Bromoform	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Isopropylbenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,1,2,2-tetrachloroethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
n-propylbenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,3,5-trimethylbenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
tert-butylbenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,2,4-trimethylbenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
sec-butylbenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
p-isopropyltoluene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
n-butylbenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,2-dibromo-3-chloropropane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Hexachlorobutadiene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Naphthalene	mg/kg	0.00005	6687	<0.0001	<0.0001	<0.0001	<0.05	<0.05	<0.05	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.0001
Acenaphthylene	mg/kg	0.05	20010	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	20013	<0.05	<0.05	<0.05	<0.05	0.44	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06
Fluorene	mg/kg	0.05	13362	<0.05	<0.05	<0.05	<0.05	0.46	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08
Phenanthrene	mg/kg	0.05	4178	<0.05	<0.05	<0.05	<0.05	6.4	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	0.83
Anthracene	mg/kg	0.05	100406	<0.05	<0.05	<0.05	<0.05	1.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	0.21
Fluoranthene	mg/kg	0.05	4188	<0.05	<0.05	<0.05	<0.05	8.4	0.06	<0.05	<0.05	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	1
Pyrene	mg/kg	0.05	10052	<0.05	<0.05	<0.05	<0.05	6.6	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	0.93
Benz(a)anthracene	mg/kg	0.05	46.3	<0.05	<0.05	<0.05	<0.05	3.4	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.38
Chrysene	mg/kg	0.05	91.9	<0.05	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.45
Benzo(a) pyrene	mg/kg	0.05	14.1	<0.05	<0.05	<0.05	<0.05	2.5	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.35
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	133	<0.05	<0.05	<0.05	<0.05	1.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.16
Dibenz(a,h)anthracene	mg/kg	0.05	0.946	<0.05	<0.05	<0.05	<0.05	0.24	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	1060	<0.05	<0.05	<0.05	<0.05	1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.19
Benzo(b)fluoranthene	mg/kg	0.05	11.8	<0.05	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	0.41
Benzo(k)fluoranthene	mg/kg	0.05	313	<0.05	<0.05	<0.05	<0.05	1.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	0.13
PAH 17 Total	mg/kg	0.85		<0.85	<0.85	<0.85	<0.85	39.5	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	5.21
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3
Azobenzene	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3
Bis(2-chloroethoxy) methane	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3
Bis(2-chloroethyl)ether	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2
Carbazole	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3
Dibenzofuran	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2
Hexachloroethane	mg/kg	0.05		<0.05	<0.05	<0.05	-	-	-	<0.05	-	-	-	-	-	<0.05	<0.05	-	-	-	-	<0.05
Bis(2-chloroisopropyl) ether	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1
9,10-Anthracenedione	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3
2-methylphenol	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3
2-nitrophenol	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3
2,4-dimethylphenol	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3

					W-BH15			W-BH16		W-BH17			W-BH18			W-BH19			W-BH20			W-BH21
				7.2	2.5	6.5	18.5	0.1	18	0.5	7	21.5	0.1	6.1	18.1	3	7	21	0.1	7	22	0.1
				04/01/2023	17/01/2023	17/01/2023	20/01/2023	11/01/2023	12/01/2023	13/01/2023	16/01/2023	24/01/2023	04/01/2023	05/01/2023	06/01/2023	18/01/2023	19/01/2023	24/01/2023	02/02/2023	03/02/2023	03/02/2023	07/02/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-10590	23-13550	23-13550	23-14015	23-12169	23-12263	23-12265	23-13184	23-14640	23-10590	23-10748	23-11626	23-13586	23-13599	23-14640	23-16960	23-17045	23-17045	23-17124
Determinand	Units	Method Detection Limit	Construction Worker GAC	Clay - GTD	Clay - TFD	Clay - GTD	Silt - GTD	MADE GROUND	Gravel - GTD	Clay - TFD	Clay - TFD	Chalk	Clay	Clay - TFD	GTD	Clay - TFD	Clay - GTD	Chalk	Clay	Clay - TFD	Chalk	Clay
4-chloro-3-methylphenol	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1
4-methylphenol	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2
Phenol	mg/kg	0.2	6912	<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2
2-chloronaphthalene	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	-	-	-	-	-	<0.012	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
PCB 52	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
PCB 101	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
PCB 138	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
PCB 153	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
PCB 180	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	-	-	-	-	-	-	-	<0.007	-	-	-	-	-	-	-	-
Aniline	mg/kg	0.1		5.8	<0.1	<0.1	-	-	-	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	-	0.2
4-chloroaniline	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1
4-nitroaniline	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2
2,4-Dinitrotoluene	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2
2,6-dinitrotoluene	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1
Nitrobenzene	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3
Chlorobenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
2-chlorotoluene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
4-chlorotoluene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,3-dichlorobenzene	mg/kg	0.001		<0.005 - 1.3	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,4-dichlorobenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,2-dichlorobenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,2,4-trichlorobenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,2,3-trichlorobenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Hexachlorobenzene	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3
Hexabromobenzene	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Bromomethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
Trichlorofluoromethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
1,2-dibromoethane	mg/kg	0.001		<0.005	<0.005	<0.005	-	-	-	<0.005	-	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005
2-chlorophenol	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1
2,4-dichlorophenol	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3
2,4,5-trichlorophenol	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2
2,4,6-trichlorophenol	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1
Butyl benzyl phthalate	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3
Di-n-butyl phthalate	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2
Diethylphthalate	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2
Dimethyl phthalate	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1
Isophorone	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2
Arsenic	mg/kg	1	117	8.8	12	12	1.9	16	4.6	15	11	1.4	15	14	2.8	21	10	1.9	22	18	1.7	17
Barium	mg/kg	1	4086	81	120	79	19	84	20	110	120	9.5	61	100	14	96	110	16	100	120	9.7	78
Beryllium	mg/kg	0.06	20.7	0.65	0.81	0.72	0.16	1.4	0.3	1	0.72	0.08	1.2	0.97	0.17	1.1	0.66	0.14	1.9	1	0.09	1.3
Boron	mg/kg	0.2	47202	1.8	3.7	2.3	<0.2	4.4	<0.2	3.4	1.4	0.2	3.9	6.2	<0.2	5.4	1.3	0.3	5.4	2.9	<0.2	4.4
Cadmium	mg/kg	0.2	139	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	0.2	<0.2	<0.2	0.3	0.4	<0.2	0.3	<0.2
Chromium (III+VI)	mg/kg	1	11511	19	26	23	3.5	42	4.8	31	19	<1	36	29	4.3	36	18	3.1	57	26	1.5	40
Copper	mg/kg	1	31202	15	16	16	6.6	16	6.4	15	20	6.2	16	13	4.8	18	16	7	21	13	5.9	19
Lead	mg/kg	1	429	12	13	14	3.3	31	4.7	18	11	2.4	32	16	3.6	19	10	4.1	43	15	2.2	29
Mercury	mg/kg	0.3	23.7	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	1591	23	25	25	8.2	34	6.5	37	24	5.5	31	30	5	34	23	6.5	48	30	6.4	36
Selenium	mg/kg	1	2443	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1	3977	31	35	29	4.9	64	11	47	28	1.9	56	45	6.5	53	28	5.1	92	42	3	64
Zinc	mg/kg	1	152760	44	69	46	20	100	17	71	53	15	76	75	12	85	42	21	120	96	17	89
Chromium (hexavalent)	mg/kg	1.8	79.5	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		61	150	87	3.8	1.6	53	1.4	6.9	<1	<1	140	5.9	730	87	1.5	1.8	570	<1	<1
% Moisture	%	0.01		18	28	20	16	23	12	17	16	18	27	42	14	31	13	15	27	25	17	24
pH (Lab)	pH_Units	0		8.8	8.6	8.2	8.8	8	9.8	7.8	9	8.4	7.1	8.1	8	7.5	9.1	8.5	7.4	8.4	8.8	7.8
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	W-BH22			W-BH23	W-BH24		W-BH25	W-BH26	W-BH27			W-BH28		W-BH29					W-BH30	
				7.5	0.1	20.5	0.1	0.5	20	4	0.1	0.8	2	16	17	23.2	0	2.4	5.4	18.5	0.7	2
				08/02/2023	03/02/2023	08/02/2023	19/01/2023	08/02/2023	09/02/2023	20/12/2022	23/11/2022	15/12/2022	16/12/2022	20/12/2022	22/12/2022	11/01/2023	23/11/2022	23/11/2022	23/11/2022	09/12/2022	08/12/2022	09/12/2022
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-17119	23-17045	23-17119	23-13599	23-17119	23-17144	22-14872	22-11231	22-14107	22-14647	22-14872	22-14937	23-12169	22-11231	22-11231	22-11231	22-13361	22-13360	22-13361
				Silt - TFD	MADE GROUND	Chalk	MADE GROUND	Clay - TFD	Chalk	Clay - TFD	Clay	Clay - TFD	Clay - TFD	Gravel - GTD	Clay - GTD	Chalk	Clay	Clay - TFD	Clay - TFD	Chalk	Clay	Silt - TFD
Textural Class (no units)	-	0		-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.51 - 0.515	0.017	0.008	0.0125 - 0.013	0.0115 - 0.012	0.0168 - 0.017	0.48 - 0.483	0.0196 - 0.02	0.05	0.865 - 0.87	0.0185 - 0.019	0.018 - 0.0181	0.0042	0.055	0.81	-	0.009	0.15 - 0.151	1.27 - 1.3
>C5-C6 Aliphatics	mg/kg	0.001	420410	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	603497	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	16835	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	17225	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2	17415	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	3.2	<2
>C16-C21 Aliphatics	mg/kg	8	344743	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8	344743	19	8.3	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		22	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	16	<10
>EC5-EC7 Aromatics	mg/kg	0.001	73285	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	75283	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	6832	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	6933	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	6983	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10	5233	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10	5246	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	171	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	75293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	28627	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001	43628	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	44350	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Vinyl chloride	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Chloroethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,1-dichloroethene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,1-dichloroethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Chloroform	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Carbon tetrachloride	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Trichloroethene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Tetrachloroethene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
2,2-dichloropropane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,1-dichloropropene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,2-dichloroethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,2-dichloropropane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Dibromomethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Bromodichloromethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,3-dichloropropane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Chlorodibromomethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Styrene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Bromoform	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Isopropylbenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
n-propylbenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
tert-butylbenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
sec-butylbenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
p-isopropyltoluene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
n-butylbenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Hexachlorobutadiene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Naphthalene	mg/kg	0.00005	6687	<0.05	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.0001 - 0.05	<0.0001 - 0.14	<0.0001	<0.05	<0.05	<0.0001	<0.05	<0.0001	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	mg/kg	0.05	20010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.34	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	20013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	13362	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	4178	0.18	0.25	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	0.14	0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	mg/kg	0.05	100406	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	4188	0.32	0.43	<0.05	0.13	<0.05	<0.05	<0.05	0.05	0.09	0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	mg/kg	0.05	10052	0.25	0.36	<0.05	0.12	<0.05	<0.05	<0.05	0.05	0.1	0.06	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05	46.3	<0.05	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	mg/kg	0.05	91.9	<0.05	0.23	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05	14.1	<0.05	0.22	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	133	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05	0.946	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	1060	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	11.8	<0.05	0.3	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	313	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	2.28	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	1.11	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		-	<0.1	-	-	-	-	<0.1	<0.1	0.1	<0.1	-	-	<0.1	-	<0.1	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.2		-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-	-	-
Azobenzene	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-	-	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2		-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-	-	-
Carbazole	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-	-	-
Dibenzofuran	mg/kg	0.2		-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-	-	-
Hexachloroethane	mg/kg	0.05		-	<0.05	-	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-	<0.05	-	<0.05	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-	-	-
9,10-Anthracenedione	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-	-	-
2-methylphenol	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-	-	-
2-nitrophenol	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-	-	-
2,4-dimethylphenol	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-	-	-

					W-BH22		W-BH23	W-BH24		W-BH25	W-BH26	W-BH27			W-BH28		W-BH29				W-BH30	
				7.5	0.1	20.5	0.1	0.5	20	4	0.1	0.8	2	16	17	23.2	0	2.4	5.4	18.5	0.7	2
				08/02/2023	03/02/2023	08/02/2023	19/01/2023	08/02/2023	09/02/2023	20/12/2022	23/11/2022	15/12/2022	16/12/2022	20/12/2022	22/12/2022	11/01/2023	23/11/2022	23/11/2022	23/11/2022	09/12/2022	08/12/2022	09/12/2022
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-17119	23-17045	23-17119	23-13599	23-17119	23-17144	22-14872	22-11231	22-14107	22-14647	22-14872	22-14937	23-12169	22-11231	22-11231	22-11231	22-13361	22-13360	22-13361
Determinand	Units	Method Detection Limit	Construction Worker GAC	Silt - TFD	MADE GROUND	Chalk	MADE GROUND	Clay - TFD	Chalk	Clay - TFD	Clay	Clay - TFD	Clay - TFD	Gravel - GTD	Clay - GTD	Chalk	Clay	Clay - TFD	Clay - TFD	Chalk	Clay	Silt - TFD
4-chloro-3-methylphenol	mg/kg	0.1		-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-	-	-
4-methylphenol	mg/kg	0.2		-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-	-	-
Phenol	mg/kg	0.2	6912	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-	-	-
2-chloronaphthalene	mg/kg	0.1		-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-	-	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.012	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCB 52	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCB 101	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCB 138	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCB 153	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCB 180	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	-	-	-	<0.007	-	-	-	-	-	-	<0.007	-	-	-	-	-
Aniline	mg/kg	0.1		-	<0.1	-	-	-	-	1.1	0.4	<0.1	<0.1	-	-	<0.1	-	0.6	-	-	-	-
4-chloroaniline	mg/kg	0.1		-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-	-	-
4-nitroaniline	mg/kg	0.2		-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2		-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.1		-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-	-	-
Nitrobenzene	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-	-	-
Chlorobenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
2-chlorotoluene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
4-chlorotoluene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Hexachlorobenzene	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-	-	-
Hexabromobenzene	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Bromomethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
Trichlorofluoromethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
1,2-dibromoethane	mg/kg	0.001		-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-	<0.005	-	<0.005	-	-	-	-
2-chlorophenol	mg/kg	0.1		-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-	-	-
2,4-dichlorophenol	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.2		-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.1		-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3		-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.2		-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-	-	-
Diethylphthalate	mg/kg	0.2		-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-	-	-
Dimethyl phthalate	mg/kg	0.1		-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	-	-	-	-
Isophorone	mg/kg	0.2		-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	-	-	-	-
Arsenic	mg/kg	1	117	16	13	3.2	17	16	3.7	13	18	21	15	3.9	2.7	<1	18	18	-	1.4	16	19
Barium	mg/kg	1	4086	110	48	15	66	61	33	120	83	160	80	16	16	11	72	110	-	8.9	110	110
Beryllium	mg/kg	0.06	20.7	1.2	1.2	0.17	1.3	1.4	0.3	1.1	1.3	1.3	0.81	0.21	0.15	0.08	1.6	1	-	0.09	1.2	1.1
Boron	mg/kg	0.2	47202	14	4	<0.2	4.1	3.2	<0.2	3.2	1.5	4.8	3.3	0.3	<0.2	<0.2	2.1	4	-	<0.2	5.1	3.5
Cadmium	mg/kg	0.2	139	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	0.4	<0.2	<0.2	-	0.4	<0.2	<0.2
Chromium (III+VI)	mg/kg	1	11511	33	36	3.4	39	40	7.9	31	40	38	24	5	2.8	<1	46	31	-	<1	35	31
Copper	mg/kg	1	31202	21	16	6.8	20	17	8	17	18	18	13	4.2	3.2	3.9	19	14	-	7.7	18	16
Lead	mg/kg	1	429	28	29	3.9	31	24	4.7	18	30	24	15	3.4	2.6	2.3	31	17	-	2.9	21	18
Mercury	mg/kg	0.3	23.7	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3
Nickel	mg/kg	1	1591	33	28	6.8	35	44	10	32	36	50	24	7	4.5	3.8	41	30	-	3.4	36	32
Selenium	mg/kg	1	2443	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1
Vanadium	mg/kg	1	3977	54	56	6.9	61	62	12	45	61	63	39	11	4.7	1.6	68	47	-	1.5	52	48
Zinc	mg/kg	1	152760	100	87	21	90	86	27	76	100	95	62	21	13	14	95	75	-	15	81	76
Chromium (hexavalent)	mg/kg	1.8	79.5	1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1
Sulphide	mg/kg	1		130	2.4	8.4	<1	<1	62	88	11	<1	170	8.6	2.6	<1	8.8	110	-	<1	1.7	82
% Moisture	%	0.01		53	32	17	24	21	19	35	22	24	33	14	16	17	24	31	40	17	19	24
pH (Lab)	pH_Units	0		7.3	6.2	8.8	7.7	8.3	8.5	8.4	7.8	7.9	7.6	8.7	9	9.2	7.2	7.9	-	8.4	7.5	7.7
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	<0.1	-	-	-	<0.1	-	-	-	-	-	-	-	-

				W-BH31		W-BH32			W-BH33		W-BH34		W-BH35				W-BH36		W-BH37	W-TP01	W-TP02	W-TP03
				3.2	19.2	0.8	16.2		3.4	16.5	0.1	4.7	0.1		5.5	18.9	2.5	17.5	0.1	0.1	0.8	2.3
				05/12/2022	07/12/2022	29/11/2022	01/12/2022		14/12/2022	16/12/2022	23/11/2022	24/11/2022	22/11/2022		23/11/2022	07/12/2022	07/02/2023	09/02/2023	23/01/2023	11/01/2023	11/01/2023	11/01/2023
				Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				22-13280	23-10020	22-13250	22-12879	22-12883	22-13842	22-14647	22-11275	22-11195	22-11249	22-11250	22-11231	22-13605	23-17124	23-17144	23-14634	23-12169	23-12169	23-12169
Determinand	Units	Method Detection Limit	Construction Worker GAC	Clay - TFD	Silt - GTD	Clay - TFD	Sand - GTD	Sand - GTD	Clay - TFD	Gravel - GTD	MADE GROUND	Peat - TFD	MADE GROUND	MADE GROUND	Clay - GTD	Chalk	Clay - TFD	Gravel - GTD	Clay	MADE GROUND	MADE GROUND	Clay - TFD
Textural Class (no units)	-	0		-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	1.2	-	-	-	-	-	7.2	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.46 - 0.465	0.025 - 0.0253	0.28 - 0.283	0.024 - 0.0243	-	0.35 - 0.354	0.0176 - 0.018	0.0158 - 0.016	3.19 - 3.2	0.019	-	0.0685 - 0.069	0.0095	0.45	0.0058	0.169 - 0.17	0.0072	0.0087	2.27 - 2.3
>C5-C6 Aliphatics	mg/kg	0.001	420410	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	603497	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	16835	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	17225	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2	17415	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8	344743	<8	<8	<8	<8	-	<8	<8	<8	<8	<8	-	<8	<8	<8	<8	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8	344743	<8	<8	<8	<8	-	<8	<8	<8	<8	<8	-	<8	<8	<8	<8	<8	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001	73285	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	75283	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	6832	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	6933	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	6983	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10	5233	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10	5246	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	11	<10	<10	<10	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	16	<10	<10	<10	<10	<10	<10
mineral oil	mg/kg	10		-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	171	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	75293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	28627	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001	43628	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	44350	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Vinyl chloride	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Chloroethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,1-dichloroethene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
trans-1,2-dichloroethene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,1-dichloroethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
cis-1,2-dichloroethene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Chloroform	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,1,1-trichloroethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Carbon tetrachloride	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Trichloroethene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,1,2-trichloroethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Tetrachloroethene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
2,2-dichloropropane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,1-dichloropropene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,2-dichloroethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,2-dichloropropane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Dibromomethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Bromodichloromethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
cis-1,3-dichloropropene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
trans-1,3-dichloropropene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,3-dichloropropane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Chlorodibromomethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Styrene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Bromoform	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Isopropylbenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
n-propylbenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,3,5-trimethylbenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
tert-butylbenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,2,4-trimethylbenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
sec-butylbenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
p-isopropyltoluene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
n-butylbenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Hexachlorobutadiene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Naphthalene	mg/kg	0.00005	6687	<0.05	<0.05	0.15	<0.0001	0.48	<0.05	<0.05	<0.0001 - 0.05	<0.0001 - 0.19	<0.0001 - 0.07	-	<0.0001	<0.05	0.08	<0.05	<0.0001	<0.0001	<0.05	<0.05
Acenaphthylene	mg/kg	0.05	20010	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	20013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	13362	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	4178	0.1	<0.05	0.08	<0.05	0.17	<0.05	<0.05	0.12	0.1	0.11	-	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	0.05
Anthracene	mg/kg	0.05	100406	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	4188	0.08	<0.05	0.07	<0.05	0.12	<0.05	<0.05	0.17	0.05	0.2	-	<0.05	<0.05	0.08	<0.05	<0.05	0.06	<0.05	<0.05
Pyrene	mg/kg	0.05	10052	0.07	<0.05	0.07	<0.05	0.12	<0.05	<0.05	0.17	0.05	0.2	-	<0.05	<0.05	0.09	<0.05	<0.05	0.06	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05	46.3	<0.05	<0.05	<0.05	0.1	0.05	<0.05	<0.05	0.1	<0.05	0.11	-	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	mg/kg	0.05	91.9	<0.05	<0.05	<0.05	0.08	0.07	<0.05	<0.05	0.09	<0.05	0.08	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05	14.1	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	0.08	<0.05	0.1	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	133	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05	0.946	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	1060	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	11.8	<0.05	<0.05	<0.05	0.11	0.05	<0.05	<0.05	0.11	<0.05	0.1	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	313	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.06	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	<0.85	<0.85	<0.85	1.06	<0.85	<0.85	1.14	<0.85	1.03	-	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		-	-	-	0.1	-	-	-	0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-
4-bromophenyl phenyl ether	mg/kg	0.2		-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-
4-chlorophenyl phenyl ether	mg/kg	0.3		-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-
Azobenzene	mg/kg	0.3		-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2		-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-
Carbazole	mg/kg	0.3		-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-
Dibenzofuran	mg/kg	0.2		-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-
Hexachloroethane	mg/kg	0.05		-	-	-	<0.05	-	-	-	<0.05	<0.05	<0.05	-	<0.05	-	-	-	<0.05	<0.05	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-
9,10-Anthracenedione	mg/kg	0.3		-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-
2-methylphenol	mg/kg	0.3		-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-
2-nitrophenol	mg/kg	0.3		-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-
2,4-dimethylphenol	mg/kg	0.3		-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-

				W-BH31		W-BH32			W-BH33		W-BH34		W-BH35				W-BH36		W-BH37	W-TP01	W-TP02	W-TP03
				3.2	19.2	0.8	16.2		3.4	16.5	0.1	4.7	0.1		5.5	18.9	2.5	17.5	0.1	0.1	0.8	2.3
				05/12/2022	07/12/2022	29/11/2022	01/12/2022		14/12/2022	16/12/2022	23/11/2022	24/11/2022	22/11/2022		23/11/2022	07/12/2022	07/02/2023	09/02/2023	23/01/2023	11/01/2023	11/01/2023	11/01/2023
				Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				22-13280	23-10020	22-13250	22-12879	22-12883	22-13842	22-14647	22-11275	22-11195	22-11249	22-11250	22-11231	22-13605	23-17124	23-17144	23-14634	23-12169	23-12169	23-12169
Determinand	Units	Method Detection Limit	Construction Worker GAC	Clay - TFD	Silt - GTD	Clay - TFD	Sand - GTD	Sand - GTD	Clay - TFD	Gravel - GTD	MADE GROUND	Peat - TFD	MADE GROUND	MADE GROUND	Clay - GTD	Chalk	Clay - TFD	Gravel - GTD	Clay	MADE GROUND	MADE GROUND	Clay - TFD
4-chloro-3-methylphenol	mg/kg	0.1		-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-
4-methylphenol	mg/kg	0.2		-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-
Phenol	mg/kg	0.2	6912	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-
2-chloronaphthalene	mg/kg	0.1		-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
PCB 118	mg/kg	0.001		-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	<0.012	-	-	-	-	-	-	-	-	-	-	-	-	<0.012	-	-
PCB 28	mg/kg	0.001		-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
PCB 52	mg/kg	0.001		-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
PCB 101	mg/kg	0.001		-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
PCB 138	mg/kg	0.001		-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
PCB 153	mg/kg	0.001		-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
PCB 180	mg/kg	0.001		-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	<0.007	<0.007	-	-	-	-	-	-	-	-	-	-	-	<0.007	-	-
Aniline	mg/kg	0.1		-	-	-	0.4	-	-	-	<0.1	2	<0.1	-	2.2	-	-	-	<0.1	<0.1	-	-
4-chloroaniline	mg/kg	0.1		-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-
4-nitroaniline	mg/kg	0.2		-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-
2,4-Dinitrotoluene	mg/kg	0.2		-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-
2,6-dinitrotoluene	mg/kg	0.1		-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-
Nitrobenzene	mg/kg	0.3		-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-
Chlorobenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
2-chlorotoluene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
4-chlorotoluene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,3-dichlorobenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,4-dichlorobenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,2-dichlorobenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,2,4-trichlorobenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,2,3-trichlorobenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Hexachlorobenzene	mg/kg	0.3		-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-
Hexabromobenzene	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Bromomethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
Trichlorofluoromethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
1,2-dibromoethane	mg/kg	0.001		-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005	<0.005	-	-
2-chlorophenol	mg/kg	0.1		-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-
2,4-dichlorophenol	mg/kg	0.3		-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-
2,4,5-trichlorophenol	mg/kg	0.2		-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-
2,4,6-trichlorophenol	mg/kg	0.1		-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-
Butyl benzyl phthalate	mg/kg	0.3		-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3	<0.3	-	-
Di-n-butyl phthalate	mg/kg	0.2		-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-
Diethylphthalate	mg/kg	0.2		-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-
Dimethyl phthalate	mg/kg	0.1		-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1	<0.1	-	-
Isophorone	mg/kg	0.2		-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2	<0.2	-	-
Arsenic	mg/kg	1	117	11	1.9	17	5.1	-	20	2.5	16	3.3	20	-	13	1.5	11	2.9	24	18	2.5	13
Barium	mg/kg	1	4086	120	14	100	44	-	93	12	75	12	76	-	90	11	130	15	87	96	11	120
Beryllium	mg/kg	0.06	20.7	1	0.15	1.4	0.4	-	0.81	0.14	1.1	0.28	1.6	-	0.73	0.09	0.75	0.17	1.4	1.4	0.12	1.1
Boron	mg/kg	0.2	47202	5.2	<0.2	6.4	0.3	-	1	0.2	3.4	140	5.2	-	1.8	<0.2	1.1	<0.2	2.9	4.6	<0.2	4.2
Cadmium	mg/kg	0.2	139	<0.2	0.3	<0.2	0.3	-	<0.2	<0.2	<0.2	0.3	<0.2	-	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium (III+VI)	mg/kg	1	11511	32	3	42	10	-	36	2.7	30	5.5	47	-	21	1.2	23	3.2	38	40	3.2	33
Copper	mg/kg	1	31202	16	5.9	16	10	-	350	2.6	15	19	21	-	18	2	17	5.2	20	20	6.8	18
Lead	mg/kg	1	429	18	3.3	24	7.2	-	31	2.4	32	4.3	34	-	11	2.1	16	3.4	26	28	2.6	18
Mercury	mg/kg	0.3	23.7	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	1591	31	6.7	42	12	-	31	4.1	28	13	42	-	27	3.1	24	4.8	46	38	4.1	34
Selenium	mg/kg	1	2443	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1	3977	48	4.6	63	15	-	48	5.4	51	11	72	-	30	2.2	37	6.8	60	62	4.1	52
Zinc	mg/kg	1	152760	79	17	93	28	-	560	14	87	27	99	-	47	13	67	14	94	97	11	81
Chromium (hexavalent)	mg/kg	1.8	79.5	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	0.2	-	-	-	-	-	2.1	-	-	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1		<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		170	6.7	2.7	13	-	130	4.3	21	170	<1	-	120	2.7	180	3.7	<1	1.1	1.7	430
% Moisture	%	0.01		36	13	25	15	15	27	11	21	78	24	24	14	18	27	14	24	20	5.2	31
pH (Lab)	pH_Units	0		8.2	8.3	7.6	8.7	8.4	7.9	8.3	8.2	-	7.5	7.2	8.6	8.3	8.5	8.6	7.4	8.1	9.3	7.7
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	15	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	W-TP04		W-TP05	W-TP06	W-TP07	W-TP08	W-TP09	W-TP09A		W-TP10	W-TP11		W-TP12	W-TP13	W-TP14	W-TP14A	W-TP15		W-TP16
				0.1	0.8	0.1	0.6	0.1	0.1	0.6	2.6		0.6	0.6		0.1	0.1	0.5	1.6	0.6	1.6	0.8
				18/01/2023	18/01/2023	12/01/2023	12/01/2023	23/01/2023	18/01/2023	30/11/2022	30/11/2022		13/12/2022	02/12/2022		24/01/2023	19/01/2023	24/11/2022	01/12/2022	06/12/2022	06/12/2022	26/01/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-13586	23-13586	23-12263	23-12263	23-14634	23-13586	22-13079	22-13079	22-13082	22-13738	22-12937	22-12939	23-14640	23-13599	22-11195	22-12879	22-13291	22-13291	23-15173
				MADE GROUND	Clay	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Silt	Clay	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD
Textural Class (no units)	-	0		-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	5.3	-	-	4.5	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.0497 - 0.05	0.031 - 0.0312	0.0149 - 0.015	0.0446 - 0.045	0.0478 - 0.048	0.017 - 0.0171	-	0.507 - 0.51	-	0.02 - 0.0203	0.51 - 0.513	-	0.16 - 0.163	0.026 - 0.0263	0.042 - 0.0424	2.29 - 2.3	0.11 - 0.111	0.43 - 0.434	0.27 - 0.271
>C5-C6 Aliphatics	mg/kg	0.001	420410	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	603497	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	16835	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	17225	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2	17415	<2	<2	<2	<2	<2	<2	-	<2	-	<2	<2	-	<2	<2	<2	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8	344743	<8	<8	<8	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8	344743	<8	<8	<8	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<8	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	<10	<10	<10	<10	<10	-	<10	-	<10	<10	-	<10	<10	<10	<10	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001	73285	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	75283	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	6832	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	6933	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	6983	<2	<2	<2	<2	<2	<2	-	3.5	-	<2	<2	-	<2	<2	<2	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10	5233	<10	<10	<10	<10	<10	<10	-	<10	-	<10	<10	-	<10	<10	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10	5246	<10	<10	<10	<10	<10	<10	-	12	-	<10	<10	-	<10	<10	<10	<10	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	-	24	-	<10	<10	-	<10	<10	<10	<10	<10	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	171	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001	75293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001	28627	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001	43628	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001	44350	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Vinyl chloride	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Chloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,1-dichloroethene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
trans-1,2-dichloroethene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,1-dichloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
cis-1,2-dichloroethene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Chloroform	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,1,1-trichloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Carbon tetrachloride	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Trichloroethene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,1,2-trichloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Tetrachloroethene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
2,2-dichloropropane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,1-dichloropropene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,2-dichloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,2-dichloropropane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Dibromomethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Bromodichloromethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
cis-1,3-dichloropropene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
trans-1,3-dichloropropene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,3-dichloropropane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Chlorodibromomethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,1,1,2-tetrachloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Styrene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Bromoform	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Isopropylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,1,2,2-tetrachloroethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
n-propylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,3,5-trimethylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
tert-butylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,2,4-trimethylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
sec-butylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
p-isopropyltoluene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
n-butylbenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,2-dibromo-3-chloropropane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Hexachlorobutadiene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Naphthalene	mg/kg	0.00005	6687	<0.05	<0.05	<0.05	<0.05	0.1	<0.0001	-	<0.0001 - 0.32	-	<0.05	<0.0001 - 0.19	0.18	<0.0001	<0.0001	<0.05	0.11	<0.05	<0.05	<0.0001
Acenaphthylene	mg/kg	0.05	20010	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	-	0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	20013	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	0.05	-	<0.05	0.07	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	13362	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	-	0.14	-	<0.05	0.09	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	4178	0.05	<0.05	<0.05	<0.05	<0.05	0.32	-	0.41	-	0.11	0.45	0.45	0.21	0.12	<0.05	0.16	<0.05	<0.05	<0.05
Anthracene	mg/kg	0.05	100406	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	-	0.11	-	<0.05	0.12	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	4188	0.07	<0.05	0.09	<0.05	<0.05	0.49	-	0.23	-	0.1	0.46	0.43	0.21	0.12	<0.05	0.12	<0.05	<0.05	<0.05
Pyrene	mg/kg	0.05	10052	0.06	<0.05	0.08	<0.05	<0.05	0.41	-	0.19	-	0.06	0.42	0.36	0.21	0.09	<0.05	0.12	<0.05	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05	46.3	<0.05	<0.05	<0.05	<0.05	<0.05	0.2	-	0.1	-	<0.05	0.21	0.19	0.09	<0.05	<0.05	0.06	<0.05	<0.05	<0.05
Chrysene	mg/kg	0.05	91.9	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	-	0.08	-	<0.05	0.25	0.24	0.17	0.07	<0.05	0.06	<0.05	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05	14.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.18	-	0.07	-	<0.05	0.17	0.11	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	133	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	-	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05	0.946	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	1060	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	-	<0.05	0.14	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	11.8	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	-	0.09	-	<0.05	0.26	0.17	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05	313	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	-	<0.05	-	<0.05	0.06	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	<0.85	<0.85	<0.85	<0.85	2.21	-	1.84	-	<0.85	2.99	2.51	1.12	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		-	-	-	-	-	<0.1	-	0.2	-	-	0.1	-	<0.1	<0.1	-	-	-	-	<0.1
4-bromophenyl phenyl ether	mg/kg	0.2		-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2
4-chlorophenyl phenyl ether	mg/kg	0.3		-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3
Azobenzene	mg/kg	0.3		-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3
Bis(2-chloroethoxy) methane	mg/kg	0.3		-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3
Bis(2-chloroethyl)ether	mg/kg	0.2		-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2
Carbazole	mg/kg	0.3		-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3
Dibenzofuran	mg/kg	0.2		-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2
Hexachloroethane	mg/kg	0.05		-	-	-	-	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	<0.05	-	-	-	-	<0.05
Bis(2-chloroisopropyl) ether	mg/kg	0.1		-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1
9,10-Anthracenedione	mg/kg	0.3		-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3
2-methylphenol	mg/kg	0.3		-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3
2-nitrophenol	mg/kg	0.3		-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3
2,4-dimethylphenol	mg/kg	0.3		-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3

				W-TP04		W-TP05	W-TP06	W-TP07	W-TP08	W-TP09	W-TP09A		W-TP10	W-TP11		W-TP12	W-TP13	W-TP14	W-TP14A	W-TP15		W-TP16
				0.1	0.8	0.1	0.6	0.1	0.1	0.6	2.6		0.6	0.6		0.1	0.1	0.5	1.6	0.6	1.6	0.8
				18/01/2023	18/01/2023	12/01/2023	12/01/2023	23/01/2023	18/01/2023	30/11/2022	30/11/2022		13/12/2022	02/12/2022		24/01/2023	19/01/2023	24/11/2022	01/12/2022	06/12/2022	06/12/2022	26/01/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-13586	23-13586	23-12263	23-12263	23-14634	23-13586	22-13079	22-13079	22-13082	22-13738	22-12937	22-12939	23-14640	23-13599	22-11195	22-12879	22-13291	22-13291	23-15173
Determinand	Units	Method Detection Limit	Construction Worker GAC	MADE GROUND	Clay	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Silt	Clay	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD
4-chloro-3-methylphenol	mg/kg	0.1		-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1
4-methylphenol	mg/kg	0.2		-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2
Phenol	mg/kg	0.2	6912	-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2
2-chloronaphthalene	mg/kg	0.1		-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	-	-	<0.012	-	-	<0.012	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-
PCB 52	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-
PCB 101	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-
PCB 138	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-
PCB 153	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-
PCB 180	mg/kg	0.001		-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	-	-	-	-	<0.007	-	-	<0.007	<0.007	-	-	-	-	-	-	-
Aniline	mg/kg	0.1		-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	1.1	<0.1	-	-	-	-	<0.1
4-chloroaniline	mg/kg	0.1		-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1
4-nitroaniline	mg/kg	0.2		-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2
2,4-Dinitrotoluene	mg/kg	0.2		-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2
2,6-dinitrotoluene	mg/kg	0.1		-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1
Nitrobenzene	mg/kg	0.3		-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3
Chlorobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
2-chlorotoluene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
4-chlorotoluene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,3-dichlorobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005 - 0.2	-	<0.005	<0.005	-	-	-	-	<0.005
1,4-dichlorobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,2-dichlorobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,2,4-trichlorobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,2,3-trichlorobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Hexachlorobenzene	mg/kg	0.3		-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3
Hexabromobenzene	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Bromomethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
Trichlorofluoromethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
1,2-dibromoethane	mg/kg	0.001		-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005
2-chlorophenol	mg/kg	0.1		-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1
2,4-dichlorophenol	mg/kg	0.3		-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3
2,4,5-trichlorophenol	mg/kg	0.2		-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2
2,4,6-trichlorophenol	mg/kg	0.1		-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1
Butyl benzyl phthalate	mg/kg	0.3		-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3
Di-n-butyl phthalate	mg/kg	0.2		-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2
Diethylphthalate	mg/kg	0.2		-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2
Dimethyl phthalate	mg/kg	0.1		-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1
Isophorone	mg/kg	0.2		-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2
Arsenic	mg/kg	1	117	19	20	21	19	17	20	-	12	-	16	15	-	17	19	18	29	16	13	16
Barium	mg/kg	1	4086	86	97	93	96	110	100	-	120	-	92	79	-	74	79	160	120	130	120	82
Beryllium	mg/kg	0.06	20.7	1.5	1.3	1.6	1.5	1.4	1.5	-	0.96	-	1.4	1.5	-	1.4	1.4	1.2	1.4	1.3	1.1	1.2
Boron	mg/kg	0.2	47202	6.8	3.1	7.1	11	5.1	5.4	-	8.3	-	3.4	7.4	-	6.9	3.3	1.2	8.2	4.3	3.6	4.8
Cadmium	mg/kg	0.2	139	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium (III+VI)	mg/kg	1	11511	46	40	49	43	40	45	-	29	-	41	43	-	43	42	36	39	37	32	32
Copper	mg/kg	1	31202	19	20	20	19	18	22	-	17	-	16	17	-	20	20	15	20	18	21	13
Lead	mg/kg	1	429	33	23	39	24	24	35	-	18	-	23	24	-	33	32	23	27	36	18	18
Mercury	mg/kg	0.3	23.7	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1	1591	40	40	43	41	48	41	-	30	-	40	40	-	38	37	42	38	38	32	36
Selenium	mg/kg	1	2443	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1	3977	71	61	74	62	63	70	-	47	-	59	63	-	62	67	57	63	54	48	51
Zinc	mg/kg	1	152760	96	89	120	92	90	110	-	69	-	87	97	-	92	95	81	95	82	76	76
Chromium (hexavalent)	mg/kg	1.8	79.5	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	2.7	-	-	0.8	-	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1		<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		<1	2	13	<1	<1	<1	-	750	-	2	<1	-	2	7.9	<1	12	1.2	1.4	<1
% Moisture	%	0.01		21	20	25	21	28	23	-	30	30	20	23	23	21	24	20	28	23	26	26
pH (Lab)	pH_Units	0		7.7	7.9	7.8	8.4	7.7	7.5	-	8.2	8	8.4	7.6	7.9	7.8	7.9	8.3	7.1	7.9	8	7.9
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	W-TP17		W-TP18		W-TP19A	W-TP21		W-TP23	W-TP24		W-TP26	W-TP27A	W-TP28	W-TP28A	W-TP29		W-TP30	W-TP31
				0.1	2.2	0.1	2.2	0.1	0.6	2.8	0.1	0.6		0.8	2.5	0.5	2.6	0.3		0.6	0.3
				20/01/2023	20/01/2023	25/01/2023	25/01/2023	19/01/2023	24/01/2023	24/01/2023	25/01/2023	01/12/2022		05/12/2022	24/11/2022	23/11/2022	23/11/2022	06/12/2022		14/12/2022	22/11/2022
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal		Normal	Normal
				23-14015	23-14015	23-14638	23-14638	23-13599	23-14640	23-14640	23-14638	22-12879	22-12883	22-13280	22-11195	22-11231	22-11231	22-13291	22-13294	22-13842	22-11249
				MADE GROUND	Clay - TFD	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD
Textural Class (no units)	-	0		-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	-	4.1	-	-	-	-	-	5.4	-	-
Freon 113	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.026	0.675 - 0.68	0.15	0.739 - 0.74	0.0157 - 0.016	0.147 - 0.15	0.777 - 0.78	0.036	0.0316 - 0.032	-	0.47 - 0.474	0.46 - 0.461	0.0246 - 0.025	0.656 - 0.66	0.0539 - 0.054	-	0.2 - 0.203	0.029 - 0.0294
>C5-C6 Aliphatics	mg/kg	0.001	420410	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001	603497	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001	16835	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1	17225	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1
>C12-C16 Aliphatics	mg/kg	2	17415	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	-	<2	<2
>C16-C21 Aliphatics	mg/kg	8	344743	<8	<8	<8	<8	<8	<8	<8	<8	<8	-	<8	<8	<8	<8	<8	-	<8	<8
>C21-C35 Aliphatics	mg/kg	8	344743	<8	<8	<8	<8	<8	<8	<8	<8	<8	-	<8	<8	<8	<8	<8	-	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001	73285	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001	75283	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001	6832	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1	6933	<1	<1	<1	<1	2.7	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1
>EC12-EC16 Aromatics	mg/kg	2	6983	<2	<2	<2	<2	10	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	-	<2	<2
>EC16-EC21 Aromatics	mg/kg	10	5233	<10	<10	<10	<10	58	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	<10
>EC21-EC35 Aromatics	mg/kg	10	5246	11	<10	<10	<10	70	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		19	<10	<10	<10	140	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	<10	-	-
Benzene	mg/kg	0.001	171	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001
Toluene	mg/kg	0.001	75293	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001
Ethylbenzene	mg/kg	0.001	28627	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001
Xylene (m & p)	mg/kg	0.001	43628	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001
Xylene (o)	mg/kg	0.001	44350	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	<0.005	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.001	<0.005	-	<0.005	<0.001
Chloromethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Vinyl chloride	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Chloroethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1-dichloroethene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
trans-1,2-dichloroethene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1-dichloroethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
cis-1,2-dichloroethene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Chloroform	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1,1-trichloroethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Carbon tetrachloride	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Trichloroethene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1,2-trichloroethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Tetrachloroethene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
2,2-dichloropropane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1-dichloropropene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2-dichloroethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2-dichloropropane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Dibromomethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Bromodichloromethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
cis-1,3-dichloropropene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
trans-1,3-dichloropropene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,3-dichloropropane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Chlorodibromomethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Styrene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Bromoform	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Isopropylbenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
n-propylbenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
tert-butylbenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
sec-butylbenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
p-isopropyltoluene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
n-butylbenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Hexachlorobutadiene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Naphthalene	mg/kg	0.00005	6687	0.07	<0.0001	0.15	<0.05	0.51	<0.0001	<0.05	0.06	<0.0001	0.58	<0.05	<0.0001 - 0.06	<0.05	<0.0001 - 0.07	<0.0001	<0.05	<0.05	<0.05
Acenaphthylene	mg/kg	0.05	20010	<0.05	<0.05	0.08	0.06	0.33	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05	20013	0.05	<0.05	0.06	<0.05	0.73	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05	13362	0.08	<0.05	0.06	<0.05	0.84	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	4178	0.71	0.07	0.32	0.11	9	0.17	<0.05	0.1	<0.05	0.12	0.06	0.07	0.05	0.23	0.11	0.1	0.05	0.06
Anthracene	mg/kg	0.05	100406	0.13	<0.05	0.09	<0.05	2.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	4188	0.96	0.09	0.34	0.13	14	0.28	<0.05	0.18	<0.05	0.09	0.05	0.05	0.05	0.19	0.14	0.13	0.07	0.09
Pyrene	mg/kg	0.05	10052	0.83	0.08	0.28	0.11	12	0.25	<0.05	0.14	<0.05	0.08	<0.05	0.06	0.07	0.19	0.12	0.12	0.08	0.07
Benz(a)anthracene	mg/kg	0.05	46.3	0.45	<0.05	0.13	<0.05	6.1	0.15	<0.05	0.06	0.08	<0.05	<0.05	<0.05	<0.05	0.08	0.05	0.05	<0.05	<0.05
Chrysene	mg/kg	0.05	91.9	0.41	<0.05	0.17	<0.05	5.8	0.17	<0.05	0.08	0.08	<0.05	<0.05	<0.05	<0.05	0.07	0.08	0.08	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05	14.1	0.33	<0.05	0.15	<0.05	6	0.13	<0.05	0.08	0.06	<0.05	<0.05	<0.05	<0.05	0.07	0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	133	0.24	<0.05	<0.05	<0.05	2.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05	0.946	<0.05	<0.05	<0.05	<0.05	0.77	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05	1060	0.23	<0.05	<0.05	<0.05	2.7	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05	11.8	0.47	<0.05	0.15	<0.05	5.7	0.16	<0.05	0.08	0.09	<0.05	<0.05	<0.05	<0.05	0.06	0.07	0.09	<0.05	0.06
Benzo(k)fluoranthene	mg/kg	0.05	313	0.12	<0.05	<0.05	<0.05	3.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		5.08	<0.85	1.98	<0.85	72.4	1.44	<0.85	0.85	<0.85	0.87	<0.85	<0.85	<0.85	1.08	<0.85	<0.85	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	0.1	<0.1	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.2		-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.3		-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Azobenzene	mg/kg	0.3		-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2		-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
Carbazole	mg/kg	0.3		-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Dibenzofuran	mg/kg	0.2		-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
Hexachloroethane	mg/kg	0.05		-	<0.05	-	-	-	<0.05	-	-	<0.05	-	-	<0.05	-	<0.05	<0.05	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
9,10-Anthracenedione	mg/kg	0.3		-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
2-methylphenol	mg/kg	0.3		-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
2-nitrophenol	mg/kg	0.3		-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
2,4-dimethylphenol	mg/kg	0.3		-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-

				W-TP17		W-TP18		W-TP19A	W-TP21		W-TP23	W-TP24		W-TP26	W-TP27A	W-TP28	W-TP28A	W-TP29		W-TP30	W-TP31
				0.1	2.2	0.1	2.2	0.1	0.6	2.8	0.1	0.6		0.8	2.5	0.5	2.6	0.3		0.6	0.3
				20/01/2023	20/01/2023	25/01/2023	25/01/2023	19/01/2023	24/01/2023	24/01/2023	25/01/2023	01/12/2022		05/12/2022	24/11/2022	23/11/2022	23/11/2022	06/12/2022		14/12/2022	22/11/2022
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal		Normal	Normal
				23-14015	23-14015	23-14638	23-14638	23-13599	23-14640	23-14640	23-14638	22-12879	22-12883	22-13280	22-11195	22-11231	22-11231	22-13291	22-13294	22-13842	22-11249
Determinand	Units	Method Detection Limit	Construction Worker GAC	MADE GROUND	Clay - TFD	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD
4-chloro-3-methylphenol	mg/kg	0.1		-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
4-methylphenol	mg/kg	0.2		-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
Phenol	mg/kg	0.2	6912	-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
2-chloronaphthalene	mg/kg	0.1		-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	-	-	-	-	-	-	<0.012	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
PCB 52	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
PCB 101	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
PCB 138	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
PCB 153	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
PCB 180	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	-	-	-	-	-	-	<0.007	-	<0.007	-	-	-	<0.007	-	-
Aniline	mg/kg	0.1		-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	1.3	-	0.6	<0.1	-	-	-
4-chloroaniline	mg/kg	0.1		-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
4-nitroaniline	mg/kg	0.2		-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2		-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
2,6-dinitrotoluene	mg/kg	0.1		-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
Nitrobenzene	mg/kg	0.3		-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Chlorobenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
2-chlorotoluene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
4-chlorotoluene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,3-dichlorobenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,4-dichlorobenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2-dichlorobenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Hexachlorobenzene	mg/kg	0.3		-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Hexabromobenzene	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Bromomethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Trichlorofluoromethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2-dibromoethane	mg/kg	0.001		-	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
2-chlorophenol	mg/kg	0.1		-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
2,4-dichlorophenol	mg/kg	0.3		-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
2,4,5-trichlorophenol	mg/kg	0.2		-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
2,4,6-trichlorophenol	mg/kg	0.1		-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
Butyl benzyl phthalate	mg/kg	0.3		-	<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Di-n-butyl phthalate	mg/kg	0.2		-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
Diethylphthalate	mg/kg	0.2		-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
Dimethyl phthalate	mg/kg	0.1		-	<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
Isophorone	mg/kg	0.2		-	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
Arsenic	mg/kg	1	117	18	21	18	27	17	18	11	16	16	-	14	11	23	14	18	-	11	23
Barium	mg/kg	1	4086	71	100	73	79	74	73	98	58	100	-	80	100	88	100	77	-	69	86
Beryllium	mg/kg	0.06	20.7	1.5	1.1	1.4	1.3	1.5	1.4	0.87	1.3	1.3	-	1.4	0.7	1.4	1.1	1.7	-	1.3	1.6
Boron	mg/kg	0.2	47202	7.4	9.5	5.6	13	5	2.5	3.4	4.1	3.1	-	3.4	4.4	3.6	5.6	15	-	1.9	3.8
Cadmium	mg/kg	0.2	139	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2
Chromium (III+VI)	mg/kg	1	11511	43	32	42	36	41	41	26	41	37	-	40	22	42	33	47	-	40	44
Copper	mg/kg	1	31202	21	17	19	18	22	19	15	18	19	-	18	10	21	17	21	-	21	20
Lead	mg/kg	1	429	33	20	33	21	33	33	15	32	22	-	23	13	26	21	35	-	22	28
Mercury	mg/kg	0.3	23.7	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3
Nickel	mg/kg	1	1591	39	33	38	39	36	37	27	34	37	-	38	22	43	33	43	-	40	41
Selenium	mg/kg	1	2443	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1
Vanadium	mg/kg	1	3977	68	56	65	58	66	62	38	62	55	-	56	35	63	49	64	-	60	65
Zinc	mg/kg	1	152760	97	83	93	84	95	94	66	86	87	-	90	58	100	77	97	-	88	96
Chromium (hexavalent)	mg/kg	1.8	79.5	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	-	0.7	-	-	-	-	-	2	-	-
Cyanide (Free)	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1
Sulphide	mg/kg	1		1.5	820	6.5	130	2.9	1.4	89	2.1	1.3	-	3.1	210	7.6	110	2.2	-	<1	<1
% Moisture	%	0.01		25	39	28	37	24	24	30	25	20	20	27	25	22	29	28	28	26	22
pH (Lab)	pH_Units	0		7.1	8.3	7.2	7.7	7.8	7.7	7.7	6.6	8.3	8.3	8.3	8.5	8.1	8.1	7.5	8	8	7.7
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-

Location	C-BH17	E-BH01		E-BH02		E-BH03			E-BH04		E-BH05		E-BH06A	E-BH06B				E-BH07			E-BH08
Average Depth (m)	0	0.1	3	9.3	18	0.1	0.5	10	0.1		0.5	10	0	0	3.5	24.9		0.1	0.7	10	0
Date	08/11/2022	04/01/2023	04/01/2023	11/01/2023	12/01/2023	25/01/2023	25/01/2023	26/01/2023	10/11/2022		16/11/2022	17/11/2022	17/11/2022	17/11/2022	17/11/2022	30/11/2022		24/01/2023	24/01/2023	25/01/2023	09/11/2022
Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal
Lab Report Number	22-96579	23-10590	23-10590	23-12169	23-12263	23-14638	23-14638	23-15173	22-97150	22-97153	22-98816	22-98887	22-98889	22-98887	22-98887	22-13079	23-13082	23-14640	23-14640	23-14638	22-96532
Stratum		MADE GROUND	Clay - TFD	Clay - TFD	Clay - GTD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Silt - TFD	Chalk	Chalk	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND
Textural Class (no units)	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	1
Loss on ignition	%	-	-	-	-	-	-	-	-	6.9	-	-	-	-	-	-	0.5	-	-	-	-
Freon 113	mg/kg	<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.69	0.16 - 0.163	0.29 - 0.293	0.976 - 0.98	0.02 - 0.0202	0.259 - 0.26	-	0.41 - 0.414	0.045 - 0.0452	-	0.0778 - 0.078	0.79 - 0.794	-	0.2 - 0.204	0.175 - 0.18	0.091 - 0.0913	-	0.59	0.14 - 0.142	0.8 - 0.804	0.0567 - 0.057
>C5-C6 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1		<1	<1	<1	<1	<1	<1	-	<1	<1	-	6.3	<1	-	<1	<1	<1	-	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2		6	<2	<2	<2	<2	<2	-	<2	<2	-	15	2.7	-	<2	<2	<2	-	2.6	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8		11	<8	<8	<8	<8	<8	-	<8	<8	-	18	<8	-	14	<8	<8	-	15	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8		48	<8	<8	<8	<8	19	-	<8	<8	-	47	13	-	140	<8	<8	-	43	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		65	<10	<10	<10	<10	25	-	<10	<10	-	86	19	-	150	<10	<10	-	61	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1		<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1	3.1	-	<1	<1	<1	-	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2		4.5	<2	<2	<2	<2	4.4	-	<2	<2	-	<2	5.4	-	<2	<2	<2	-	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10		21	<10	<10	<10	<10	19	-	<10	<10	-	<10	<10	-	28	<10	<10	-	17	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10		51	<10	<10	<10	<10	30	-	<10	33	-	<10	16	-	270	<10	<10	-	29	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		76	<10	<10	<10	<10	54	-	<10	39	-	<10	30	-	300	<10	<10	-	47	<10	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	370	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001
Toluene	mg/kg	0.001		<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001
Ethylbenzene	mg/kg	0.001		<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001
Xylene (m & p)	mg/kg	0.001		<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001
Xylene (o)	mg/kg	0.001		<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.001
Chloromethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Vinyl chloride	mg/kg	0.001	220	<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Chloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,1-dichloroethene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
trans-1,2-dichloroethene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,1-dichloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
cis-1,2-dichloroethene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Chloroform	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,1,1-trichloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Carbon tetrachloride	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Trichloroethene	mg/kg	0.001	33000	<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,1,2-trichloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Tetrachloroethene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
2,2-dichloropropane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,1-dichloropropene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,2-dichloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,2-dichloropropane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Dibromomethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Bromodichloromethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
cis-1,3-dichloropropene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
trans-1,3-dichloropropene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,3-dichloropropane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Chlorodibromomethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,1,1,2-tetrachloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Styrene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Bromoform	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Isopropylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,1,2,2-tetrachloroethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
n-propylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,3,5-trimethylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
tert-butylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,2,4-trimethylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
sec-butylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
p-isopropyltoluene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
n-butylbenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,2-dibromo-3-chloropropane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Hexachlorobutadiene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Naphthalene	mg/kg	0.00005		<0.0001 - 0.12	<0.05	<0.0001	<0.0001	<0.0001	0.28	<0.0001	<0.0001	<0.0001 - 0.72	-	0.54	<0.0001 - 1.5	-	<0.0001 - 0.36	<0.0001	0.18	-	<0.05	<0.0001	<0.0001	<0.0001
Acenaphthylene	mg/kg	0.05		0.06	<0.05	<0.05	<0.05	<0.05	0.3	<0.05	<0.05	0.05	-	<0.05	<0.05	-	0.08	<0.05	<0.05	-	0.14	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05		0.15	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05	0.07	-	0.09	0.39	-	0.2	<0.05	<0.05	-	0.12	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05		0.19	<0.05	<0.05	<0.05	<0.05	0.29	<0.05	<0.05	0.1	-	0.06	0.1	-	0.29	<0.05	0.07	-	0.17	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05		3.4	0.41	0.06	<0.05	<0.05	3.4	0.22	<0.05	3.3	-	0.42	0.16	-	3.1	0.11	0.21	-	2.4	0.12	0.08	<0.05
Anthracene	mg/kg	0.05		0.89	0.08	<0.05	<0.05	<0.05	0.95	<0.05	<0.05	0.29	-	0.08	<0.05	-	0.88	<0.05	<0.05	-	0.65	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05		5.8	0.51	<0.05	<0.05	<0.05	4.6	0.25	<0.05	1.7	-	0.52	0.09	-	4.5	0.13	0.1	-	4.5	0.14	0.07	0.07
Pyrene	mg/kg	0.05		5.6	0.42	<0.05	<0.05	<0.05	4.8	0.24	<0.05	4.2	-	0.45	0.07	-	4.8	0.13	0.07	-	4.4	0.13	0.08	0.07
Benz(a)anthracene	mg/kg	0.05		2.5	0.22	<0.05	<0.05	<0.05	3	0.15	<0.05	3.8	-	0.32	<0.05	-	2.7	0.06	<0.05	-	2.3	0.06	0.07	<0.05
Chrysene	mg/kg	0.05		3.2	0.34	<0.05	<0.05	<0.05	3.9	0.26	<0.05	10	-	0.35	<0.05	-	3.3	<0.05	<0.05	-	2.7	0.1	0.12	<0.05
Benzo(a) pyrene	mg/kg	0.05		2.3	0.21	<0.05	<0.05	<0.05	2.5	0.13	<0.05	3.3	-	0.18	<0.05	-	2.5	0.06	<0.05	-	2.3	0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05		1.2	0.13	<0.05	<0.05	<0.05	1.3	0.05	<0.05	1.2	-	0.1	<0.05	-	1.1	<0.05	<0.05	-	1.2	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05		0.32	<0.05	<0.05	<0.05	<0.05	0.47	<0.05	<0.05	0.91	-	<0.05	<0.05	-	0.35	<0.05	<0.05	-	0.35	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05		1.4	0.16	<0.05	<0.05	<0.05	1.6	0.09	<0.05	3.1	-	0.15	<0.05	-	1.3	<0.05	<0.05	-	1.5	0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05		2.6	0.25	<0.05	<0.05	<0.05	2.5	0.16	<0.05	3.5	-	0.22	<0.05	-	3.2	0.07	<0.05	-	2.6	0.09	0.06	<0.05
Benzo(k)fluoranthene	mg/kg	0.05		1.5	0.15	<0.05	<0.05	<0.05	1.3	<0.05	<0.05	1.2	-	0.12	<0.05	-	0.93	<0.05	<0.05	-	1.1	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		31.3	2.88	<0.85	<0.85	<0.85	31.2	-	<0.85	37.7	-	3.6	2.33	-	29.6	<0.85	<0.85	-	26.4	<0.85	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	0.5	-	-	0.3	-	0.3	<0.1	-	-	-	<0.1	<0.1	<0.1
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	<0.3	<0.3
Azobenzene	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	<0.3	<0.3
Bis(2-chloroethoxy) methane	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	<0.3	<0.3
Bis(2-chloroethyl)ether	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2
Carbazole	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	0.4	<0.3	<0.3	-	-	<0.3	<0.3	<0.3
Dibenzofuran	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	0.4	-	0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2
Hexachloroethane	mg/kg	0.05		<0.05	-	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	-	<0.05	-	<0.05	<0.05	<0.05	-	-	<0.05	<0.05	<0.05
Bis(2-chloroisopropyl) ether	mg/kg	0.1		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	<0.1	<0.1
9,10-Anthracenedione	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	<0.3	<0.3
2-methylphenol	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	<0.3	<0.3
2-nitrophenol	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	<0.3	<0.3
2,4-dimethylphenol	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	<0.3	<0.3
4-chloro-3-methylphenol	mg/kg	0.1		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	<0.1	<0.1
4-methylphenol	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2
Phenol	mg/kg	0.2	175000	<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2
2-chloronaphthalene	mg/kg	0.1		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	<0.1	<0.1
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	1.1	-	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-

Location			C-BH17	E-BH01		E-BH02		E-BH03			E-BH04		E-BH05		E-BH06A	E-BH06B				E-BH07				E-BH08
Average Depth (m)			0	0.1	3	9.3	18	0.1	0.5	10	0.1		0.5	10	0	0	3.5	24.9		0.1	0.7	10	0	
Date			08/11/2022	04/01/2023	04/01/2023	11/01/2023	12/01/2023	25/01/2023	25/01/2023	26/01/2023	10/11/2022		16/11/2022	17/11/2022	17/11/2022	17/11/2022	17/11/2022	30/11/2022		24/01/2023	24/01/2023	25/01/2023	09/11/2022	
Sample Type			Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	
Lab Report Number			22-96579	23-10590	23-10590	23-12169	23-12263	23-14638	23-14638	23-15173	22-97150	22-97153	22-98816	22-98887	22-98889	22-98887	22-98887	22-13079	22-13082	23-14640	23-14640	23-14638	22-96532	
Stratum				MADE GROUND	Clay - TFD	Clay - TFD	Clay - GTD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Silt - TFD	Chalk	Chalk	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	
Determinand	Units	Method Detection Limit	Construction Worker GAC																					
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	
Total PCB WHO 12	mg/kg	0.012		<0.012	-	-	-	-	-	-	-	-	-	-	-	<0.012	-	-	-	-	-	-	<0.012	
PCB 28	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	
PCB 52	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	
PCB 101	mg/kg	0.001		0.003	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	
PCB 138	mg/kg	0.001		0.01	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	
PCB 153	mg/kg	0.001		0.011	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	
PCB 180	mg/kg	0.001		0.011	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	<0.001	
PCBs (Sum of total)	mg/kg	0.007		0.036	-	-	-	-	-	-	-	-	-	-	-	<0.007	-	-	-	-	-	-	<0.007	
Aniline	mg/kg	0.1		0.5	-	8.7	<0.1	<0.1	-	<0.1	1.8	0.7	-	-	<0.1	-	1.1	0.7	-	-	-	<0.1	<0.1	0.6
4-chloroaniline	mg/kg	0.1		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1
4-nitroaniline	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2
2,4-Dinitrotoluene	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2
2,6-dinitrotoluene	mg/kg	0.1		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1
Nitrobenzene	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3
Chlorobenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
2-chlorotoluene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
4-chlorotoluene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,3-dichlorobenzene	mg/kg	0.001		<0.001 - 0.4	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001 - 0.2	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,4-dichlorobenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,2-dichlorobenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,2,4-trichlorobenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,2,3-trichlorobenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Hexachlorobenzene	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3
Hexabromobenzene	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Bromomethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
Trichlorofluoromethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
1,2-dibromoethane	mg/kg	0.001		<0.001	-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.005	<0.005	<0.001
2-chlorophenol	mg/kg	0.1		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1
2,4-dichlorophenol	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3
2,4,5-trichlorophenol	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2
2,4,6-trichlorophenol	mg/kg	0.1		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1
Butyl benzyl phthalate	mg/kg	0.3		<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	<0.3	<0.3	<0.3
Di-n-butyl phthalate	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2
Diethylphthalate	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2
Dimethyl phthalate	mg/kg	0.1		<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	<0.1	<0.1	<0.1
Isophorone	mg/kg	0.2		<0.2	-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	<0.2
Arsenic	mg/kg	1	7000	6.6	15	13	13	3.5	10	-	13	9.2	-	16	12	-	10	11	3.2	-	9.2	13	10	17
Barium	mg/kg	1		260	79	93	93	26	130	-	75	130	-	81	38	-	150	130	13	-	150	100	81	86
Beryllium	mg/kg	0.06		6.4	1	0.88	1	0.26	0.81	-	0.77	0.87	-	1.2	1	-	0.88	0.87	0.14	-	1	0.91	0.76	1.2
Boron	mg/kg	0.2		3.9	7	10	20	0.4	2.6	-	6.7	0.6	-	1.1	17	-	4.1	3.7	0.5	-	1.5	1.3	16	3.4
Cadmium	mg/kg	0.2	12000	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	0.4	-	<0.2	<0.2	<0.2	<0.2
Chromium (III+VI)	mg/kg	1		64	32	27	30	7.7	23	-	23	24	-	35	28	-	26	26	2.2	-	23	28	23	38
Copper	mg/kg	1		19	19	16	15	3.9	33	-	10	40	-	22	22	-	29	11	5.1	-	34	18	14	15
Lead	mg/kg	1		15	35	18	17	4.7	52	-	12	30	-	38	15	-	58	14	3	-	72	32	15	24
Mercury	mg/kg	0.3		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1		5.9	31	28	33	9.1	15	-	24	16	-	34	29	-	15	26	14	-	13	28	25	35
Selenium	mg/kg	1		<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1
Vanadium	mg/kg	1		180	51	42	46	14	37	-	37	33	-	53	37	-	49	38	3.5	-	36	42	37	56
Zinc	mg/kg	1		55	83	62	76	20	89	-	59	130	-	93	86	-	95	60	27	-	79	74	68	79
Chromium (hexavalent)	mg/kg	1.8		<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	-	1.6	-	-	0.9	-	-	-	0.2	-	-	-	-
Cyanide (Free)	mg/kg	1	1400	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1
Sulphide	mg/kg	1		2,600	5.9	88	100	26	29	-	160	120	-	7.9	270	-	28	230	36	-	65	1.1	130	9
% Moisture	%	0.01		13	22	31	45	13	9.5	18	43	14	14	19	48	9.8	9.8	22	18	18	12	17	46	22
pH (Lab)	pH_Units	0		10.4	7.6	8.2	7.4	8.7	10.8	-	8.3	11.9	8.4	8	8.2	9.5	10.6	8.8	8.5	7.9	7.9	8.1	7.4	8.8
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	-	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	<0.1

Determinand	Units	Method Detection Limit	Construction Worker GAC	E-BH09	E-BH10					E-BH11	E-BH12		E-BH13	E-BH14	E-BH14A	E-BH15				E-BH16			E-BH17
				11.5	23.4	0.8	0	1.7		21.4	25.2	21	0.1	23.5	3	0.3	1.5	3.5	0.2		10		0.9	14	24	9
				16/11/2022	17/11/2022	13/12/2022	11/11/2022	11/11/2022		17/11/2022	25/11/2022	03/02/2023	30/01/2023	02/02/2023	10/02/2023	16/01/2023	13/02/2023	13/02/2023	28/11/2022		06/12/2022		25/11/2022	30/11/2022	01/12/2022	18/11/2022
				Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal		Normal	Normal	Normal	Normal
				22-98816	22-98887	22-13738	22-97121	22-97121	22-97123	22-98887	22-11254	23-17045	23-15977	23-16960	23-18009	23-13184	23-18009	23-18009	22-13308	22-13322	22-13291	22-13294	22-11254	22-13079	22-12879	22-98820
				Clay - GTD	Chalk	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Gravel - GTD	Chalk	Gravel - GTD	MADE GROUND	Silt - GTD	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	MADE GROUND	Clay - GTD	Silt - GTD	Clay - TFD
Textural Class (no units)	-	0		-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	2.6	-	-	-	-	-	-	-	-	-	-	41.1	-	11.6	-	-	-	-
Freon 113	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.013 - 0.0132	0.0087	0.197 - 0.2	-	0.278 - 0.28	-	0.0106 - 0.011	0.0074	0.015 - 0.0151	0.688 - 0.69	0.015 - 0.0154	0.55 - 0.554	3.07 - 3.1	2.6	0.33 - 0.332	0.5 - 0.503	-	1.4 - 1.43	-	0.0445 - 0.045	0.33 - 0.334	0.011 - 0.0113	0.296 - 0.3
>C5-C6 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1		5.7	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1	1.3	<1	<1	<1	-	<1	-	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2		12	<2	<2	-	<2	-	<2	<2	<2	<2	<2	<2	5	2.6	<2	2.6	-	<2	-	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8		17	<8	<8	-	<8	-	<8	<8	<8	<8	<8	<8	12	<8	<8	8.2	-	<8	-	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8		44	<8	<8	-	<8	-	<8	23	<8	<8	<8	<8	230	22	<8	34	-	<8	-	<8	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		78	<10	<10	-	<10	-	<10	28	<10	<10	<10	<10	250	29	<10	45	-	<10	-	<10	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.036	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.058	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.027	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1		<1	<1	<1	-	1.2	-	<1	<1	<1	<1	<1	<1	<1	2.2	<1	1.9	-	<1	-	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2		<2	<2	<2	-	2.9	-	<2	<2	<2	<2	<2	<2	<2	8.5	<2	6.7	-	<2	-	<2	2.8	<2	<2
>EC16-EC21 Aromatics	mg/kg	10		<10	<10	<10	-	<10	-	<10	<10	<10	<10	<10	<10	<10	22	<10	<10	-	<10	-	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10		<10	<10	<10	-	14	-	<10	20	<10	<10	<10	<10	180	29	<10	<10	-	<10	-	<10	10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	-	22	-	<10	20	<10	<10	<10	<10	190	61	<10	23	-	<10	-	<10	20	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-
Benzene	mg/kg	0.001	370	<0.001	<0.001	<0.005	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	0.025	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001
Toluene	mg/kg	0.001		<0.001	<0.001	<0.005	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	0.049	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001
Ethylbenzene	mg/kg	0.001		<0.001	<0.001	<0.005	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001
Xylene (m & p)	mg/kg	0.001		<0.001	<0.001	<0.005	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001
Xylene (o)	mg/kg	0.001		<0.001	<0.001	<0.005	-	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	0.0089	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.001
Total BTEX	mg/kg	0.005		-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-
MTBE	mg/kg	0.001		<0.001	<0.001	<0.005	-	<0.001	-	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.001	<0.005	<0.005	<0.001
Chloromethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Vinyl chloride	mg/kg	0.001	220	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Chloroethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,1-dichloroethene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
trans-1,2-dichloroethene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,1-dichloroethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
cis-1,2-dichloroethene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Chloroform	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,1,1-trichloroethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Carbon tetrachloride	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Trichloroethene	mg/kg	0.001	33000	<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,1,2-trichloroethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Tetrachloroethene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
2,2-dichloropropane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,1-dichloropropene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,2-dichloroethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,2-dichloropropane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Dibromomethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Bromodichloromethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
cis-1,3-dichloropropene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
trans-1,3-dichloropropene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,3-dichloropropane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Chlorodibromomethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Styrene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Bromoform	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Isopropylbenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
n-propylbenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
tert-butylbenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
sec-butylbenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
p-isopropyltoluene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
n-butylbenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Hexachlorobutadiene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Naphthalene	mg/kg	0.00005		<0.0001 - 0.2	0.34	<0.0001	-	<0.0001 - 0.53	0.45	0.07	<0.05	<0.05	<0.0001	<0.05	<0.0001	<0.0001 - 2	2.4	<0.0001	<0.0001 - 1.8	-	<0.0001	0.11	<0.0001 - 0.06	0.38	0.11	0.12
Acenaphthylene	mg/kg	0.05		<0.05	<0.05	<0.05	-	0.07	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	0.06	<0.05	<0.05
Acenaphthene	mg/kg	0.05		<0.05	<0.05	<0.05	-	0.09	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.49	0.57	<0.05	0.16	-	<0.05	<0.05	<0.05	0.07	<0.05	<0.05
Fluorene	mg/kg	0.05		<0.05	0.08	0.05	-	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.64	0.68	<0.05	0.52	-	<0.05	<0.05	<0.05	0.15	0.05	<0.05
Phenanthrene	mg/kg	0.05		<0.05	0.16	0.32	-	0.16	0.11	0.21	<0.05	<0.05	0.72	<0.05	0.07	2.8	5.4	0.06	2.3	-	<0.05	0.06	0.06	0.47	0.14	0.09
Anthracene	mg/kg	0.05		<0.05	<0.05	0.07	-	<0.05	<0.05	0.07	<0.05	<0.05	0.16	<0.05	<0.05	0.96	1.3	<0.05	0.5	-	<0.05	<0.05	<0.05	0.1	<0.05	<0.05
Fluoranthene	mg/kg	0.05		<0.05	0.22	0.31	-	0.15	0.09	0.56	<0.05	<0.05	1.5	<0.05	0.08	2.5	6.4	0.05	1.6	-	<0.05	<0.05	0.07	0.23	0.15	0.06
Pyrene	mg/kg	0.05		<0.05	0.21	0.3	-	0.14	0.11	0.59	<0.05	<0.05	1.7	<0.05	0.08	2.5	5.7	0.06	1.6	-	<0.05	<0.05	0.07	0.18	0.17	0.05
Benz(a)anthracene	mg/kg	0.05		<0.05	0.17	0.17	-	0.07	<0.05	0.43	<0.05	<0.05	1.2	<0.05	<0.05	1.5	3.2	<0.05	1	-	<0.05	<0.05	<0.05	0.1	0.07	<0.05
Chrysene	mg/kg	0.05		<0.05	0.14	0.23	-	0.09	<0.05	0.4	<0.05	<0.05	1.7	<0.05	<0.05	1.6	2.5	0.05	1	-	<0.05	<0.05	<0.05	0.09	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05		<0.05	0.15	0.14	-	0.07	<0.05	0.41	<0.05	<0.05	1.3	<0.05	<0.05	1.2	2.5	<0.05	0.65	-	<0.05	<0.05	0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05		<0.05	<0.05	0.07	-	<0.05	<0.05	0.24	<0.05	<0.05	0.78	<0.05	<0.05	0.52	1.2	<0.05	0.52	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	0.22	<0.05	<0.05	0.21	0.3	<0.05	0.15	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	<0.05	0.11	-	<0.05	<0.05	0.25	<0.05	<0.05	0.96	<0.05	<0.05	0.7	1.4	<0.05	0.89	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	0.17	0.19	-	0.1	<0.05	0.46	<0.05	<0.05	1.4	<0.05	<0.05	1.6	2.9	<0.05	1.1	-	<0.05	<0.05	0.05	0.08	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	0.07	0.06	-	<0.05	<0.05	0.26	<0.05	<0.05	0.79	<0.05	<0.05	0.61	0.93	<0.05	0.6	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	1.71	2.02	-	1.55	<0.85	4.03	<0.85	<0.85	12.3	<0.85	<0.85	20	37.2	<0.85	14.4	-	<0.85	<0.85	<0.85	1.91	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		0.1	-	<0.1	-	0.3	-	-	-	-	<0.1	-	<0.1	1.9	-	<0.1	3.9	-	<0.1	-	<0.1	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-
Azobenzene	mg/kg	0.3		<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2		<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-
Carbazole	mg/kg	0.3		<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-
Dibenzofuran	mg/kg	0.2		<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	0.5	-	<0.2	0.9	-	<0.2	-	<0.2	-	-	-
Hexachloroethane	mg/kg	0.05		<0.05	-	<0.05	-	<0.05	-	-	-	-	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	-	<0.05	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-
9,10-Anthracenedione	mg/kg	0.3		<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-
2-methylphenol	mg/kg	0.3		<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-
2-nitrophenol	mg/kg	0.3		<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-
2,4-dimethylphenol	mg/kg	0.3		<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-
4-chloro-3-methylphenol	mg/kg	0.1		<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-
4-methylphenol	mg/kg	0.2		<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-
Phenol	mg/kg	0.2	175000	<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-
2-chloronaphthalene	mg/kg	0.1		<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	0.001	-	-	<0.001	-	<0.001	<0.001	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	E-BH09	E-BH10					E-BH11	E-BH12		E-BH13	E-BH14	E-BH14A		E-BH15				E-BH16			E-BH17
				11.5	23.4	0.8	0	1.7		21.4	25.2	21	0.1	23.5	3	0.3	1.5	3.5	0.2		10		0.9	14	24	9
				16/11/2022	17/11/2022	13/12/2022	11/11/2022	11/11/2022		17/11/2022	25/11/2022	03/02/2023	30/01/2023	02/02/2023	10/02/2023	16/01/2023	13/02/2023	13/02/2023	28/11/2022		06/12/2022		25/11/2022	30/11/2022	01/12/2022	18/11/2022
				Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal		Normal	Normal	Normal	Normal
				22-98816	22-98887	22-13738	22-97121	22-97121	22-97123	22-98887	22-11254	23-17045	23-15977	23-16960	23-18009	23-13184	23-18009	23-18009	22-13308	22-13322	22-13291	22-13294	22-11254	22-13079	22-12879	22-98820
				Clay - GTD	Chalk	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Gravel - GTD	Chalk	Gravel - GTD	MADE GROUND	Silt - GTD	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	MADE GROUND	Clay - GTD	Silt - GTD	Clay - TFD
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	<0.001	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	<0.012	-	-	-	-	-	-	-	-	-	<0.012	-	-	<0.012	-	<0.012	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	0.004	-	-	0.009	-	<0.001	<0.001	-	-	-	-
PCB 52	mg/kg	0.001		-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	0.002	-	-	0.002	-	<0.001	<0.001	-	-	-	-
PCB 101	mg/kg	0.001		-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	0.004	-	-	0.001	-	<0.001	<0.001	-	-	-	-
PCB 138	mg/kg	0.001		-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	0.015	-	-	0.002	-	<0.001	<0.001	-	-	-	-
PCB 153	mg/kg	0.001		-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	0.02	-	-	0.002	-	<0.001	<0.001	-	-	-	-
PCB 180	mg/kg	0.001		-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	0.023	-	-	0.002	-	<0.001	<0.001	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	<0.007	-	-	<0.007	-	-	-	-	-	-	0.069	-	-	0.018	-	<0.007	<0.007	-	-	-	-
Aniline	mg/kg	0.1		0.4	-	<0.1	-	0.3	-	-	-	-	<0.1	-	<0.1	2.4	-	<0.1	<0.1	-	0.3	-	2.6	-	-	-
4-chloroaniline	mg/kg	0.1		<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-
4-nitroaniline	mg/kg	0.2		<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2		<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-
2,6-dinitrotoluene	mg/kg	0.1		<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-
Nitrobenzene	mg/kg	0.3		<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-
Chlorobenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
2-chlorotoluene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
4-chlorotoluene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,3-dichlorobenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005 - 0.2	-	<0.005	<0.005 - 0.9	-	<0.005	-	<0.001	-	-	-
1,4-dichlorobenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,2-dichlorobenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Hexachlorobenzene	mg/kg	0.3		<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-
Hexabromobenzene	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Bromomethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
Trichlorofluoromethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
1,2-dibromoethane	mg/kg	0.001		<0.001	-	<0.005	-	<0.001	-	-	-	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	-	<0.001	-	-	-
2-chlorophenol	mg/kg	0.1		<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-
2,4-dichlorophenol	mg/kg	0.3		<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-
2,4,5-trichlorophenol	mg/kg	0.2		<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-
2,4,6-trichlorophenol	mg/kg	0.1		<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-
Butyl benzyl phthalate	mg/kg	0.3		<0.3	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	-	<0.3	-	-	-
Di-n-butyl phthalate	mg/kg	0.2		<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-
Diethylphthalate	mg/kg	0.2		<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-
Dimethyl phthalate	mg/kg	0.1		<0.1	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	<0.1	-	<0.1	<0.1	-	<0.1	-	<0.1	-	-	-
Isophorone	mg/kg	0.2		<0.2	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	-	<0.2	-	<0.2	-	-	-
Arsenic	mg/kg	1	7000	8.1	3	17	-	14	-	4.1	1.3	2.8	10	3.5	17	12	28	15	7.3	-	14	-	5.9	8.1	2.5	18
Barium	mg/kg	1		100	20	79	-	140	-	17	11	10	130	22	89	170	120	100	120	-	74	-	19	73	13	56
Beryllium	mg/kg	0.06		0.72	0.32	1.4	-	1.1	-	0.23	0.12	0.14	1.2	0.23	1	1.9	1.3	0.98	1	-	1.1	-	0.18	0.66	0.13	1.2
Boron	mg/kg	0.2		1.4	0.3	1.6	-	6.8	-	<0.2	<0.2	<0.2	1.8	0.2	7.2	5.1	3.6	9.5	11	-	5	-	0.3	1	0.4	6.3
Cadmium	mg/kg	0.2	12000	<0.2	0.3	<0.2	-	<0.2	-	<0.2	0.3	0.2	<0.2	0.2	<0.2	0.6	<0.2	<0.2	0.5	-	<0.2	-	0.3	<0.2	0.3	<0.2
Chromium (III+VI)	mg/kg	1		20	7.4	42	-	31	-	4.8	2.2	2.9	23	5.3	30	140	29	28	270	-	34	-	2.8	16	2	35
Copper	mg/kg	1		17	8.5	18	-	17	-	3.1	4.2	4.8	14	6	16	60	49	18	45	-	18	-	11	12	5.7	18
Lead	mg/kg	1		11	5.4	30	-	28	-	3.8	2.3	2.4	53	3.9	18	140	48	17	430	-	19	-	5	10	2.8	19
Mercury	mg/kg	0.3		<0.3	<0.3	<0.3	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1		20	12	37	-	29	-	5.9	12	4.7	14	7.3	32	49	23	30	38	-	36	-	14	21	5.3	36
Selenium	mg/kg	1		<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	8.4	-	<1	-	<1	<1	<1	<1
Vanadium	mg/kg	1		27	11	62	-	47	-	9.3	3.1	6.6	38	9.1	45	86	68	43	60	-	49	-	4.2	24	3	49
Zinc	mg/kg	1		44	24	95	-	72	-	19	19	16	96	21	73	140	150	71	190	-	85	-	20	39	19	88
Chromium (hexavalent)	mg/kg	1.8		<1.8	<1.8	<1.8	-	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	6.7	-	-	-	-
Cyanide (Free)	mg/kg	1	1400	<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	-	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	<1	<1
Sulphide	mg/kg	1		18	26	<1	-	81	-	<1	<1	<1	92	24	270	71	80	230	320	-	170	-	2.2	62	2.2	830
% Moisture	%	0.01		14	14	22	-	29	29	11	18	13	13	12	30	6.3	13	28	9.1	9.1	40	40	9.4	14	19	33
pH (Lab)	pH_Units	0		9.1	8.4	8.8	-	8.8	8.3	8.8	8.7	8.9	10.3	8.8	8.7	8.5	8.6	8.5	10.1	10	6.9	7.6	9.3	8.6	8.8	8.4
Asbestos Type	None	0		-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	1	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	30	-	<0.1	-	-	-	-

				E-BH18						E-BH19		E-BH20						E-BH21				E-BH22				
				20.8	0.5	2.5		4.5	27.4	0.9	21.6	0.8		4	15.5		21.1	2.7	9.2	20.5		0.6	1.2		12.4	
				22/11/2022	25/11/2022	28/11/2022		29/11/2022	13/12/2022	14/12/2022	21/12/2022	28/11/2022		29/11/2022	30/11/2022		01/12/2022	17/01/2023	18/01/2023	19/01/2023		29/11/2022	05/12/2022		06/12/2022	
				Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal		Normal	Normal		Normal	Normal	Normal	Normal		Normal	Normal		Normal	
				22-11249	22-11254	22-13308	22-13322	22-13250	22-13359	22-13738	22-13842	22-14905	22-13308	22-13322	22-13250	22-13079	22-13082	22-12879	23-13550	23-13586	23-13599		22-13250	22-13280	22-13282	22-13291	22-13294
Determinand	Units	Method Detection Limit	Construction Worker GAC	Gravel - GTD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Chalk	MADE GROUND	Clay - GTD	MADE GROUND	MADE GROUND	Clay - TFD	Sand - GTD	Sand - GTD	Sand - GTD	Clay - TFD	Silt - TFD	Gravel - GTD		MADE GROUND	MADE GROUND	MADE GROUND	Clay - GTD	Clay - GTD
Textural Class (no units)	-	0		-	-	-	1	-	1	-	-	1	-	1	-	-	1	-	-	-	-		-	-	1	-	1
Loss on ignition	%	0.2		-	-	-	-	-	3.2	-	-	-	-	-	-	2.1	-	-	-	-	-		-	-	3	-	2
Freon 113	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.015 - 0.0151	0.11 - 0.114	0.1 - 0.102	-	0.6 - 0.602	-	0.0289 - 0.029	0.468 - 0.47	0.0071	0.28 - 0.283	-	0.427 - 0.43	0.057	-	0.013 - 0.0134	0.18 - 0.181	1.17 - 1.2	0.0061		1.4 - 1.41	0.6 - 0.603	-	0.11 - 0.111	-
>C5-C6 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	-	<0.001	-
>C6-C8 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	-	<0.001	-
>C8-C10 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	-	<0.001	-
>C10-C12 Aliphatics	mg/kg	1		<1	<1	<1	-	<1	-	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1		<1	<1	-	<1	-
>C12-C16 Aliphatics	mg/kg	2		<2	4.7	<2	-	<2	-	<2	4.6	<2	3.4	-	<2	<2	-	<2	<2	<2	<2		2.8	<2	-	2.1	-
>C16-C21 Aliphatics	mg/kg	8		<8	29	<8	-	<8	-	<8	14	<8	17	-	<8	<8	-	<8	<8	<8	<8		18	<8	-	<8	-
>C21-C35 Aliphatics	mg/kg	8		<8	1,400	<8	-	<8	-	8.9	78	<8	48	-	<8	<8	-	<8	<8	<8	<8		190	15	-	<8	-
>C5-C35 Aliphatics	mg/kg	10		<10	1,500	<10	-	<10	-	<10	96	<10	68	-	<10	<10	-	<10	<10	<10	<10		210	15	-	<10	-
>EC5-EC7 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	-	<0.001	-
>EC7-EC8 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	-	<0.001	-
>EC8-EC10 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	-	<0.001	-
>EC10-EC12 Aromatics	mg/kg	1		<1	<1	<1	-	<1	-	<1	<1	<1	2.1	-	<1	3.6	-	<1	<1	<1	<1		<1	<1	-	<1	-
>EC12-EC16 Aromatics	mg/kg	2		<2	8.8	<2	-	<2	-	<2	11	<2	6.9	-	<2	9.1	-	<2	<2	<2	<2		17	5.5	-	<2	-
>EC16-EC21 Aromatics	mg/kg	10		<10	42	<10	-	<10	-	<10	33	<10	33	-	<10	13	-	<10	<10	<10	<10		150	15	-	<10	-
>EC21-EC35 Aromatics	mg/kg	10		<10	1,400	<10	-	<10	-	<10	79	<10	45	-	<10	17	-	<10	<10	<10	<10		430	25	-	<10	-
>EC5-EC35 Aromatics	mg/kg	10		<10	1,400	<10	-	<10	-	<10	120	<10	87	-	<10	43	-	<10	<10	<10	<10		590	45	-	<10	-
mineral oil	mg/kg	10		-	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-		-	-	37	-	<10
Benzene	mg/kg	0.001	370	<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001		<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001		<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001		<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001		<0.001	<0.001	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-	-		-	-	<0.005	-	<0.005
MTBE	mg/kg	0.001		<0.001	<0.001	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	-	<0.005	-
Chloromethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Vinyl chloride	mg/kg	0.001	220	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Chloroethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,1-dichloroethene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,1-dichloroethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Chloroform	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Carbon tetrachloride	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Trichloroethene	mg/kg	0.001	33000	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Tetrachloroethene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
2,2-dichloropropane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,1-dichloropropene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,2-dichloroethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,2-dichloropropane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Dibromomethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Bromodichloromethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,3-dichloropropane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Chlorodibromomethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Styrene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Bromoform	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Isopropylbenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
n-propylbenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
tert-butylbenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
sec-butylbenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
p-isopropyltoluene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
n-butylbenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Naphthalene	mg/kg	0.00005		<0.05	0.89	<0.0001 - 0.06	-	<0.0001	<0.05	<0.05	2.3	<0.05	<0.0001 - 1.4	-	<0.0001	1	-	0.12	<0.0001	<0.05	<0.05		1.5	0.21	0.21	<0.05	<0.05
Acenaphthylene	mg/kg	0.05		<0.05	0.18	<0.05	-	<0.05	<0.05	<0.05	0.08	<0.05	0.06	-	<0.05	0.25	-	<0.05	<0.05	<0.05	<0.05		0.15	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05		<0.05	0.21	<0.05	-	<0.05	<0.05	<0.05	0.84	<0.05	1.1	-	<0.05	0.22	-	<0.05	<0.05	<0.05	<0.05		3.9	0.56	0.57	<0.05	<0.05
Fluorene	mg/kg	0.05		<0.05	0.36	<0.05	-	<0.05	<0.05	<0.05	0.71	<0.05	1.2	-	<0.05	0.51	-	0.07	<0.05	<0.05	<0.05		5.5	0.53	0.55	<0.05	<0.05
Phenanthrene	mg/kg	0.05		<0.05	1.7	0.11	-	0.15	0.14	0.07	7.1	<0.05	11	-	0.3	1.5	-	0.33	0.21	0.07	0.07		40	4.6	4.8	0.09	0.06
Anthracene	mg/kg	0.05		<0.05	0.62	<0.05	-	<0.05	0.13	<0.05	1.6	<0.05	3.2	-	0.07	0.42	-	0.07	<0.05	<0.05	<0.05		12	1.1	1.2	<0.05	<0.05
Fluoranthene	mg/kg	0.05		<0.05	1.8	0.09	-	0.15	0.13	0.05	7.8	<0.05	18	-	0.39	0.86	-	0.36	0.27	<0.05	0.05		38	6.8	6.9	0.06	0.06
Pyrene	mg/kg	0.05		<0.05	1.6	0.1	-	0.13	0.13	<0.05	7.1	<0.05	17	-	0.38	0.61	-	0.32	0.22	<0.05	0.05		30	5.4	5.6	0.08	0.07
Benz(a)anthracene	mg/kg	0.05		<0.05	1	<0.05	-	0.08	<0.05	<0.05	3.6	<0.05	6.8	-	0.17	0.31	-	0.16	0.12	<0.05	<0.05		16	3.1	3.6	<0.05	<0.05
Chrysene	mg/kg	0.05		<0.05	1.1	<0.05	-	<0.05	<0.05	<0.05	2.9	<0.05	6.3	-	0.19	0.27	-	0.1	0.15	<0.05	<0.05		14	2.8	2.5	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05		<0.05	0.84	<0.05	-	<0.05	<0.05	<0.05	2.6	<0.05	4.1	-	0.1	0.2	-	0.09	0.09	<0.05	<0.05		11	2.2	2.3	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05		<0.05	0.29	<0.05	-	<0.05	<0.05	<0.05	1.3	<0.05	1.7	-	<0.05	0.1	-	<0.05	<0.05	<0.05	<0.05		4.4	1.1	1.1	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	0.26	<0.05	0.39	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05		1.3	0.26	0.34	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	0.46	<0.05	-	<0.05	<0.05	<0.05	1.4	<0.05	1.8	-	<0.05	0.12	-	<0.05	<0.05	<0.05	<0.05		5.1	1.2	1.2	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	0.88	<0.05	-	0.06	<0.05	<0.05	3.1	<0.05	4.4	-	0.11	0.23	-	0.11	0.1	<0.05	<0.05		14	3	3.1	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	0.46	<0.05	-	<0.05	<0.05	<0.05	1.4	<0.05	2.8	-	0.08	0.12	-	0.07	<0.05	<0.05	<0.05		5.1	1.1	1	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	12.4	<0.85	-	<0.85	<0.85	<0.85	44	<0.85	81.4	-	1.79	6.75	-	1.8	1.16	<0.85	<0.85		201	34	35	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05		1.4	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		-	-	<0.1	-	<0.1	-	-	-	-	0.9	-	<0.1	-	-	-	<0.1	-	-		-	-	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.2		-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-		-	-	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.3		-	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-		-	-	-	-	-
Azobenzene	mg/kg	0.3		-	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-		-	-	-	-	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		-	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-		-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2		-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-		-	-	-	-	-
Carbazole	mg/kg	0.3		-	-	<0.3	-	<0.3	-	-	-	-	1.1	-	<0.3	-	-	-	<0.3	-	-		-	-	-	-	-
Dibenzofuran	mg/kg	0.2		-	-	<0.2	-	<0.2	-	-	-	-	1	-	<0.2	-	-	-	<0.2	-	-		-	-	-	-	-
Hexachloroethane	mg/kg	0.05		-	-	<0.05	-	<0.05	-	-	-	-	<0.05	-	<0.05	-	-	-	<0.05	-	-		-	-	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-		-	-	-	-	-
9,10-Anthracenedione	mg/kg	0.3		-	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-		-	-	-	-	-
2-methylphenol	mg/kg	0.3		-	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-		-	-	-	-	-
2-nitrophenol	mg/kg	0.3		-	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-		-	-	-	-	-
2,4-dimethylphenol	mg/kg	0.3		-	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-		-	-	-	-	-
4-chloro-3-methylphenol	mg/kg	0.1		-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-		-	-	-	-	-
4-methylphenol	mg/kg	0.2		-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-		-	-	-	-	-
Phenol	mg/kg	0.2	175000	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-		-	-	-	-	-
2-chloronaphthalene	mg/kg	0.1		-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-		-	-	-	-	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		1.8	<1	<1	-	<1	-	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1		<1	<1	-	<1	-
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	<0.001	-	<0.001	-	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	-	<0.001	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	<0.001	-	<0.001	-	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	-	<0.001	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	<0.001	-	<0.001	-	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	-	<0.001	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	<0.001	-	<0.001	-	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	-	<0.001	-
PCB 118	mg/kg	0.001		-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	<0.001	<0.001	<0.001
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	<0.001	-	<0.001	-	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	-	<0.001	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	<0.001	-	<0.001	-	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	-	<0.001	-

				E-BH18							E-BH19		E-BH20						E-BH21				E-BH22				
				20.8	0.5	2.5		4.5		27.4	0.9	21.6	0.8		4	15.5		21.1	2.7	9.2	20.5		0.6	1.2		12.4	
				22/11/2022	25/11/2022	28/11/2022		29/11/2022		13/12/2022	14/12/2022	21/12/2022	28/11/2022		29/11/2022	30/11/2022		01/12/2022	17/01/2023	18/01/2023	19/01/2023		29/11/2022	05/12/2022		06/12/2022	
				Normal	Normal	Normal		Normal		Normal	Normal	Normal	Normal		Normal	Normal		Normal	Normal	Normal	Normal		Normal	Normal		Normal	
				22-11249	22-11254	22-13308	22-13322	22-13250	22-13359	22-13738	22-13842	22-14905	22-13308	22-13322	22-13250	22-13079	22-13082	22-12879	23-13550	23-13586	23-13599		22-13250	22-13280	22-13282	22-13291	22-13294
Determinand	Units	Method Detection Limit	Construction Worker GAC	Gravel - GTD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Chalk	MADE GROUND	Clay - GTD	MADE GROUND	MADE GROUND	Clay - TFD	Sand - GTD	Sand - GTD	Sand - GTD	Clay - TFD	Silt - TFD	Gravel - GTD		MADE GROUND	MADE GROUND	MADE GROUND	Clay - GTD	Clay - GTD
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	<0.001	-	<0.001	-	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	-	<0.001	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	<0.001	-	<0.001	-	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	-	<0.001	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	<0.001	-	<0.001	-	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	-	<0.001	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	<0.001	-	<0.001	-	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	-	<0.001	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	<0.001	-	<0.001	-	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	-	<0.001	-
Total PCB WHO 12	mg/kg	0.012		-	-	<0.012	-	<0.012	-	-	-	-	<0.012	-	-	-	-	-	-	-	-		-	<0.012	-	<0.012	-
PCB 28	mg/kg	0.001		-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	<0.001	<0.001	<0.001
PCB 52	mg/kg	0.001		-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	<0.001	<0.001	<0.001
PCB 101	mg/kg	0.001		-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	<0.001	<0.001	<0.001
PCB 138	mg/kg	0.001		-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	<0.001	<0.001	<0.001
PCB 153	mg/kg	0.001		-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	<0.001	<0.001	<0.001
PCB 180	mg/kg	0.001		-	-	<0.001	-	<0.001	<0.001	-	-	-	<0.001	-	-	-	-	-	-	-	-		-	<0.001	<0.001	<0.001	<0.001
PCBs (Sum of total)	mg/kg	0.007		-	-	<0.007	-	<0.007	<0.007	-	-	-	<0.007	-	-	-	-	-	-	-	-		-	<0.007	<0.007	<0.007	<0.007
Aniline	mg/kg	0.1		-	-	<0.1	-	0.4	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-		-	-	-	-	-
4-chloroaniline	mg/kg	0.1		-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-		-	-	-	-	-
4-nitroaniline	mg/kg	0.2		-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-		-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2		-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-		-	-	-	-	-
2,6-dinitrotoluene	mg/kg	0.1		-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-		-	-	-	-	-
Nitrobenzene	mg/kg	0.3		-	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-		-	-	-	-	-
Chlorobenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
2-chlorotoluene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
4-chlorotoluene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3		-	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-		-	-	-	-	-
Hexabromobenzene	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Bromomethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
Trichlorofluoromethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
1,2-dibromoethane	mg/kg	0.001		-	-	<0.005	-	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	<0.005	-	-		-	-	-	-	-
2-chlorophenol	mg/kg	0.1		-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-		-	-	-	-	-
2,4-dichlorophenol	mg/kg	0.3		-	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-		-	-	-	-	-
2,4,5-trichlorophenol	mg/kg	0.2		-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-		-	-	-	-	-
2,4,6-trichlorophenol	mg/kg	0.1		-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-		-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3		-	-	<0.3	-	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	<0.3	-	-		-	-	-	-	-
Di-n-butyl phthalate	mg/kg	0.2		-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-		-	-	-	-	-
Diethylphthalate	mg/kg	0.2		-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-		-	-	-	-	-
Dimethyl phthalate	mg/kg	0.1		-	-	<0.1	-	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	<0.1	-	-		-	-	-	-	-
Isophorone	mg/kg	0.2		-	-	<0.2	-	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	<0.2	-	-		-	-	-	-	-
Arsenic	mg/kg	1	7000	4.7	7.9	15	-	11	-	1.7	43	13	11	-	15	7.1	-	9.3	14	17	3.5		18	12	-	9.5	-
Barium	mg/kg	1		33	280	110	-	100	-	10	160	93	77	-	110	120	-	76	110	66	18		160	190	-	81	-
Beryllium	mg/kg	0.06		0.36	0.36	1.3	-	0.95	-	0.11	1.8	1.1	0.89	-	1.2	0.64	-	0.82	0.93	1.3	0.2		2.2	2.4	-	0.67	-
Boron	mg/kg	0.2		<0.2	1.5	3.6	-	2.9	-	0.5	2.2	0.6	0.9	-	3.5	0.4	-	1	2.4	4.8	<0.2		2.4	5.3	-	2	-
Cadmium	mg/kg	0.2	12000	<0.2	0.7	<0.2	-	<0.2	-	0.4	<0.2	<0.2	0.4	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2		<0.2	<0.2	-	<0.2	-
Chromium (III+VI)	mg/kg	1		9.1	34	49	-	29	-	2.3	71	29	42	-	38	20	-	22	28	41	4.4		34	73	-	19	-
Copper	mg/kg	1		7.6	13	21	-	12	-	3.1	70	16	38	-	14	14	-	15	14	21	8.3		30	16	-	16	-
Lead	mg/kg	1		5.8	26	23	-	17	-	2.6	35	13	23	-	21	16	-	12	19	22	3.6		32	36	-	11	-
Mercury	mg/kg	0.3		<0.3	<0.3	<0.3	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3		<0.3	<0.3	-	<0.3	-
Nickel	mg/kg	1		13	27	48	-	30	-	6.4	21	31	53	-	34	22	-	24	29	45	6.4		26	25	-	24	-
Selenium	mg/kg	1		<1	<1	<1	-	<1	-	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1		<1	<1	-	<1	-
Vanadium	mg/kg	1		15	36	56	-	45	-	3	89	37	140	-	52	27	-	30	44	58	9.4		51	60	-	26	-
Zinc	mg/kg	1		26	49	88	-	71	-	15	61	53	82	-	84	49	-	46	70	110	16		73	67	-	49	-
Chromium (hexavalent)	mg/kg	1.8		<1.8	<1.8	<1.8	-	<1.8	-	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8		<1.8	<1.8	-	<1.8	-
TOC	%	0.1		-	-	-	1.1	-	1.4	-	-	-	-	0.9	-	-	0.6	-	-	-	-		-	-	1.3	-	1.1
Cyanide (Free)	mg/kg	1	1400	<1	<1	<1	-	<1	-	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1		<1	<1	-	<1	-
Cyanide Total	mg/kg	1		<1	<1	<1	-	<1	-	<1	<1	<1	<1	-	<1	<1	-	<1	<1	<1	<1		<1	<1	-	<1	-
Sulphide	mg/kg	1		19	85	1.8	-	430	-	7.9	270	<1	82	-	240	17	-	<1	7.7	140	4.3		580	640	-	95	-
% Moisture	%	0.01		15	5.2	23	23	26	26	20	16	15	12	12	36	12	12	14	24	37	13		8.2	21	21	12	12
pH (Lab)	pH_Units	0		8.5	11.4	7.9	8.6	8.2	8.6	8.5	9.8	8.1	11	9.8	8.3	8.6	8.1	8.7	8.3	7.4	8.4		9.9	9.4	9.3	8.1	8.5
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	-	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected		Not-detected	Not-detected	-	Not-detected	-
Stones content (>50mm)	%	0.1		-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	-	-	<0.1	-	-	-	-	-		-	-	<0.1	-	<0.1

				E-BH23			E-BH24				E-BH25										E-BH26	E-BH26A		E-BH28	E-CPT06	E-CPT11	E-CPT15	E-CPT16
				26.7	2.5	26.5	0.8		5.1	25.6	0	0.5	1.1		3	9.5	17	25.7			2.5	0.2	20.2	0.1	0.1	0.9	1.6	0
				22/12/2022	12/12/2022	20/12/2022	07/12/2022		12/12/2022	15/12/2022	29/11/2022	29/11/2022	29/11/2022		06/12/2022	07/12/2022	21/12/2022	09/12/2022			15/11/2022	09/11/2022	22/11/2022	21/12/2022	18/01/2023	20/01/2023	17/11/2022	15/11/2022
				Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal			Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				22-14937	22-13376	22-14872	22-13605	22-13608	22-13376	22-14107	22-13250	22-13250	22-13250	22-13359	22-13291	22-13605	22-14905	22-13361			22-98836	22-96532	22-11249	22-14905	23-13586	23-14015	22-98887	22-98836
Determinand	Units	Method Detection Limit	Construction Worker GAC	Chalk	Clay - TFD	Chalk	MADE GROUND	MADE GROUND	Clay - TFD	Chalk	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - GTD	Chalk			Clay	MADE GROUND	Clay - GTD		MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND
Textural Class (no units)	-	0		-	-	1	-	1	-	-	-	-	-	1	-	-	1	-			-	1	-	1	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	2.9	-	-	-	-	-	2.6	-	-	-	-			-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.016 - 0.0164	0.15	0.0285 - 0.029	0.32	-	0.26 - 0.261	0.012	-	0.227 - 0.23	0.286 - 0.29	-	0.32 - 0.322	0.31 - 0.312	0.0168 - 0.017	0.015 - 0.0151			0.0907 - 0.091	1.55 - 1.6	0.042 - 0.0421	0.0158 - 0.016	0.083 - 0.0833	0.15 - 0.152	0.12 - 0.124	1.2
>C5-C6 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1		<1	<1	<1	3.2	-	<1	<1	-	<1	<1	-	<1	<1	<1	<1			<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2		<2	<2	<2	12	-	<2	<2	-	<2	4.5	-	<2	<2	<2	<2			<2	4.1	<2	<2	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8		<8	<8	<8	20	-	<8	<8	-	<8	<8	-	<8	<8	<8	<8			<8	18	<8	<8	8.2	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8		<8	<8	<8	39	-	<8	<8	-	400	11	-	<8	<8	<8	<8			<8	270	<8	<8	38	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	<10	<10	74	-	<10	<10	-	400	22	-	<10	<10	<10	<10			<10	290	<10	<10	46	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1		<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1	<1	<1	<1			<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2		<2	<2	<2	7.3	-	<2	<2	-	6.3	2.4	-	<2	<2	<2	<2			<2	<2	<2	<2	<2	<2	<2	2.3
>EC16-EC21 Aromatics	mg/kg	10		<10	<10	<10	12	-	<10	<10	-	11	<10	-	<10	<10	<10	<10			<10	34	<10	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10		<10	<10	<10	17	-	<10	<10	-	500	18	-	<10	<10	<10	<10			<10	620	<10	<10	21	<10	<10	26
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	36	-	<10	<10	-	520	26	-	<10	<10	<10	<10			<10	660	<10	<10	24	<10	<10	37
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-			-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	370	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
Toluene	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
Ethylbenzene	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
Xylene (m & p)	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
Xylene (o)	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005			<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-			-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005			<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
Chloromethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Vinyl chloride	mg/kg	0.001	220	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Chloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1-dichloroethene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
trans-1,2-dichloroethene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1-dichloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
cis-1,2-dichloroethene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Chloroform	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1,1-trichloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Carbon tetrachloride	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Trichloroethene	mg/kg	0.001	33000	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1,2-trichloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Tetrachloroethene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
2,2-dichloropropane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1-dichloropropene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2-dichloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2-dichloropropane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Dibromomethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Bromodichloromethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
cis-1,3-dichloropropene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
trans-1,3-dichloropropene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,3-dichloropropane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Chlorodibromomethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Styrene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Bromoform	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Isopropylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
n-propylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,3,5-trimethylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
tert-butylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2,4-trimethylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
sec-butylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
p-isopropyltoluene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
n-butylbenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Hexachlorobutadiene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-			<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Naphthalene	mg/kg	0.00005		<0.05	<0.0001	<0.05	<0.0001 - 0.18	-	0.06	<0.05	-	0.35	<0.0001 - 0.14	0.14	<0.05	<0.0001	<0.05	<0.05			<0.0001 - 0.2	<0.0001 - 0.18	<0.05	<0.0001	<0.0001	<0.0001	<0.0001 - 0.14	0.32
Acenaphthylene	mg/kg	0.05		<0.05	<0.05	<0.05	0.07	-	<0.05	<0.05	-	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
Acenaphthene	mg/kg	0.05		<0.05	<0.05	<0.05	0.17	-	<0.05	<0.05	-	0.1	0.08	0.08	<0.05	<0.05	<0.05	<0.05			<0.05	0.12	<0.05	<0.05	0.09	<0.05	<0.05	0.08
Fluorene	mg/kg	0.05		<0.05	<0.05	<0.05	0.3	-	<0.05	<0.05	-	0.15	0.08	0.08	<0.05	<0.05	<0.05	<0.05			<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	0.09
Phenanthrene	mg/kg	0.05		<0.05	0.14	<0.05	2.7	-	0.05	<0.05	-	1.4	0.72	0.73	0.1	0.1	<0.05	<0.05			<0.05	0.08	1.1	<0.05	0.08	1.1	0.14	1.1
Anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	0.73	-	<0.05	<0.05	-	0.41	0.21	0.21	<0.05	<0.05	<0.05	<0.05			<0.05	0.57	<0.05	<0.05	0.21	<0.05	<0.05	0.3
Fluoranthene	mg/kg	0.05		<0.05	0.29	<0.05	3.3	-	<0.05	<0.05	-	1.9	1.2	1.3	0.16	0.06	<0.05	<0.05			0.08	5.1	<0.05	0.13	1.7	<0.05	0.14	2.1
Pyrene	mg/kg	0.05		<0.05	0.24	<0.05	2.4	-	0.05	<0.05	-	1.6	1	1	0.14	0.06	<0.05	<0.05			0.08	5.1	<0.05	0.11	1.5	<0.05	0.12	2.3
Benz(a)anthracene	mg/kg	0.05		<0.05	0.1	<0.05	1.2	-	<0.05	<0.05	-	0.83	0.62	0.54	0.06	<0.05	<0.05	<0.05			<0.05	2.4	<0.05	<0.05	0.74	<0.05	0.07	1.5
Chrysene	mg/kg	0.05		<0.05	0.09	<0.05	0.87	-	<0.05	<0.05	-	1.1	0.56	0.59	0.13	<0.05	<0.05	<0.05			<0.05	3.7	<0.05	0.06	0.86	<0.05	0.06	1.5
Benzo(a) pyrene	mg/kg	0.05		<0.05	0.06	<0.05	0.78	-	<0.05	<0.05	-	0.87	0.51	0.53	<0.05	<0.05	<0.05	<0.05			<0.05	3.1	<0.05	0.06	0.66	<0.05	0.07	1.4
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	0.32	-	<0.05	<0.05	-	0.35	0.28	0.29	<0.05	<0.05	<0.05	<0.05			<0.05	1.5	<0.05	<0.05	0.26	<0.05	<0.05	0.85
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	0.08	-	<0.05	<0.05	-	0.12	0.06	0.05	<0.05	<0.05	<0.05	<0.05			<0.05	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	0.25
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	<0.05	<0.05	0.36	-	<0.05	<0.05	-	0.4	0.3	0.3	<0.05	<0.05	<0.05	<0.05			<0.05	1.9	<0.05	<0.05	0.35	<0.05	<0.05	0.98
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	0.11	<0.05	1	-	<0.05	<0.05	-	1	0.59	0.61	0.08	<0.05	<0.05	<0.05			<0.05	2.9	<0.05	0.08	0.69	<0.05	0.08	1.8
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	0.08	<0.05	0.44	-	<0.05	<0.05	-	0.56	0.32	0.29	0.08	<0.05	<0.05	<0.05			<0.05	2.2	<0.05	<0.05	0.35	<0.05	<0.05	0.61
PAH 17 Total	mg/kg	0.85		<0.85	1.11	<0.85	14.9	-	<0.85	<0.85	-	11.3	6.7	6.72	<0.85	<0.85	<0.85	<0.85			<0.85	30.5	<0.85	<0.85	8.53	<0.85	<0.85	15
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		-	<0.1	-	0.3	-	-	-	-	-	<0.1	-	-	<0.1	-	-			<0.1	0.1	-	<0.1	<0.1	<0.1	<0.1	-
4-bromophenyl phenyl ether	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	-			<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
4-chlorophenyl phenyl ether	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	-			<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Azobenzene	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	-			<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	-			<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Bis(2-chloroethyl)ether	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	-			<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
Carbazole	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	-			<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Dibenzofuran	mg/kg	0.2		-	<0.2	-	0.3	-	-	-	-	-	<0.2	-	-	<0.2	-	-			<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
Hexachloroethane	mg/kg	0.05		-	<0.05	-	<0.05	-	-	-	-	-	<0.05	-	-	<0.05	-	-			<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	-			<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
9,10-Anthracenedione	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	-			<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
2-methylphenol	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	-			<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
2-nitrophenol	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	-			<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
2,4-dimethylphenol	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	-			<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
4-chloro-3-methylphenol	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	-			<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
4-methylphenol	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	-			<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
Phenol	mg/kg	0.2	175000	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	-			<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
2-chloronaphthalene	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	-			<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1	<1	<1	<1			<1	<1	<1	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-			-	-	-	<0.001	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-			-	-	-	<0.001	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-			-	-	-	<0.001	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-			-	-	-	<0.001	-	-	-	-
PCB 118	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-			-	<0.001	-	<0.001	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-			-	-	-	<0.001	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-			-	-	-	<0.001	-	-	-	-

					E-BH23		E-BH24				E-BH25									E-BH26	E-BH26A		E-BH28	E-CPT06	E-CPT11	E-CPT15	E-CPT16
				26.7	2.5	26.5	0.8		5.1	25.6	0	0.5	1.1		3	9.5	17	25.7	2.5	0.2	20.2	0.1	0.1	0.9	1.6	0
				22/12/2022	12/12/2022	20/12/2022	07/12/2022		12/12/2022	15/12/2022	29/11/2022	29/11/2022	29/11/2022		06/12/2022	07/12/2022	21/12/2022	09/12/2022	15/11/2022	09/11/2022	22/11/2022	21/12/2022	18/01/2023	20/01/2023	17/11/2022	15/11/2022
				Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				22-14937	22-13376	22-14872	22-13605	22-13608	22-13376	22-14107	22-13250	22-13250	22-13250	22-13359	22-13291	22-13605	22-14905	22-13361	22-98836	22-96532	22-11249	22-14905	23-13586	23-14015	22-98887	22-98836
Determinand	Units	Method Detection Limit	Construction Worker GAC	Chalk	Clay - TFD	Chalk	MADE GROUND	MADE GROUND	Clay - TFD	Chalk	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - GTD	Chalk	Clay	MADE GROUND	Clay - GTD		MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	<0.001	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	-	-	-	-	<0.012	-	-	-	-	-	-	<0.012	-	<0.012	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	<0.001	-	<0.001	-	-	-	-
PCB 52	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	<0.001	-	<0.001	-	-	-	-
PCB 101	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	0.002	-	<0.001	-	-	-	-
PCB 138	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	0.006	-	<0.001	-	-	-	-
PCB 153	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	0.007	-	<0.001	-	-	-	-
PCB 180	mg/kg	0.001		-	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	0.008	-	<0.001	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	-	-	-	-	-	-	<0.007	<0.007	-	-	-	-	-	0.024	-	<0.007	-	-	-	-
Aniline	mg/kg	0.1		-	0.4	-	0.3	-	-	-	-	-	<0.1	-	-	0.7	-	-	0.7	<0.1	-	<0.1	<0.1	<0.1	0.4	-
4-chloroaniline	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
4-nitroaniline	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
2,4-Dinitrotoluene	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
2,6-dinitrotoluene	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
Nitrobenzene	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Chlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
2-chlorotoluene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
4-chlorotoluene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,3-dichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005 - 0.5	<0.001	-
1,4-dichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2-dichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2,4-trichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2,3-trichlorobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Hexachlorobenzene	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Hexabromobenzene	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Bromomethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
Trichlorofluoromethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
1,2-dibromoethane	mg/kg	0.001		-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	-	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.001	-
2-chlorophenol	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
2,4-dichlorophenol	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
2,4,5-trichlorophenol	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
2,4,6-trichlorophenol	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
Butyl benzyl phthalate	mg/kg	0.3		-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	-
Di-n-butyl phthalate	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
Diethylphthalate	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
Dimethyl phthalate	mg/kg	0.1		-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	-
Isophorone	mg/kg	0.2		-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	-
Arsenic	mg/kg	1	7000	1.3	16	1.9	8.8	-	12	1.1	-	9.9	12	-	18	13	2.9	1.9	17	4.8	3.7	20	8.3	15	16	9.3
Barium	mg/kg	1		9.8	120	9.7	110	-	140	9.4	-	240	140	-	110	95	17	11	110	310	25	79	82	120	97	220
Beryllium	mg/kg	0.06		0.07	1.1	0.07	1.6	-	0.97	0.09	-	1.1	3.4	-	1.3	0.93	0.2	0.14	1.1	2.1	0.24	1.5	0.65	1.1	1.5	3.5
Boron	mg/kg	0.2		<0.2	7.6	<0.2	1	-	4.6	<0.2	-	2.8	3.6	-	9.2	4.3	<0.2	<0.2	4.9	2.7	0.3	6.2	1.3	3.4	4.2	5.6
Cadmium	mg/kg	0.2	12000	0.3	<0.2	0.4	<0.2	-	<0.2	<0.2	-	0.5	<0.2	-	<0.2	<0.2	<0.2	0.3	<0.2	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium (III+VI)	mg/kg	1		1.1	33	<1	50	-	29	1.1	-	610	55	-	44	27	4.2	2.7	33	190	6	45	16	33	57	43
Copper	mg/kg	1		6.3	19	4.5	47	-	14	2.4	-	25	31	-	21	16	5.1	6.9	18	32	4.9	18	21	19	19	16
Lead	mg/kg	1		2.5	20	3.4	41	-	18	2.3	-	26	37	-	25	14	3.8	2.5	19	27	3.9	36	20	26	29	82
Mercury	mg/kg	0.3		<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1		4.5	32	19	26	-	29	3.3	-	680	26	-	40	30	5.5	7	29	12	7.2	38	12	31	33	10
Selenium	mg/kg	1		<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1		1.7	50	1.7	59	-	48	1.9	-	77	100	-	58	39	8.3	4.3	47	150	8.5	69	30	49	67	110
Zinc	mg/kg	1		11	79	16	250	-	74	11	-	61	170	-	95	61	14	15	73	79	21	95	56	80	79	86
Chromium (hexavalent)	mg/kg	1.8		<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	0.9	-	-	-	-	-	1.5	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1	1400	<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	-	<1	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		1.2	220	1.4	7.8	-	170	<1	-	230	630	-	19	68	3.3	3.1	9.9	870	18	<1	54	6.6	120	3.100
% Moisture	%	0.01		19	31	19	9.2	9.2	27	19	-	15	18	18	28	34	9.8	15	21	8.6	15	24	14	22	17	13
pH (Lab)	pH_Units	0		8.7	7.8	8.7	10.9	10.9	8	8.6	-	11	9.3	8.7	8.1	7.8	8.7	8.5	9.4	10.9	8.6	7.3	11.7	8.5	8.4	10.6
Asbestos Type	None	0		-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	1	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	E-CPT19 0.8 19/01/2023 Normal 23-13599 MADE GROUND	E-CPT23 0.1 15/11/2022 Normal 22-98836 MADE GROUND	E-TP01 0.1 16/12/2022 Normal 22-14647 MADE GROUND	E-TP02 0.1 12/12/2022 Normal 22-13376 MADE GROUND	E-TP03 0.8 09/01/2023 Normal 23-11626 Clay - TFD	E-TP03 2.2 09/01/2023 Normal 23-11626 Clay - TFD	E-TP04 2.3 13/12/2022 Normal 22-13738 Clay - TFD	W-BH01 0.4 26/01/2023 Normal 23-15173 Clay - TFD	W-BH02 0.5 18/01/2023 Normal 23-13586 Clay - TFD	W-BH02 2.5 19/01/2023 Normal 23-13599 Clay - TFD	W-BH03 0.1 11/01/2023 Normal 23-12169 Silt	W-BH03 12 13/01/2023 Normal 23-12265 Clay - GTD	W-BH03 16.5 13/01/2023 Normal 23-12265 Sand - GTD	W-BH03 20.8 30/01/2023 Normal 23-15977 Silt - GTD	W-BH04 6.5 06/01/2023 Normal 23-11626 Clay - GTD	W-BH04 20 10/01/2023 Normal 23-12169 Chalk	W-BH05 2.1 25/01/2023 Normal 23-14638 Clay - TFD	W-BH05 4.4 25/01/2023 Normal 23-14638 Clay - TFD	W-BH06 1.9 07/02/2023 Normal 23-17124 Gravel	W-BH06 2.8 10/01/2023 Normal 23-11628 Clay - TFD	W-BH06 17.5 25/01/2023 Normal 23-14638 Clay - GTD	W-BH06 18.6 25/01/2023 Normal 23-14638 Sand - GTD	W-BH07 1.2 11/01/2023 Normal 23-12169 Clay - TFD
Textural Class (no units)	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	-	<0.005	-	<0.005
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.377 - 0.38	0.49 - 0.491	0.026 - 0.0263	0.016 - 0.0161	0.0448 - 0.045	0.36 - 0.363	0.468 - 0.47	0.015 - 0.0151	0.0126 - 0.013	0.858 - 0.86	0.0196 - 0.02	0.06 - 0.0601	0.011 - 0.0113	0.055 - 0.0551	0.046	0.0033	1.4 - 1.45		0.0415 - 0.042	0.47 - 0.474	0.0306 - 0.031	0.065 - 0.0653	0.325 - 0.33
>C5-C6 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	1.1	<1	<1
>C12-C16 Aliphatics	mg/kg	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.9	-	-	<2	<2	3.1	<2	<2
>C16-C21 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	-	-	<8	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	46	-	-	<8	<8	8.9	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	52	-	-	<10	<10	16	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	-	<2	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	-	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10		<10	<10	<10	17	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	-	<10	<10	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	24	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	-	<10	<10	<10	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	370	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001		<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001		<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001		<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Vinyl chloride	mg/kg	0.001	220	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Chloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,1-dichloroethene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
trans-1,2-dichloroethene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,1-dichloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
cis-1,2-dichloroethene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Chloroform	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,1,1-trichloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Carbon tetrachloride	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Trichloroethene	mg/kg	0.001	33000	<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,1,2-trichloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Tetrachloroethene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
2,2-dichloropropane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,1-dichloropropene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,2-dichloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,2-dichloropropane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Dibromomethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Bromodichloromethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
cis-1,3-dichloropropene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
trans-1,3-dichloropropene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,3-dichloropropane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Chlorodibromomethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,1,1,2-tetrachloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Styrene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Bromoform	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Isopropylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,1,2,2-tetrachloroethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
n-propylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,3,5-trimethylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
tert-butylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,2,4-trimethylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
sec-butylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
p-isopropyltoluene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
n-butylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,2-dibromo-3-chloropropane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Hexachlorobutadiene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Naphthalene	mg/kg	0.00005		<0.0001	<0.0001 - 0.26	<0.0001	0.15	<0.05	<0.05	<0.0001	<0.05	<0.05	<0.0001	<0.05	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.05	<0.05	<0.0001	<0.05	<0.0001
Acenaphthylene	mg/kg	0.05		<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05		<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05		<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05	0.2	0.93	0.2	1.4	<0.05	<0.05	0.26	<0.05	<0.05	0.09	0.08	0.07	<0.05	<0.05	<0.05	<0.05	0.07	0.19	<0.05	0.08	0.09	0.05	<0.05	
Anthracene	mg/kg	0.05	<0.05	0.28	<0.05	0.14	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05	0.26	1.8	0.22	1.1	<0.05	<0.05	0.18	<0.05	<0.05	0.06	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	0.21	<0.05	<0.05	0.05	<0.05	<0.05	
Pyrene	mg/kg	0.05	0.2	1.8	0.23	1.9	<0.05	<0.05	0.19	<0.05	<0.05	0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	0.22	<0.05	<0.05	0.05	0.05	<0.05	
Benz(a)anthracene	mg/kg	0.05	0.1	1.1	0.15	2.1	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	
Chrysene	mg/kg	0.05	0.14	1.2	0.28	3.9	<0.05	<0.05	0.17	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	0.27	<0.05	<0.05	<0.05	<0.05	<0.05	
Benzo(a) pyrene	mg/kg	0.05	0.07	1.1	0.14	1.2	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.17	<0.05	<0.05	<0.05	<0.05	<0.05	
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05	<0.05	0.58	0.07	0.45	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	
Dibenz(a,h)anthracene	mg/kg	0.05	<0.05	0.19	<0.05	0.39	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Benzo(g,h,i)perylene	mg/kg	0.05	<0.05	0.63	0.11	0.97	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	
Benzo(b)fluoranthene	mg/kg	0.05	0.09	1.3	0.17	1.5	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.19	<0.05	<0.05	<0.05	<0.05	<0.05	
Benzo(k)fluoranthene	mg/kg	0.05	<0.05	0.51	0.05	0.36	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
PAH 17 Total	mg/kg	0.85	1.06	11.8	1.62	15.5	<0.85	<0.85	1.07	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	-	<0.85	<0.85	<0.85	<0.85	<0.85	
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		<0.1	0.2	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	<0.1
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	<0.2
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	<0.3
Azobenzene	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	<0.3
Bis(2-chloroethoxy) methane	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	<0.3
Bis(2-chloroethyl)ether	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	<0.2
Carbazole	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	<0.3
Dibenzofuran	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	<0.2
Hexachloroethane	mg/kg	0.05		<0.05	<0.05	<0.05	-	-	-	<0.05	-	-	<0.05	-	<0.05	-	-	-	-	-	<0.05	-	-	<0.05	-	<0.05
Bis(2-chloroisopropyl) ether	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	<0.1
9,10-Anthracenedione	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	<0.3
2-methylphenol	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	<0.3
2-nitrophenol	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	<0.3
2,4-dimethylphenol	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	<0.3
4-chloro-3-methylphenol	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	<0.1
4-methylphenol	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	<0.2
Phenol	mg/kg	0.2	175000	<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	<0.2
2-chloronaphthalene	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	<0.1
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	E-CPT19	E-CPT23	E-TP01	E-TP02	E-TP03		E-TP04	W-BH01	W-BH02		W-BH03				W-BH04		W-BH05			W-BH06			W-BH07
				0.8	0.1	0.1	0.1	0.8	2.2	2.3	0.4	0.5	2.5	0.1	12	16.5	20.8	6.5	20	2.1	4.4	19.1	2.8	17.5	18.6	1.2
				19/01/2023	15/11/2022	16/12/2022	12/12/2022	09/01/2023	09/01/2023	13/12/2022	26/01/2023	18/01/2023	19/01/2023	11/01/2023	13/01/2023	13/01/2023	30/01/2023	06/01/2023	10/01/2023	25/01/2023	25/01/2023	07/02/2023	10/01/2023	25/01/2023	25/01/2023	11/01/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-13599	22-98836	22-14647	22-13376	23-11626	23-11626	22-13738	23-15173	23-13586	23-13599	23-12169	23-12265	23-12265	23-15977	23-11626	23-12169	23-14638	23-14638	23-17124	23-11628	23-14638	23-14638	23-12169
				MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Silt	Clay - GTD	Sand - GTD	Silt - GTD	Clay - GTD	Chalk	Clay - TFD	Clay - TFD	Gravel	Clay - TFD	Clay - GTD	Sand - GTD	Clay - TFD
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	-	<0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 52	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 101	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 138	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 153	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 180	mg/kg	0.001		-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	-	-	-	<0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aniline	mg/kg	0.1		<0.1	0.5	<0.1	-	-	-	0.3	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	<0.1
4-chloroaniline	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	<0.1
4-nitroaniline	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	<0.2
2,4-Dinitrotoluene	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	<0.2
2,6-dinitrotoluene	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	<0.1
Nitrobenzene	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	<0.3
Chlorobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
2-chlorotoluene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
4-chlorotoluene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,3-dichlorobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005 - 0.3	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005 - 1	-	-	<0.005	-	<0.005
1,4-dichlorobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,2-dichlorobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,2,4-trichlorobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,2,3-trichlorobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Hexachlorobenzene	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	<0.3
Hexabromobenzene	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Bromomethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
Trichlorofluoromethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
1,2-dibromoethane	mg/kg	0.001		<0.005	<0.001	<0.005	-	-	-	<0.005	-	-	<0.005	-	<0.005	-	-	-	-	-	<0.005	-	-	<0.005	-	<0.005
2-chlorophenol	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	<0.1
2,4-dichlorophenol	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	<0.3
2,4,5-trichlorophenol	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	<0.2
2,4,6-trichlorophenol	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	<0.1
Butyl benzyl phthalate	mg/kg	0.3		<0.3	<0.3	<0.3	-	-	-	<0.3	-	-	<0.3	-	<0.3	-	-	-	-	-	<0.3	-	-	<0.3	-	<0.3
Di-n-butyl phthalate	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	<0.2
Diethylphthalate	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	<0.2
Dimethyl phthalate	mg/kg	0.1		<0.1	<0.1	<0.1	-	-	-	<0.1	-	-	<0.1	-	<0.1	-	-	-	-	-	<0.1	-	-	<0.1	-	<0.1
Isophorone	mg/kg	0.2		<0.2	<0.2	<0.2	-	-	-	<0.2	-	-	<0.2	-	<0.2	-	-	-	-	-	<0.2	-	-	<0.2	-	<0.2
Arsenic	mg/kg	1	7000	15	10	14	14	14	22	97	15	22	9.2	16	7.1	5.3	1.8	10	1.5	17	-	5.3	13	6.4	5.3	15
Barium	mg/kg	1		110	210	83	85	59	100	56	74	77	110	68	98	26	21	94	11	84	-	32	110	85	37	120
Beryllium	mg/kg	0.06		1.1	2.2	0.99	0.94	1.1	0.89	0.95	1.3	1.6	1	1.3	0.68	0.3	0.21	0.57	0.09	1.2	-	0.29	1	0.65	0.38	1.4
Boron	mg/kg	0.2		5.6	2.8	1.4	1.5	6.7	5.7	5.4	3.4	5	3.8	6.5	0.5	<0.2	0.3	0.7	<0.2	7.6	-	0.6	4.3	0.4	0.5	7.6
Cadmium	mg/kg	0.2	12000	<0.2	2.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.3	<0.2	0.4	<0.2	-	0.3	<0.2	<0.2	<0.2	<0.2
Chromium (III+VI)	mg/kg	1		34	42	30	29	34	30	30	37	45	30	41	20	6.5	4.7	17	1	36	-	6.9	32	19	9.1	36
Copper	mg/kg	1		30	26	17	24	15	15	14	14	19	18	19	17	5.2	5.8	13	5	19	-	7	18	12	9.4	20
Lead	mg/kg	1		38	48	37	33	21	15	17	21	26	17	32	10	5.2	4.3	9.1	2.4	21	-	4.7	18	11	6	22
Mercury	mg/kg	0.3		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1		33	13	29	28	31	29	32	40	48	30	34	22	8.1	11	21	5.8	36	-	9.1	32	22	12	39
Selenium	mg/kg	1		<2	<2	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	-	<1	<1	<1	<1	<1
Vanadium	mg/kg	1		52	65	46	47	51	40	46	55	70	47	63	26	11	7	24	2.6	56	-	13	46	26	15	59
Zinc	mg/kg	1		89	130	86	88	77	64	73	85	95	76	95	41	20	27	35	17	85	-	22	70	41	26	87
Chromium (hexavalent)	mg/kg	1.8		<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1	1400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		16	570	<1	<1	<1	230	220	2.1	<1	430	1.4	90	2.8	44	130	<1	53	-	65	180	25	13	<1
% Moisture	%	0.01		20	12	22	20	21	25	24	22	22	32	23	14	15	18	14	19	34	35	10	35	14	9.8	26
pH (Lab)	pH_Units	0		8.3	10.9	7.5	8.2	8.2	8.8	9	7.9	7.8	7.8	7.5	8.6	8.9	8.6	8.7	9	7.8	-	8.5	8	8.2	8.9	8
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	W-BH08		W-BH09			W-BH10	W-BH10A		W-BH11		W-BH12		W-BH13		W-BH14		W-BH15			W-BH16		W-BH17	
				2.5	17	1.6	5.3	19.5	0.1	3	20	2.5	7.5	3.5	19.7	0.4	21.6	0.1	7.2	2.5	6.5	18.5	0.1	18	0.5	7
				16/01/2023	18/01/2023	01/02/2023	02/02/2023	03/02/2023	01/02/2023	02/02/2023	03/02/2023	26/01/2023	27/01/2023	24/01/2023	26/01/2023	06/01/2023	19/01/2023	04/01/2023	04/01/2023	17/01/2023	17/01/2023	20/01/2023	11/01/2023	12/01/2023	13/01/2023	16/01/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-13184	23-13586	23-15975	23-16960	23-17045	23-15975	23-16960	23-17045	23-15173	23-15977	23-14640	23-15173	23-11626	23-13599	23-10590	23-10590	23-13550	23-13550	23-14015	23-12169	23-12263	23-12265	23-13184
				Clay - TFD	Sand - GTD	Clay - TFD	Peat - TFD	Chalk	MADE GROUND	Clay - TFD	Chalk	Clay - TFD	Clay - GTD	Clay - TFD	Chalk	MADE GROUND	Chalk	MADE GROUND	Clay - GTD	Clay - TFD	Clay - GTD	Silt - GTD	MADE GROUND	Gravel - GTD	Clay - TFD	Clay - TFD
Textural Class (no units)	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.54	0.0048	0.22 - 0.224	0.54 - 0.542	0.013 - 0.0132	0.0139 - 0.014	1.4	0.009	2.37 - 2.4	0.115 - 0.12	2	0.0047	0.0177 - 0.018	0.0068	0.0117 - 0.012	0.25	0.5	0.176 - 0.18	0.0062	0.0105 - 0.011	0.0286 - 0.029	0.0248 - 0.025	0.0587 - 0.059
>C5-C6 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.2	<2	<2	<2	<2	<2	<2	26	<2	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	30	<8	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	13	<8	<8	16	<8	<8	14	63	<8	<8	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	23	<10	<10	17	<10	<10	14	120	<10	<10	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	3.4	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	17	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	19	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	40	<10	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	370	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Vinyl chloride	mg/kg	0.001	220	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Chloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1-dichloroethene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
trans-1,2-dichloroethene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1-dichloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
cis-1,2-dichloroethene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Chloroform	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1,1-trichloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Carbon tetrachloride	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Trichloroethene	mg/kg	0.001	33000	<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1,2-trichloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Tetrachloroethene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
2,2-dichloropropane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1-dichloropropene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2-dichloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2-dichloropropane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Dibromomethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Bromodichloromethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
cis-1,3-dichloropropene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
trans-1,3-dichloropropene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,3-dichloropropane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Chlorodibromomethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Styrene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Bromoform	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Isopropylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
n-propylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,3,5-trimethylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
tert-butylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2,4-trimethylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
sec-butylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
p-isopropyltoluene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
n-butylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Hexachlorobutadiene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Naphthalene	mg/kg	0.00005		<0.0001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.0001	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.0001	<0.0001	<0.05	<0.05	<0.05	<0.0001	<0.05
Acenaphthylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.44	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.46	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	6.4	<0.05	<0.05	<0.05
Anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.2	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	0.09	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	8.4	0.06	<0.05	<0.05
Pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	0.13	<0.05	0.09	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	6.6	<0.05	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	3.4	<0.05	<0.05	<0.05
Chrysene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	2.5	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.2	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.24	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.3	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.4	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	39.5	<0.85	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Azobenzene	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Bis(2-chloroethyl)ether	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Carbazole	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Dibenzofuran	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Hexachloroethane	mg/kg	0.05		<0.05	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	-	-	-	-	<0.05	<0.05	<0.05	-	-	-	<0.05	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
9,10-Anthracenedione	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
2-methylphenol	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
2-nitrophenol	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
2,4-dimethylphenol	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
4-chloro-3-methylphenol	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
4-methylphenol	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Phenol	mg/kg	0.2	175000	<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
2-chloronaphthalene	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		2.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	W-BH08		W-BH09			W-BH10	W-BH10A		W-BH11		W-BH12		W-BH13		W-BH14		W-BH15			W-BH16		W-BH17	
				2.5	17	1.6	5.3	19.5	0.1	3	20	2.5	7.5	3.5	19.7	0.4	21.6	0.1	7.2	2.5	6.5	18.5	0.1	18	0.5	7
				16/01/2023	18/01/2023	01/02/2023	02/02/2023	03/02/2023	01/02/2023	02/02/2023	03/02/2023	26/01/2023	27/01/2023	24/01/2023	26/01/2023	06/01/2023	19/01/2023	04/01/2023	04/01/2023	17/01/2023	17/01/2023	20/01/2023	11/01/2023	12/01/2023	13/01/2023	16/01/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-13184	23-13586	23-15975	23-16960	23-17045	23-15975	23-16960	23-17045	23-15173	23-15977	23-14640	23-15173	23-11626	23-13599	23-10590	23-10590	23-13550	23-13550	23-14015	23-12169	23-12263	23-12265	23-13184
				Clay - TFD	Sand - GTD	Clay - TFD	Peat - TFD	Chalk	MADE GROUND	Clay - TFD	Chalk	Clay - TFD	Clay - GTD	Clay - TFD	Chalk	MADE GROUND	Chalk	MADE GROUND	Clay - GTD	Clay - TFD	Clay - GTD	Silt - GTD	MADE GROUND	Gravel - GTD	Clay - TFD	Clay - TFD
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, *2,3,3,4,4,5,5-* (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 52	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 101	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 138	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 153	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 180	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aniline	mg/kg	0.1		1.6	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	5.8	<0.1	<0,1	-	-	-	<0.1	-
4-chloroaniline	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
4-nitroaniline	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
2,4-Dinitrotoluene	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
2,6-dinitrotoluene	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
Nitrobenzene	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Chlorobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
2-chlorotoluene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
4-chlorotoluene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,3-dichlorobenzene	mg/kg	0.001		<0.005 - 0.3	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005 - 1.3	<0.005	<0.005	-	-	-	<0.005	-
1,4-dichlorobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2-dichlorobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2,4-trichlorobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2,3-trichlorobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Hexachlorobenzene	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Hexabromobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Bromomethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
Trichlorofluoromethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
1,2-dibromoethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	-	<0.005	<0.005	<0.005	-	-	-	<0.005	-
2-chlorophenol	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
2,4-dichlorophenol	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
2,4,5-trichlorophenol	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
2,4,6-trichlorophenol	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
Butyl benzyl phthalate	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	-	<0.3	<0.3	<0.3	-	-	-	<0.3	-
Di-n-butyl phthalate	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Diethylphthalate	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Dimethyl phthalate	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	<0.1	-
Isophorone	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	-	<0.2	<0.2	<0.2	-	-	-	<0.2	-
Arsenic	mg/kg	1	7000	11	4.6	14	5.1	2.5	17	25	1.6	7	9.4	13	2.6	17	1.5	15	8.8	12	12	1.9	16	4.6	15	11
Barium	mg/kg	1		100	11	120	130	26	80	70	13	86	110	120	11	68	13	70	81	120	79	19	84	20	110	120
Beryllium	mg/kg	0.06		0.86	0.18	1.1	0.49	0.18	1.4	1.2	0.11	0.89	0.73	0.92	0.1	1.3	0.1	1.2	0.65	0.81	0.72	0.16	1.4	0.3	1	0.72
Boron	mg/kg	0.2		2.2	<0.2	1.7	4.8	<0.2	2.2	16	<0.2	2.9	1.5	7.3	<0.2	5	0.2	5.1	1.8	3.7	2.3	<0.2	4.4	<0.2	3.4	1.4
Cadmium	mg/kg	0.2	12000	<0.2	<0.2	<0.2	0.2	0.3	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	0.3	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2
Chromium (III+VI)	mg/kg	1		23	6.6	32	13	4	41	35	2.3	26	22	28	1.8	43	2	37	19	26	23	3.5	42	4.8	31	19
Copper	mg/kg	1		21	4.4	15	15	8.2	16	16	7.2	11	14	14	2.5	20	3	20	15	16	16	6.6	16	6.4	15	20
Lead	mg/kg	1		15	3.8	18	10	3.1	33	20	2.6	14	12	23	2.3	30	3.1	26	12	13	14	3.3	31	4.7	18	11
Mercury	mg/kg	0.3		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1		28	6	33	16	5.3	37	35	4.4	27	29	28	11	31	6.3	32	23	25	25	8.2	34	6.5	37	24
Selenium	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1		35	8.6	49	20	6.5	64	62	3.8	41	29	43	3.1	67	3.3	58	31	35	29	4.9	64	11	47	28
Zinc	mg/kg	1		66	13	80	45	21	100	83	18	65	52	78	18	86	18	90	44	69	46	20	100	17	71	53
Chromium (hexavalent)	mg/kg	1.8		<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1	1400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		65	2.8	4	110	9	2.2	120	6	61	99	180	<1	<1	<1	1.7	61	150	87	3.8	1.6	53	1.4	6.9
% Moisture	%	0.01		30	12	26	41	19	25	39	19	31	18	33	18	22	17	25	18	28	20	16	23	12	17	16
pH (Lab)	pH_Units	0		8.3	8.1	8.1	7.5	8.7	7.5	7.4	9.2	7	8.9	7.9	8.7	8	8.1	7.9	8.8	8.6	8.2	8.8	8	9.8	7.8	9
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	W-BH18				W-BH19			W-BH20			W-BH21		W-BH22		W-BH23	W-BH24		W-BH25	W-BH26	W-BH27			W-BH28
				21.5	0.1	6.1	18.1	3	7	21	0.1	7	22	0.1	7.5	0.1	20.5	0.1	0.5	20	4	0.1	0.8	2	16	17
				24/01/2023	04/01/2023	05/01/2023	06/01/2023	18/01/2023	19/01/2023	24/01/2023	02/02/2023	03/02/2023	03/02/2023	07/02/2023	08/02/2023	03/02/2023	08/02/2023	19/01/2023	08/02/2023	09/02/2023	20/12/2022	23/11/2022	15/12/2022	16/12/2022	20/12/2022	22/12/2022
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-14640	23-10590	23-10748	23-11626	23-13586	23-13599	23-14640	23-16960	23-17045	23-17045	23-17124	23-17119	23-17045	23-17119	23-13599	23-17119	23-17144	22-14872	22-11231	22-14107	22-14647	22-14872	22-14937
				Chalk	Clay	Clay - TFD	GTD	Clay - TFD	Clay - GTD	Chalk	Clay	Clay - TFD	Chalk	Clay	Silt - TFD	MADE GROUND	Chalk	MADE GROUND	Clay - TFD	Chalk	Clay - TFD	Clay	Clay - TFD	Clay - TFD	Gravel - GTD	Clay - GTD
Textural Class (no units)	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.0066	0.01 - 0.0104	0.028 - 0.0282	0.0043	1.25 - 1.3	0.0877 - 0.088	0.0266 - 0.027	0.0599 - 0.06	0.19 - 0.193	0.0032	0.0083	0.51 - 0.515	0.017	0.008	0.0125 - 0.013	0.0115 - 0.012	0.0168 - 0.017	0.48 - 0.483	0.0196 - 0.02	0.05	0.865 - 0.87	0.0185 - 0.019	0.018 - 0.0181
>C5-C6 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.92	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2		<2	<2	<2	<2	<2	<2	<2	<2	20	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	<8	<8	28	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	<8	<8	14	<8	<8	19	8.3	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	62	<10	<10	22	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2		<2	<2	<2	<2	<2	<2	<2	<2	12	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	41	<10	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	370	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Vinyl chloride	mg/kg	0.001	220	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Chloroethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,1-dichloroethene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
trans-1,2-dichloroethene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,1-dichloroethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
cis-1,2-dichloroethene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Chloroform	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,1,1-trichloroethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Carbon tetrachloride	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Trichloroethene	mg/kg	0.001	33000	-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,1,2-trichloroethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Tetrachloroethene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
2,2-dichloropropane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,1-dichloropropene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,2-dichloroethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,2-dichloropropane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Dibromomethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Bromodichloromethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
cis-1,3-dichloropropene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
trans-1,3-dichloropropene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,3-dichloropropane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Chlorodibromomethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Styrene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Bromoform	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Isopropylbenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
n-propylbenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,3,5-trimethylbenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
tert-butylbenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,2,4-trimethylbenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
sec-butylbenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
p-isopropyltoluene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
n-butylbenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Hexachlorobutadiene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Naphthalene	mg/kg	0.00005		<0.05	<0.05	<0.05	<0.05	<0.0001	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.05	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.0001 - 0.05	<0.0001 - 0.14	<0.0001	<0.05	<0.05
Acenaphthylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.34	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05		<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	0.83	0.18	0.25	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.14	0.05	<0.05	<0.05
Anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05		<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	1	0.32	0.43	<0.05	0.13	<0.05	<0.05	<0.05	0.05	0.09	0.05	<0.05	<0.05
Pyrene	mg/kg	0.05		<0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	<0.05	<0.05	0.93	0.25	0.36	<0.05	0.12	<0.05	<0.05	<0.05	0.05	0.1	0.06	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05		<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.38	<0.05	0.21	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	mg/kg	0.05		<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.45	<0.05	0.23	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05		<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.35	<0.05	0.22	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.16	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.19	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	0.41	<0.05	0.3	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	0.13	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	5.21	<0.85	2.28	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	1.11	<0.85	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	0.1	<0.1	-	-
4-bromophenyl phenyl ether	mg/kg	0.2		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-
4-chlorophenyl phenyl ether	mg/kg	0.3		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-
Azobenzene	mg/kg	0.3		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-
Carbazole	mg/kg	0.3		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-
Dibenzofuran	mg/kg	0.2		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-
Hexachloroethane	mg/kg	0.05		-	-	-	-	<0.05	<0.05	-	-	-	-	<0.05	-	<0.05	-	-	-	-	<0.05	<0.05	<0.05	<0.05	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-
9,10-Anthracenedione	mg/kg	0.3		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-
2-methylphenol	mg/kg	0.3		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-
2-nitrophenol	mg/kg	0.3		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-
2,4-dimethylphenol	mg/kg	0.3		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-
4-chloro-3-methylphenol	mg/kg	0.1		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-
4-methylphenol	mg/kg	0.2		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-
Phenol	mg/kg	0.2	175000	-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-
2-chloronaphthalene	mg/kg	0.1		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

				W-BH18				W-BH19			W-BH20			W-BH21		W-BH22		W-BH23	W-BH24		W-BH25	W-BH26	W-BH27			W-BH28
				21.5	0.1	6.1	18.1	3	7	21	0.1	7	22	0.1	7.5	0.1	20.5	0.1	0.5	20	4	0.1	0.8	2	16	17
				24/01/2023	04/01/2023	05/01/2023	06/01/2023	18/01/2023	19/01/2023	24/01/2023	02/02/2023	03/02/2023	03/02/2023	07/02/2023	08/02/2023	03/02/2023	08/02/2023	19/01/2023	08/02/2023	09/02/2023	20/12/2022	23/11/2022	15/12/2022	16/12/2022	20/12/2022	22/12/2022
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				23-14640	23-10590	23-10748	23-11626	23-13586	23-13599	23-14640	23-16960	23-17045	23-17045	23-17124	23-17119	23-17045	23-17119	23-13599	23-17119	23-17144	22-14872	22-11231	22-14107	22-14647	22-14872	22-14937
Determinand	Units	Method Detection Limit	Construction Worker GAC	Chalk	Clay	Clay - TFD	GTD	Clay - TFD	Clay - GTD	Chalk	Clay	Clay - TFD	Chalk	Clay	Silt - TFD	MADE GROUND	Chalk	MADE GROUND	Clay - TFD	Chalk	Clay - TFD	Clay	Clay - TFD	Clay - TFD	Gravel - GTD	Clay - GTD
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	<0.012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCB 52	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCB 101	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCB 138	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCB 153	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCB 180	mg/kg	0.001		-	-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	<0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.007	-	-	-	-	-
Aniline	mg/kg	0.1		-	-	-	-	<0.1	<0.1	-	-	-	-	0.2	-	<0.1	-	-	-	-	1.1	0.4	<0.1	<0.1	-	-
4-chloroaniline	mg/kg	0.1		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-
4-nitroaniline	mg/kg	0.2		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-
2,4-Dinitrotoluene	mg/kg	0.2		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-
2,6-dinitrotoluene	mg/kg	0.1		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-
Nitrobenzene	mg/kg	0.3		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-
Chlorobenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
2-chlorotoluene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
4-chlorotoluene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,3-dichlorobenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,4-dichlorobenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,2-dichlorobenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,2,4-trichlorobenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,2,3-trichlorobenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Hexachlorobenzene	mg/kg	0.3		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-
Hexabromobenzene	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Bromomethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
Trichlorofluoromethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
1,2-dibromoethane	mg/kg	0.001		-	-	-	-	<0.005	<0.005	-	-	-	-	<0.005	-	<0.005	-	-	-	-	<0.005	<0.001	<0.005	<0.005	-	-
2-chlorophenol	mg/kg	0.1		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-
2,4-dichlorophenol	mg/kg	0.3		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-
2,4,5-trichlorophenol	mg/kg	0.2		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-
2,4,6-trichlorophenol	mg/kg	0.1		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-
Butyl benzyl phthalate	mg/kg	0.3		-	-	-	-	<0.3	<0.3	-	-	-	-	<0.3	-	<0.3	-	-	-	-	<0.3	<0.3	<0.3	<0.3	-	-
Di-n-butyl phthalate	mg/kg	0.2		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-
Diethylphthalate	mg/kg	0.2		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-
Dimethyl phthalate	mg/kg	0.1		-	-	-	-	<0.1	<0.1	-	-	-	-	<0.1	-	<0.1	-	-	-	-	<0.1	<0.1	<0.1	<0.1	-	-
Isophorone	mg/kg	0.2		-	-	-	-	<0.2	<0.2	-	-	-	-	<0.2	-	<0.2	-	-	-	-	<0.2	<0.2	<0.2	<0.2	-	-
Arsenic	mg/kg	1	7000	1.4	15	14	2.8	21	10	1.9	22	18	1.7	17	16	13	3.2	17	16	3.7	13	18	21	15	3.9	2.7
Barium	mg/kg	1		9.5	61	100	14	96	110	16	100	120	9.7	78	110	48	15	66	61	33	120	83	160	80	16	16
Beryllium	mg/kg	0.06		0.08	1.2	0.97	0.17	1.1	0.66	0.14	1.9	1	0.09	1.3	1.2	1.2	0.17	1.3	1.4	0.3	1.1	1.3	1.3	0.81	0.21	0.15
Boron	mg/kg	0.2		0.2	3.9	6.2	<0.2	5.4	1.3	0.3	5.4	2.9	<0.2	4.4	14	4	<0.2	4.1	3.2	<0.2	3.2	1.5	4.8	3.3	0.3	<0.2
Cadmium	mg/kg	0.2	12000	0.3	<0.2	<0.2	0.2	<0.2	<0.2	0.3	0.4	<0.2	0.3	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3
Chromium (III+VI)	mg/kg	1		<1	36	29	4.3	36	18	3.1	57	26	1.5	40	33	36	3.4	39	40	7.9	31	40	38	24	5	2.8
Copper	mg/kg	1		6.2	16	13	4.8	18	16	7	21	13	5.9	19	21	16	6.8	20	17	8	17	18	18	13	4.2	3.2
Lead	mg/kg	1		2.4	32	16	3.6	19	10	4.1	43	15	2.2	29	28	29	3.9	31	24	4.7	18	30	24	15	3.4	2.6
Mercury	mg/kg	0.3		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1		5.5	31	30	5	34	23	6.5	48	30	6.4	36	33	28	6.8	35	44	10	32	36	50	24	7	4.5
Selenium	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1		1.9	56	45	6.5	53	28	5.1	92	42	3	64	54	56	6.9	61	62	12	45	61	63	39	11	4.7
Zinc	mg/kg	1		15	76	75	12	85	42	21	120	96	17	89	100	87	21	90	86	27	76	100	95	62	21	13
Chromium (hexavalent)	mg/kg	1.8		<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1	1400	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		<1	<1	140	5.9	730	87	1.5	1.8	570	<1	<1	130	2.4	8.4	<1	<1	62	88	11	<1	170	8.6	2.6
% Moisture	%	0.01		18	27	42	14	31	13	15	27	25	17	24	53	32	17	24	21	19	35	22	24	33	14	16
pH (Lab)	pH_Units	0		8.4	7.1	8.1	8	7.5	9.1	8.5	7.4	8.4	8.8	7.8	7.3	6.2	8.8	7.7	8.3	8.5	8.4	7.8	7.9	7.6	8.7	9
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	W-BH29					W-BH30		W-BH31		W-BH32			W-BH33		W-BH34		W-BH35				W-BH36		W-BH37
				23.2	0	2.4	5.4	18.5	0.7	2	3.2	19.2	0.8	16.2		3.4	16.5	0.1	4.7	0.1			5.5	18.9	2.5	17.5	0.1
				11/01/2023	23/11/2022	23/11/2022	23/11/2022	09/12/2022	08/12/2022	09/12/2022	05/12/2022	07/12/2022	29/11/2022	01/12/2022		14/12/2022	16/12/2022	23/11/2022	24/11/2022	22/11/2022			23/11/2022	07/12/2022	07/02/2023	09/02/2023	23/01/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal			Normal	Normal	Normal	Normal	Normal
				23-12169	22-11231	22-11231	22-11231	22-13361	22-13360	22-13361	22-13280	23-10020	22-13250	22-12879	22-12883	22-13842	22-14647	22-11275	22-11195	22-11249	22-11250	22-11231	22-13605	23-17124	23-17144	23-14634	
				Chalk	Clay	Clay - TFD	Clay - TFD	Chalk	Clay	Silt - TFD	Clay - TFD	Silt - GTD	Clay - TFD	Sand - GTD	Sand - GTD	Clay - TFD	Gravel - GTD	MADE GROUND	Peat - TFD	MADE GROUND	MADE GROUND	Clay - GTD	Chalk	Clay - TFD	Gravel - GTD	Clay	
Textural Class (no units)	-	0		-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	7.2	-	-	-	-	-
Freon 113	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.0042	0.055	0.81	-	0.009	0.15 - 0.151	1.27 - 1.3	0.46 - 0.465	0.025 - 0.0253	0.28 - 0.283	0.024 - 0.0243	-	0.35 - 0.354	0.0176 - 0.018	0.0158 - 0.016	3.19 - 3.2	0.019	-	0.0685 - 0.069	0.0095	0.45	0.0058	0.169 - 0.17
>C5-C6 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2		<2	<2	<2	<2	<2	3.2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	-	<8	<8	<8	<8	<8	-	<8	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	-	<8	<8	<8	<8	<8	-	<8	<8	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	<10	<10	<10	<10	16	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<3	<2	<2	-	<2	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	11	<10	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	16	<10	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	370	<0.005	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001		<0.005	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001		<0.005	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001		<0.005	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001		<0.005	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.001	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.001	<0.001	-	<0.001	<0.005	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Vinyl chloride	mg/kg	0.001	220	<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Chloroethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,1-dichloroethene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
trans-1,2-dichloroethene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,1-dichloroethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
cis-1,2-dichloroethene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Chloroform	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,1,1-trichloroethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Carbon tetrachloride	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Trichloroethene	mg/kg	0.001	33000	<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,1,2-trichloroethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Tetrachloroethene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
2,2-dichloropropane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,1-dichloropropene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,2-dichloroethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,2-dichloropropane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Dibromomethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Bromodichloromethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
cis-1,3-dichloropropene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
trans-1,3-dichloropropene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,3-dichloropropane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Chlorodibromomethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,1,1,2-tetrachloroethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Styrene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Bromoform	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Isopropylbenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,1,2,2-tetrachloroethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
n-propylbenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,3,5-trimethylbenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
tert-butylbenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,2,4-trimethylbenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
sec-butylbenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
p-isopropyltoluene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
n-butylbenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,2-dibromo-3-chloropropane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Hexachlorobutadiene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Naphthalene	mg/kg	0.00005		<0.0001	<0.05	<0.0001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.15	<0.0001	0.48	<0.05	<0.05	<0.0001 - 0.05	<0.0001 - 0.19	<0.0001 - 0.07	-	<0.0001	<0.05	0.08	<0.05	<0.0001
Acenaphthylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05		<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	<0.05	0.08	<0.05	0.17	<0.05	<0.05	0.12	0.1	0.11	-	<0.05	<0.05	0.11	<0.05	<0.05
Anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05		<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	0.07	<0.05	0.12	<0.05	<0.05	0.17	0.05	0.2	-	<0.05	<0.05	0.08	<0.05	<0.05
Pyrene	mg/kg	0.05		<0.05	0.14	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	0.07	<0.05	0.12	<0.05	<0.05	0.17	0.05	0.2	-	<0.05	<0.05	0.09	<0.05	<0.05
Benz(a)anthracene	mg/kg	0.05		<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	0.05	<0.05	<0.05	0.1	<0.05	0.11	-	<0.05	<0.05	0.07	<0.05	<0.05
Chrysene	mg/kg	0.05		<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	0.07	<0.05	<0.05	0.09	<0.05	0.08	-	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05		<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	0.08	<0.05	0.1	-	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.11	0.05	<0.05	<0.05	0.11	<0.05	0.1	-	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.06	-	<0.05	<0.05	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	1.06	<0.85	<0.85	1.14	<0.85	1.03	-	<0.85	<0.85	<0.85	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		<0.1	-	<0.1	-	-	-	-	-	-	-	0.1	-	-	-	0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	-	<0.2	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3
Azobenzene	mg/kg	0.3		<0.3	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3
Bis(2-chloroethoxy) methane	mg/kg	0.3		<0.3	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3
Bis(2-chloroethyl)ether	mg/kg	0.2		<0.2	-	<0.2	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2
Carbazole	mg/kg	0.3		<0.3	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3
Dibenzofuran	mg/kg	0.2		<0.2	-	<0.2	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2
Hexachloroethane	mg/kg	0.05		<0.05	-	<0.05	-	-	-	-	-	-	-	<0.05	-	-	-	<0.05	<0.05	<0.05	-	<0.05	-	-	-	<0.05
Bis(2-chloroisopropyl) ether	mg/kg	0.1		<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1
9,10-Anthracenedione	mg/kg	0.3		<0.3	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3
2-methylphenol	mg/kg	0.3		<0.3	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3
2-nitrophenol	mg/kg	0.3		<0.3	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3
2,4-dimethylphenol	mg/kg	0.3		<0.3	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3
4-chloro-3-methylphenol	mg/kg	0.1		<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1
4-methylphenol	mg/kg	0.2		<0.2	-	<0.2	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2
Phenol	mg/kg	0.2	175000	<0.2	-	<0.2	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2
2-chloronaphthalene	mg/kg	0.1		<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	W-BH29					W-BH30		W-BH31		W-BH32			W-BH33		W-BH34		W-BH35				W-BH36		W-BH37
				23.2	0	2.4	5.4	18.5	0.7	2	3.2	19.2	0.8	16.2		3.4	16.5	0.1	4.7	0.1		5.5	18.9	2.5	17.5	0.1
				11/01/2023	23/11/2022	23/11/2022	23/11/2022	09/12/2022	08/12/2022	09/12/2022	05/12/2022	07/12/2022	29/11/2022	01/12/2022		14/12/2022	16/12/2022	23/11/2022	24/11/2022	22/11/2022		23/11/2022	07/12/2022	07/02/2023	09/02/2023	23/01/2023
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal
				23-12169	22-11231	22-11231	22-11231	22-13361	22-13360	22-13361	22-13280	23-10020	22-13250	22-12879	22-12883	22-13842	22-14647	22-11275	22-11195	22-11249	22-11250	22-11231	22-13605	23-17124	23-17144	23-14634
				Chalk	Clay	Clay - TFD	Clay - TFD	Chalk	Clay	Silt - TFD	Clay - TFD	Silt - GTD	Clay - TFD	Sand - GTD	Sand - GTD	Clay - TFD	Gravel - GTD	MADE GROUND	Peat - TFD	MADE GROUND	MADE GROUND	Clay - GTD	Chalk	Clay - TFD	Gravel - GTD	Clay
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	<0.012	-	-	-	-	-	-	-	-	<0.012	-	-	-	-	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCB 52	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCB 101	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCB 138	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCB 153	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCB 180	mg/kg	0.001		-	<0.001	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		-	<0.007	-	-	-	-	-	-	-	-	<0.007	<0.007	-	-	-	-	-	-	-	-	-	-	-
Aniline	mg/kg	0.1		<0.1	-	0.6	-	-	-	-	-	-	-	0.4	-	-	-	<0.1	2	<0.1	-	2.2	-	-	-	<0.1
4-chloroaniline	mg/kg	0.1		<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1
4-nitroaniline	mg/kg	0.2		<0.2	-	<0.2	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2
2,4-Dinitrotoluene	mg/kg	0.2		<0.2	-	<0.2	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2
2,6-dinitrotoluene	mg/kg	0.1		<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1
Nitrobenzene	mg/kg	0.3		<0.3	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3
Chlorobenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
2-chlorotoluene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
4-chlorotoluene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,3-dichlorobenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,4-dichlorobenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,2-dichlorobenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,2,4-trichlorobenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,2,3-trichlorobenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Hexachlorobenzene	mg/kg	0.3		<0.3	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3
Hexabromobenzene	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Bromomethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
Trichlorofluoromethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
1,2-dibromoethane	mg/kg	0.001		<0.005	-	<0.005	-	-	-	-	-	-	-	<0.005	-	-	-	<0.005	<0.001	<0.001	-	<0.001	-	-	-	<0.005
2-chlorophenol	mg/kg	0.1		<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1
2,4-dichlorophenol	mg/kg	0.3		<0.3	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3
2,4,5-trichlorophenol	mg/kg	0.2		<0.2	-	<0.2	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2
2,4,6-trichlorophenol	mg/kg	0.1		<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1
Butyl benzyl phthalate	mg/kg	0.3		<0.3	-	<0.3	-	-	-	-	-	-	-	<0.3	-	-	-	<0.3	<0.3	<0.3	-	<0.3	-	-	-	<0.3
Di-n-butyl phthalate	mg/kg	0.2		<0.2	-	<0.2	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2
Diethylphthalate	mg/kg	0.2		<0.2	-	<0.2	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2
Dimethyl phthalate	mg/kg	0.1		<0.1	-	<0.1	-	-	-	-	-	-	-	<0.1	-	-	-	<0.1	<0.1	<0.1	-	<0.1	-	-	-	<0.1
Isophorone	mg/kg	0.2		<0.2	-	<0.2	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	<0.2	<0.2	-	<0.2	-	-	-	<0.2
Arsenic	mg/kg	1	7000	<1	18	18	-	1.4	16	19	11	1.9	17	5.1	-	20	2.5	16	3.3	20	-	13	1.5	11	2.9	24
Barium	mg/kg	1		11	72	110	-	8.9	110	110	120	14	100	44	-	93	12	75	12	76	-	90	11	130	15	87
Beryllium	mg/kg	0.06		0.08	1.6	1	-	0.09	1.2	1.1	1	0.15	1.4	0.4	-	0.81	0.14	1.1	0.28	1.6	-	0.73	0.09	0.75	0.17	1.4
Boron	mg/kg	0.2		<0.2	2.1	4	-	<0.2	5.1	3.5	5.2	<0.2	6.4	0.3	-	1	0.2	3.4	140	5.2	-	1.8	<0.2	1.1	<0.2	2.9
Cadmium	mg/kg	0.2	12000	0.4	<0.2	<0.2	-	0.4	<0.2	<0.2	<0.2	0.3	<0.2	0.3	-	<0.2	<0.2	<0.2	0.3	<0.2	-	<0.2	0.3	<0.2	<0.2	<0.2
Chromium (III+VI)	mg/kg	1		<1	46	31	-	<1	35	31	32	3	42	10	-	36	2.7	30	5.5	47	-	21	1.2	23	3.2	38
Copper	mg/kg	1		3.9	19	14	-	7.7	18	16	16	5.9	16	10	-	350	2.6	15	19	21	-	18	2	17	5.2	20
Lead	mg/kg	1		2.3	31	17	-	2.9	21	18	18	3.3	24	7.2	-	31	2.4	32	4.3	34	-	11	2.1	16	3.4	26
Mercury	mg/kg	0.3		<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1		3.8	41	30	-	3.4	36	32	31	6.7	42	12	-	31	4.1	28	13	42	-	27	3.1	24	4.8	46
Selenium	mg/kg	1		<1	<1	<1	-	<1	<2	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1
Vanadium	mg/kg	1		1.6	68	47	-	1.5	52	48	48	4.6	63	15	-	48	5.4	51	11	72	-	30	2.2	37	6.8	60
Zinc	mg/kg	1		14	95	75	-	15	81	76	79	17	93	28	-	560	14	87	27	99	-	47	13	67	14	94
Chromium (hexavalent)	mg/kg	1.8		<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	2.1	-	-	-	-	-
Cyanide (Free)	mg/kg	1	1400	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		<1	8.8	110	-	<1	1.7	82	170	6.7	2.7	13	-	130	4.3	21	170	<1	-	120	2.7	180	3.7	<1
% Moisture	%	0.01		17	24	31	40	17	19	24	36	13	25	15	15	27	11	21	78	24	24	14	18	27	14	24
pH (Lab)	pH_Units	0		9.2	7.2	7.9	-	8.4	7.5	7.7	8.2	8.3	7.6	8.7	8.4	7.9	8.3	8.2	-	7.5	7.2	8.6	8.3	8.5	8.6	7.4
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	<0.1	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	W-TP01 0.1 11/01/2023 Normal 23-12169 MADE GROUND	W-TP02 0.8 11/01/2023 Normal 23-12169 MADE GROUND	W-TP03 2.3 11/01/2023 Normal 23-12169 Clay - TFD	W-TP04 0.1 18/01/2023 Normal 23-13586 MADE GROUND	W-TP04 0.8 18/01/2023 Normal 23-13586 Clay	W-TP05 0.1 12/01/2023 Normal 23-12263 MADE GROUND	W-TP06 0.6 12/01/2023 Normal 23-12263 MADE GROUND	W-TP07 0.1 23/01/2023 Normal 23-14634 MADE GROUND	W-TP08 0.1 18/01/2023 Normal 23-13586 MADE GROUND	W-TP09 0.6 30/11/2022 Normal 22-13079 MADE GROUND	W-TP09A 2.6 30/11/2022 Normal 22-13079 Clay - TFD	22-13082 Clay - TFD	W-TP10 0.6 13/12/2022 Normal 22-13738 Clay - TFD	W-TP11 0.6 02/12/2022 Normal 22-12937 Clay - TFD	22-12939 Clay - TFD	W-TP12 0.1 24/01/2023 Normal 23-14640 Silt	W-TP13 0.1 19/01/2023 Normal 23-13599 Clay	W-TP14 0.5 24/11/2022 Normal 22-11195 MADE GROUND	W-TP14A 1.6 01/12/2022 Normal 22-12879 Clay - TFD	W-TP15 0.6 06/12/2022 Normal 22-13291 Clay - TFD	1.6 06/12/2022 Normal 22-13291 Clay - TFD	W-TP16 0.8 26/01/2023 Normal 23-15173 Clay - TFD	W-TP17 0.1 20/01/2023 Normal 23-14015 MADE GROUND
Textural Class (no units)	-	0		-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	-	-	-	5.3	-	-	4.5	-	-	-	-	-	-	-	-	-
Freon 113	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	-	<0.005	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.0072	0.0087	2.27 - 2.3	0.0497 - 0.05	0.031 - 0.0312	0.0149 - 0.015	0.0446 - 0.045	0.0478 - 0.048	0.017 - 0.0171	-	0.507 - 0.51	-	0.02 - 0.0203	0.51 - 0.513	-	0.16 - 0.163	0.026 - 0.0263	0.042 - 0.0424	2.29 - 2.3	0.11 - 0.111	0.43 - 0.434	0.27 - 0.271	0.026
>C5-C6 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	-	<2	<2	-	<2	<2	<2	<2	<2	<2	<2	<2
>C16-C21 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<8	<8	<8	<8	<8
>C21-C35 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	<8	<8	<8	-	<8	-	<8	<8	-	<8	<8	<8	<8	<8	<8	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	-	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	-	3.5	-	<2	<2	-	<2	<2	<2	<2	<2	<2	<2	<2
>EC16-EC21 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	-	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10
>EC21-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	-	12	-	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	11
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	-	24	-	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	19
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<10	-	-	-	-	-	-	-	-
Benzene	mg/kg	0.001	370	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (m & p)	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005
Xylene (o)	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005
Chloromethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Vinyl chloride	mg/kg	0.001	220	<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Chloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,1-dichloroethene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
trans-1,2-dichloroethene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,1-dichloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
cis-1,2-dichloroethene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Chloroform	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,1,1-trichloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Carbon tetrachloride	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Trichloroethene	mg/kg	0.001	33000	<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,1,2-trichloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Tetrachloroethene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
2,2-dichloropropane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,1-dichloropropene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,2-dichloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,2-dichloropropane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Dibromomethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Bromodichloromethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
cis-1,3-dichloropropene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
trans-1,3-dichloropropene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,3-dichloropropane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Chlorodibromomethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Styrene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Bromoform	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Isopropylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
n-propylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,3,5-trimethylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
tert-butylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,2,4-trimethylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
sec-butylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
p-isopropyltoluene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
n-butylbenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Hexachlorobutadiene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Naphthalene	mg/kg	0.00005		<0.0001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	<0.0001	-	<0.0001 - 0.32	-	<0.05	<0.0001 - 0.19	0.18	<0.0001	<0.0001	<0.05	0.11	<0.05	<0.05	<0.0001	0.07
Acenaphthylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	-	0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0,05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	0.05	-	<0.05	0.07	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
Fluorene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	-	0.14	-	<0.05	0.09	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08
Phenanthrene	mg/kg	0.05		<0.05	<0.05	0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.32	-	0.41	-	0.11	0.45	0.45	0.21	0.12	<0.05	0.16	<0.05	<0.05	<0.05	0.71
Anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	-	0.11	-	0.11	0.12	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.13
Fluoranthene	mg/kg	0.05		0.06	<0.05	<0.05	0.07	<0.05	0.09	<0.05	<0.05	0.49	-	0.23	-	0.1	0.46	0.43	0.21	0.12	<0.05	0.12	<0.05	<0.05	<0.05	0.96
Pyrene	mg/kg	0.05		0.06	<0.05	<0.05	0.06	<0.05	0.08	<0.05	<0.05	0.41	-	0.19	-	0.06	0.42	0.36	0.21	0.09	<0.05	0.12	<0.05	<0.05	<0.05	0.83
Benz(a)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.2	-	0.1	-	<0.05	0.21	0.19	0.09	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	0.45
Chrysene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	-	0.08	-	<0.05	0.25	0.24	0.17	0.07	<0.05	0.06	<0.05	<0.05	<0.05	0.41
Benzo(a) pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.18	-	0.07	-	<0.05	0.17	0.11	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.33
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	-	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.24
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	-	<0.05	0.14	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.23
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	-	0.09	-	<0.05	0.26	0.17	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.47
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	-	<0.05	-	<0.05	0.06	0.1	<0.05	<0.05	<0.05	<0,05	<0.05	<0.05	<0.05	0.12
PAH 17 Total	mg/kg	0.85		<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	2.21	-	1.84	-	<0.85	2.99	2.51	1.12	<0.85	<0.85	<0.85	<0.85	<0.85	<0.85	5.08
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	-	0.2	-	-	0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-
Azobenzene	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-
Bis(2-chloroethyl)ether	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-
Carbazole	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-
Dibenzofuran	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-
Hexachloroethane	mg/kg	0.05		<0.05	-	-	-	-	-	-	-	<0.05	-	<0.05	-	-	<0.05	-	<0.05	<0.05	-	-	-	-	<0.05	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-
9,10-Anthracenedione	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-
2-methylphenol	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-
2-nitrophenol	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-
2,4-dimethylphenol	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-
4-chloro-3-methylphenol	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-
4-methylphenol	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-
Phenol	mg/kg	0.2	175000	<0.2	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-
2-chloronaphthalene	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-
PCB 118	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC	W-TP01 0.1 11/01/2023 Normal 23-12169 MADE GROUND	W-TP02 0.8 11/01/2023 Normal 23-12169 MADE GROUND	W-TP03 2.3 11/01/2023 Normal 23-12169 Clay - TFD	W-TP04 0.1 18/01/2023 Normal 23-13586 MADE GROUND	W-TP04 0.8 18/01/2023 Normal 23-13586 Clay	W-TP05 0.1 12/01/2023 Normal 23-12263 MADE GROUND	W-TP06 0.6 12/01/2023 Normal 23-12263 MADE GROUND	W-TP07 0.1 23/01/2023 Normal 23-14634 MADE GROUND	W-TP08 0.1 18/01/2023 Normal 23-13586 MADE GROUND	W-TP09 0.6 30/11/2022 Normal 22-13079 MADE GROUND	W-TP09A 2.6 30/11/2022 Normal 22-13079 Clay - TFD	22-13082 Clay - TFD	W-TP10 0.6 13/12/2022 Normal 22-13738 Clay - TFD	W-TP11 0.6 02/12/2022 Normal 22-12937 Clay - TFD	22-12939 Clay - TFD	W-TP12 0.1 24/01/2023 Normal 23-14640 Silt	W-TP13 0.1 19/01/2023 Normal 23-13599 Clay	W-TP14 0.5 24/11/2022 Normal 22-11195 MADE GROUND	W-TP14A 1.6 01/12/2022 Normal 22-12879 Clay - TFD	W-TP15 0.6 06/12/2022 Normal 22-13291 Clay - TFD	1.6 06/12/2022 Normal 22-13291 Clay - TFD	W-TP16 0.8 26/01/2023 Normal 23-15173 Clay - TFD	W-TP17 0.1 20/01/2023 Normal 23-14015 MADE GROUND
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		<0.012	-	-	-	-	-	-	-	-	-	<0.012	-	-	<0.012	-	-	-	-	-	-	-	-	-
PCB 28	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-
PCB 52	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-
PCB 101	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-
PCB 138	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-
PCB 153	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-
PCB 180	mg/kg	0.001		<0.001	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	<0.001	-	-	-	-	-	-	-	-
PCBs (Sum of total)	mg/kg	0.007		<0.007	-	-	-	-	-	-	-	-	-	<0.007	-	-	<0.007	<0.007	-	-	-	-	-	-	-	-
Aniline	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	1.1	<0.1	-	-	-	-	<0.1	-
4-chloroaniline	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-
4-nitroaniline	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-
2,4-Dinitrotoluene	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-
2,6-dinitrotoluene	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-
Nitrobenzene	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-
Chlorobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
2-chlorotoluene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
4-chlorotoluene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,3-dichlorobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005 - 0.2	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,4-dichlorobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,2-dichlorobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,2,4-trichlorobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,2,3-trichlorobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Hexachlorobenzene	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-
Hexabromobenzene	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Bromomethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
Trichlorofluoromethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
1,2-dibromoethane	mg/kg	0.001		<0.005	-	-	-	-	-	-	-	<0.005	-	<0.005	-	-	<0.005	-	<0.005	<0.005	-	-	-	-	<0.005	-
2-chlorophenol	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-
2,4-dichlorophenol	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-
2,4,5-trichlorophenol	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-
2,4,6-trichlorophenol	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-
Butyl benzyl phthalate	mg/kg	0.3		<0.3	-	-	-	-	-	-	-	<0.3	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-	-	<0.3	-
Di-n-butyl phthalate	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-
Diethylphthalate	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-
Dimethyl phthalate	mg/kg	0.1		<0.1	-	-	-	-	-	-	-	<0.1	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-	-	<0.1	-
Isophorone	mg/kg	0.2		<0.2	-	-	-	-	-	-	-	<0.2	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-	-	<0.2	-
Arsenic	mg/kg	1	7000	18	2.5	13	19	20	21	19	17	20	-	12	-	16	15	-	17	19	18	29	16	13	16	18
Barium	mg/kg	1		96	11	120	86	97	93	96	110	100	-	120	-	92	79	-	74	79	160	120	130	120	82	71
Beryllium	mg/kg	0.06		1.4	0.12	1.1	1.5	1.3	1.6	1.5	1.4	1.5	-	0.96	-	1.4	1.5	-	1.4	1.4	1.2	1.4	1.3	1.1	1.2	1.5
Boron	mg/kg	0.2		4.6	<0.2	4.2	6.8	3.1	7.1	11	5.1	5.4	-	8.3	-	3.4	7.4	-	6.9	3.3	1.2	8.2	4.3	3.6	4.8	7.4
Cadmium	mg/kg	0.2	12000	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	-	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium (III+VI)	mg/kg	1		40	3.2	33	46	40	49	43	40	45	-	29	-	41	43	-	43	42	36	39	37	32	32	43
Copper	mg/kg	1		20	6.8	18	19	20	20	19	18	22	-	17	-	16	17	-	20	20	15	20	18	21	13	21
Lead	mg/kg	1		28	2.6	18	33	23	39	24	24	35	-	18	-	23	24	-	33	32	23	27	36	18	18	33
Mercury	mg/kg	0.3		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	-	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Nickel	mg/kg	1		38	4.1	34	40	40	43	41	48	41	-	30	-	40	40	-	38	37	42	38	38	32	36	39
Selenium	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	1		62	4.1	52	71	61	74	62	63	70	-	47	-	59	63	-	62	67	57	63	54	48	51	68
Zinc	mg/kg	1		97	11	81	96	89	120	92	90	110	-	69	-	87	97	-	92	95	81	95	82	76	76	97
Chromium (hexavalent)	mg/kg	1.8		<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	-	-	-	2.7	-	-	0.8	-	-	-	-	-	-	-	-
Cyanide (Free)	mg/kg	1	1400	<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	-	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1
Sulphide	mg/kg	1		1.1	1.7	430	<1	2	13	<1	<1	<1	-	750	-	2	<1	-	2	7.9	<1	12	1.2	1.4	<1	1.5
% Moisture	%	0.01		20	5.2	31	21	20	25	21	28	23	-	30	30	20	23	23	21	24	20	28	23	26	26	25
pH (Lab)	pH_Units	0		8.1	9.3	7.7	7.7	7.9	7.8	8.4	7.7	7.5	-	8.2	8	8.4	7.6	7.9	7.8	7.9	8.3	7.1	7.9	8	7.9	7.1
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	<0.1	-	-	-	-	-	-	-	-

				W-TP18		W-TP19A	W-TP21		W-TP23	W-TP24		W-TP26	W-TP27A	W-TP28	W-TP28A	W-TP29		W-TP30	W-TP31
				2.2	0.1	2.2	0.1	0.6	2.8	0.1	0.6		0.8	2.5	0.5	2.6	0.3		0.6	0.3
				20/01/2023	25/01/2023	25/01/2023	19/01/2023	24/01/2023	24/01/2023	25/01/2023	01/12/2022		05/12/2022	24/11/2022	23/11/2022	23/11/2022	06/12/2022		14/12/2022	22/11/2022
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal		Normal	Normal
				23-14015	23-14638	23-14638	23-13599	23-14640	23-14640	23-14638	22-12879	22-12883	22-13280	22-11195	22-11231	22-11231	22-13291	22-13294	22-13842	22-11249
Determinand	Units	Method Detection Limit	Construction Worker GAC	Clay - TFD	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD
Textural Class (no units)	-	0		-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-
Loss on ignition	%	0.2		-	-	-	-	-	-	-	-	4.1	-	-	-	-	-	5.4	-	-
Freon 113	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Water Soluble Sulphate (2:1 Leachate Equivalent)	g/l	0.00125		0.675 - 0.68	0.15	0.739 - 0.74	0.0157 - 0.016	0.147 - 0.15	0.777 - 0.78	0.036	0.0316 - 0.032	-	0.47 - 0.474	0.46 - 0.461	0.0246 - 0.025	0.656 - 0.66	0.0539 - 0.054	-	0.2 - 0.203	0.029 - 0.0294
>C5-C6 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001
>C6-C8 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001
>C8-C10 Aliphatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001
>C10-C12 Aliphatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1
>C12-C16 Aliphatics	mg/kg	2		<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	-	<2	<2
>C16-C21 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	<8	<8	-	<8	<8	<8	<8	<8	-	<8	<8
>C21-C35 Aliphatics	mg/kg	8		<8	<8	<8	<8	<8	<8	<8	<8	-	<8	<8	<8	<8	<8	-	<8	<8
>C5-C35 Aliphatics	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	<10
>EC5-EC7 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001
>EC7-EC8 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001
>EC8-EC10 Aromatics	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	<0.001
>EC10-EC12 Aromatics	mg/kg	1		<1	<1	<1	2.7	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1
>EC12-EC16 Aromatics	mg/kg	2		<2	<2	<2	10	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	-	<2	<2
>EC16-EC21 Aromatics	mg/kg	10		<10	<10	<10	58	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	<10
>EC21-EC35 Aromatics	mg/kg	10		<10	<10	<10	70	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	<10
>EC5-EC35 Aromatics	mg/kg	10		<10	<10	<10	140	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	-	<10	<10
mineral oil	mg/kg	10		-	-	-	-	-	-	-	-	<10	-	-	-	-	-	<10	-	-
Benzene	mg/kg	0.001	370	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001
Toluene	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001
Ethylbenzene	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001
Xylene (m & p)	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001
Xylene (o)	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.005	<0.005	<0.001
Total BTEX	mg/kg	0.005		-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	<0.005	-	-
MTBE	mg/kg	0.001		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.001	<0.001	<0.005	-	<0.005	<0.001
Chloromethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Vinyl chloride	mg/kg	0.001	220	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Chloroethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1-dichloroethene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
trans-1,2-dichloroethene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1-dichloroethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
cis-1,2-dichloroethene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Chloroform	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1,1-trichloroethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Carbon tetrachloride	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Trichloroethene	mg/kg	0.001	33000	<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1,2-trichloroethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Tetrachloroethene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
2,2-dichloropropane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1-dichloropropene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2-dichloroethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2-dichloropropane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Dibromomethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Bromodichloromethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
cis-1,3-dichloropropene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
trans-1,3-dichloropropene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,3-dichloropropane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Chlorodibromomethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Styrene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Bromoform	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Isopropylbenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
n-propylbenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
tert-butylbenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
sec-butylbenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
p-isopropyltoluene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
n-butylbenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Hexachlorobutadiene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Naphthalene	mg/kg	0.00005		<0.0001	0.15	<0.05	0.51	<0.0001	<0.05	0.06	<0.0001	0.58	<0.05	<0.0001 - 0.06	<0.05	<0.0001 - 0.07	<0.0001	<0.05	<0.05	<0.05
Acenaphthylene	mg/kg	0.05		<0.05	0.08	0.06	0.33	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	mg/kg	0.05		<0.05	0.06	<0.05	0.73	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	mg/kg	0.05		<0.05	0.06	<0.05	0.84	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	mg/kg	0.05		0.07	0.32	0.11	9	0.17	<0.05	0.1	<0.05	0.12	0.06	0.07	0.05	0.23	0.11	0.1	0.05	0.06
Anthracene	mg/kg	0.05		<0.05	0.09	<0.05	2.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	mg/kg	0.05		0.09	0.34	0.13	14	0.28	<0.05	0.18	<0.05	0.09	0.05	0.05	0.05	0.19	0.14	0.13	0.07	0.09
Pyrene	mg/kg	0.05		0.08	0.28	0.11	12	0.25	<0.05	0.14	<0.05	0.08	<0.05	0.06	0.07	0.19	0.12	0.12	0.08	0.07
Benz(a)anthracene	mg/kg	0.05		<0.05	0.13	<0.05	6.1	0.15	<0.05	0.06	0.08	<0.05	<0.05	<0.05	<0.05	0.08	0.05	0.05	<0.05	<0.05
Chrysene	mg/kg	0.05		<0.05	0.17	<0.05	5.8	0.17	<0.05	0.08	0.08	<0.05	<0.05	<0.05	<0.05	0.07	0.08	0.08	<0.05	<0.05
Benzo(a) pyrene	mg/kg	0.05		<0.05	0.15	<0.05	6	0.13	<0.05	0.08	0.06	<0.05	<0.05	<0.05	<0.05	0.07	0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.05		<0.05	<0.05	<0.05	2.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	mg/kg	0.05		<0.05	<0.05	<0.05	0.77	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	mg/kg	0.05		<0.05	<0.05	<0.05	2.7	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	mg/kg	0.05		<0.05	0.15	<0.05	5.7	0.16	<0.05	0.08	0.09	<0.05	<0.05	<0.05	<0.05	0.06	0.07	0.09	<0.05	0.06
Benzo(k)fluoranthene	mg/kg	0.05		<0.05	<0.05	<0.05	3.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05
PAH 17 Total	mg/kg	0.85		<0.85	1.98	<0.85	72.4	1.44	<0.85	0.85	<0.85	0.87	<0.85	<0.85	<0.85	1.08	<0.85	<0.85	<0.85	<0.85
Coronene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2-methylnaphthalene	mg/kg	0.1		<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	0.1	<0.1	-	-	-
4-bromophenyl phenyl ether	mg/kg	0.2		<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
4-chlorophenyl phenyl ether	mg/kg	0.3		<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Azobenzene	mg/kg	0.3		<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Bis(2-chloroethoxy) methane	mg/kg	0.3		<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2		<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
Carbazole	mg/kg	0.3		<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Dibenzofuran	mg/kg	0.2		<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
Hexachloroethane	mg/kg	0.05		<0.05	-	-	-	<0.05	-	-	<0.05	-	-	<0.05	-	<0.05	<0.05	-	-	-
Bis(2-chloroisopropyl) ether	mg/kg	0.1		<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
9,10-Anthracenedione	mg/kg	0.3		<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
2-methylphenol	mg/kg	0.3		<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
2-nitrophenol	mg/kg	0.3		<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
2,4-dimethylphenol	mg/kg	0.3		<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
4-chloro-3-methylphenol	mg/kg	0.1		<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
4-methylphenol	mg/kg	0.2		<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
Phenol	mg/kg	0.2	175000	<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
2-chloronaphthalene	mg/kg	0.1		<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
Total Monohydric Phenols (S) Corrected	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
PCB 118	mg/kg	0.001		-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-

Determinand	Units	Method Detection Limit	Construction Worker GAC		W-TP18		W-TP19A	W-TP21		W-TP23	W-TP24		W-TP26	W-TP27A	W-TP28	W-TP28A	W-TP29		W-TP30	W-TP31
				2.2	0.1	2.2	0.1	0.6	2.8	0.1	0.6		0.8	2.5	0.5	2.6	0.3		0.6	0.3
				20/01/2023	25/01/2023	25/01/2023	19/01/2023	24/01/2023	24/01/2023	25/01/2023	01/12/2022		05/12/2022	24/11/2022	23/11/2022	23/11/2022	06/12/2022		14/12/2022	22/11/2022
				Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal	Normal	Normal	Normal		Normal	Normal
				23-14015	23-14638	23-14638	23-13599	23-14640	23-14640	23-14638	22-12879	22-12883	22-13280	22-11195	22-11231	22-11231	22-13291	22-13294	22-13842	22-11249
				Clay - TFD	MADE GROUND	Clay - TFD	MADE GROUND	MADE GROUND	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.001		-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-
Total PCB WHO 12	mg/kg	0.012		-	-	-	-	-	-	-	-	-	-	<0.012	-	-	-	-	-	-
PCB 28	mg/kg	0.001		-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
PCB 52	mg/kg	0.001		-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
PCB 101	mg/kg	0.001		-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
PCB 138	mg/kg	0.001		-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
PCB 153	mg/kg	0.001		-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
PCB 180	mg/kg	0.001		-	-	-	-	-	-	-	-	<0.001	-	<0.001	-	-	-	<0.001	-	-
PCBs (Sum of total)	mg/kg	0.007		-	-	-	-	-	-	-	-	<0.007	-	<0.007	-	-	-	<0.007	-	-
Aniline	mg/kg	0.1		<0.1	-	-	-	<0.1	-	-	<0.1	-	-	1.3	-	0.6	<0.1	-	-	-
4-chloroaniline	mg/kg	0.1		<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
4-nitroaniline	mg/kg	0.2		<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2		<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
2,6-dinitrotoluene	mg/kg	0.1		<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
Nitrobenzene	mg/kg	0.3		<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Chlorobenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
2-chlorotoluene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
4-chlorotoluene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,3-dichlorobenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,4-dichlorobenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2-dichlorobenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Hexachlorobenzene	mg/kg	0.3		<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Hexabromobenzene	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Bromomethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
Trichlorofluoromethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
1,2-dibromoethane	mg/kg	0.001		<0.005	-	-	-	<0.005	-	-	<0.005	-	-	<0.005	-	<0.001	<0.005	-	-	-
2-chlorophenol	mg/kg	0.1		<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
2,4-dichlorophenol	mg/kg	0.3		<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
2,4,5-trichlorophenol	mg/kg	0.2		<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
2,4,6-trichlorophenol	mg/kg	0.1		<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
Butyl benzyl phthalate	mg/kg	0.3		<0.3	-	-	-	<0.3	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	-	-	-
Di-n-butyl phthalate	mg/kg	0.2		<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
Diethylphthalate	mg/kg	0.2		<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
Dimethyl phthalate	mg/kg	0.1		<0.1	-	-	-	<0.1	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	-	-	-
Isophorone	mg/kg	0.2		<0.2	-	-	-	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
Arsenic	mg/kg	1	7000	21	18	27	17	18	11	16	16	-	14	11	23	14	18	-	11	23
Barium	mg/kg	1		100	73	79	74	73	98	58	100	-	80	100	88	100	77	-	69	86
Beryllium	mg/kg	0.06		1.1	1.4	1.3	1.5	1.4	0.87	1.3	1.3	-	1.4	0.7	1.4	1.1	1.7	-	1.3	1.6
Boron	mg/kg	0.2		9.5	5.6	13	5	2.5	3.4	4.1	3.1	-	3.4	4.4	3.6	5.6	15	-	1.9	3.8
Cadmium	mg/kg	0.2	12000	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2
Chromium (III+VI)	mg/kg	1		32	42	36	41	41	26	41	37	-	40	22	42	33	47	-	40	44
Copper	mg/kg	1		17	19	18	22	19	15	18	19	-	18	10	21	17	21	-	21	20
Lead	mg/kg	1		20	33	21	33	33	15	32	22	-	23	13	26	21	35	-	22	28
Mercury	mg/kg	0.3		<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	-	<0.3	<0.3
Nickel	mg/kg	1		33	38	39	36	37	27	34	37	-	38	22	43	33	43	-	40	41
Selenium	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1
Vanadium	mg/kg	1		56	65	58	66	62	38	62	55	-	56	35	63	49	64	-	60	65
Zinc	mg/kg	1		83	93	84	95	94	66	86	87	-	90	58	100	77	97	-	88	96
Chromium (hexavalent)	mg/kg	1.8		<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8
TOC	%	0.1		-	-	-	-	-	-	-	-	0.7	-	-	-	-	-	2	-	-
Cyanide (Free)	mg/kg	1	1400	<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1
Cyanide Total	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	-	<1	<1
Sulphide	mg/kg	1		820	6.5	130	2.9	1.4	89	2.1	1.3	-	3.1	210	7.6	110	2.2	-	<1	<1
% Moisture	%	0.01		39	28	37	24	24	30	25	20	20	27	25	22	29	28	28	26	22
pH (Lab)	pH_Units	0		8.3	7.2	7.7	7.8	7.7	7.7	6.6	8.3	8.3	8.3	8.5	8.1	8.1	7.5	8	8	7.7
Asbestos Type	None	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos fibres	-	0		Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	-	Not-detected	Not-detected
Stones content (>50mm)	%	0.1		-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	<0.1	-	-

	Units	Method Detection Limit	GAC_WTV_EN/WA_EQS-Coast	Location	IGET - SW2	IGET - SW3
				Well		
				Date	31/03/2023	31/03/2023
				Sample Type	Normal	Normal
				Lab Report Number	685972	685972
Inorganic nitrogen (Filtered)	mg/L	0.2	3.78		12.2	8.62
Field						
Turbidity	NTU	0.1			25.1	8.12
TPH						
GRO >C5-C12	µg/L	50			<50	<50
EPH >C10-C40	µg/L	100			<100	<100
EPH >C10-C40 (Filtered)	µg/L	100			108	107
>C5-C6 Aliphatics	µg/L	10			<10	<10
>C6-C8 Aliphatics	µg/L	10			<10	<10
>C8-C10 Aliphatics	µg/L	10			<10	<10
>C10-C12 Aliphatics	µg/L	10			<10	<10
>C12-C16 Aliphatics	µg/L	10			<10	<10
>C16-C21 Aliphatics	µg/L	10			<10	<10
>C16-C35 Aliphatics	µg/L	10			<10	<10
>C21-C35 Aliphatics	µg/L	10			<10	<10
>C12-C35 Aliphatics	µg/L	10			<10	<10
>EC5-EC7 Aromatics	µg/L	10	8[#2]		<10	<10
>EC7-EC8 Aromatics	µg/L	10	74[#1]		<10	<10
>EC8-EC10 Aromatics	µg/L	10			<10	<10
>EC10-EC12 Aromatics	µg/L	10			<10	<10
>EC12-EC16 Aromatics	µg/L	10			<10	<10
>EC16-EC21 Aromatics	µg/L	10			<10	<10
>EC21-EC35 Aromatics	µg/L	10			<10	<10
>EC12-EC35 Aromatics	µg/L	10			<10	<10
>C5-C35 Aliphatics & Aromatics	µg/L	10			<10	<10
BTEX						
Benzene	µg/L	1	8[#2]		<1	<1
Toluene	µg/L	1	74[#1]		<1	<1
Ethylbenzene	µg/L	1	20[#3]		<1	<1
Xylene (m & p)	µg/L	1			<1	<1
Xylene Total	µg/L	2	30[#3]		<2	<2
Xylene (o)	µg/L	1			<1	<1
Total BTEX	µg/L	5			<5	<5
Oxygenates						
MTBE	µg/L	1	260[#4]		<1	<1
Tert Amyl Methyl Ether	µg/L	1	34[#4]		<1	<1
Chlorinated Hydrocarbons						
Chloromethane	µg/L	1			<1	<1
Vinyl chloride	µg/L	1	8[#4]		<1	<1
Chloroethane	µg/L	1			<1	<1
1,1-dichloroethene	µg/L	1	1[#4]		<1	<1
Dichloromethane	µg/L	3	20[#2]		<3	<3
trans-1,2-dichloroethene	µg/L	1			<1	<1
1,1-dichloroethane	µg/L	1			<1	<1
cis-1,2-dichloroethene	µg/L	1			<1	<1
Chloroform	µg/L	1	2.5[#2]		<1	<1
1,1,1-trichloroethane	µg/L	1	100[#3]		<1	<1
Carbon tetrachloride	µg/L	1	12[#2]		<1	<1
Trichloroethene	µg/L	1	10[#2]		<1	<1
1,1,2-trichloroethane	µg/L	1	300[#3]		<1	<1
Tetrachloroethene	µg/L	1	10[#2]		<1	<1
VOC						
2,2-dichloropropane	µg/L	1			<1	<1
Bromochloromethane	µg/L	1			<1	<1
1,1-dichloropropene	µg/L	1			<1	<1
1,2-dichloroethane	µg/L	1	10[#2]		<1	<1
1,2-dichloropropane	µg/L	1			<1	<1
Dibromomethane	µg/L	1			<1	<1
Bromodichloromethane	µg/L	1			<1	<1
cis-1,3-dichloropropene	µg/L	1			<1	<1
trans-1,3-dichloropropene	µg/L	1			<1	<1
1,3-dichloropropane	µg/L	1			<1	<1
Chlorodibromomethane	µg/L	1			<1	<1
1,1,1,2-tetrachloroethane	µg/L	1			<1	<1
Styrene	µg/L	1	50[#3]		<1	<1
Bromoform	µg/L	1			<1	<1
Isopropylbenzene	µg/L	1			<1	<1
1,1,2,2-tetrachloroethane	µg/L	1			<1	<1
1,2,3-trichloropropane	µg/L	1			<1	<1
n-propylbenzene	µg/L	1			<1	<1
1,3,5-trimethylbenzene	µg/L	1			<1	<1
tert-butylbenzene	µg/L	1			<1	<1
1,2,4-trimethylbenzene	µg/L	1			<1	<1
sec-butylbenzene	µg/L	1			<1	<1
p-isopropyltoluene	µg/L	1			<1	<1
n-butylbenzene	µg/L	1			<1	<1
1,2-dibromo-3-chloropropane	µg/L	1			<1	<1
Hexachlorobutadiene	µg/L	1	0.6[#5]		<1	<1
PAH						
Naphthalene	µg/L	0.01	2[#2]		<0.01	<0.01
Acenaphthylene	µg/L	0.005			<0.005	<0.005
Acenaphthene	µg/L	0.005			<0.005	<0.005
Fluorene	µg/L	0.005			<0.005	<0.005
Phenanthrene	µg/L	0.005			0.0135	0.00639
Anthracene	µg/L	0.005	0.1[#2]		<0.005	<0.005
Fluoranthene	µg/L	0.005	0.0063[#2]		0.0309	0.0244
Pyrene	µg/L	0.005			0.0484	0.0347
Benz(a)anthracene	µg/L	0.005			0.0206	0.013
Chrysene	µg/L	0.005			0.0373	0.0243
Benzo(a) pyrene	µg/L	0.002	0.00017[#2]		<0.002	0.0212
Indeno(1,2,3-c,d)pyrene	µg/L	0.005	see BaP and notes[#6]		0.0154	0.0121
Dibenz(a,h)anthracene	µg/L	0.005			<0.005	<0.005
Benzo(g,h,i)perylene	µg/L	0.005	0.00082[#5]		<0.005	0.014
Benzo(b)fluoranthene	µg/L	0.005	0.017[#5]		0.0348	0.0279
Benzo(k)fluoranthene	µg/L	0.005	0.017[#5]		0.0152	0.0143
PAH 16 Total	µg/L	0.082			0.216	0.192
SVOC						
2-methylnaphthalene	µg/L	1			<1	<1
4-bromophenyl phenyl ether	µg/L	1			<1	<1
4-chlorophenyl phenyl ether	µg/L	1			<1	<1
Azobenzene	µg/L	1			<1	<1
Bis(2-chloroethoxy) methane	µg/L	1			<1	<1
Bis(2-chloroethyl)ether	µg/L	1			<1	<1
Carbazole	µg/L	1			<1	<1
Dibenzofuran	µg/L	1			<1	<1
Hexachlorocyclopentadiene	µg/L	1			<1	<1
Hexachloroethane	µg/L	1			<1	<1

	Units	Method Detection Limit	GAC_WTV_EN/WA_EQS-Coast	Location	IGET - SW2	IGET - SW3
				Well		
				Date	31/03/2023	31/03/2023
				Sample Type	Normal	Normal
				Lab Report Number	685972	685972
Phenolics						
2-methylphenol	µg/L	1			<1	<1
2-nitrophenol	µg/L	1			<1	<1
2,4-dimethylphenol	µg/L	1			<1	<1
4-chloro-3-methylphenol	µg/L	1	40[#3]		<1	<1
4-methylphenol	µg/L	1			<1	<1
4-nitrophenol	µg/L	1			<1	<1
Phenol	µg/L	1	7.7[#1]		<1	<1
Phenol (Filtered)	µg/L	2	7.7[#1]		<2	<2
2-chloronaphthalene	µg/L	1			<1	<1
Cresol Total (Filtered)	µg/L	6			<6	<6
Total Monohydric Phenols (S) Corrected (Filtered)	µg/L	16			<16	<16
Xylenols (Filtered)	µg/L	8			<8	<8
PCBs						
PCB 118	µg/L	0.015			<0.015	<0.015
PCB 28	µg/L	0.015			<0.015	<0.015
PCB 52	µg/L	0.015			<0.015	<0.015
PCB 101	µg/L	0.015			<0.015	<0.015
PCB 138	µg/L	0.015			<0.015	<0.015
PCB 153	µg/L	0.015			<0.015	<0.015
PCB 180	µg/L	0.015			<0.015	<0.015
Total PCB 7 Congeners	µg/L	0.105			<0.105	<0.105
Amino Aliphatics						
N-nitrosodi-n-propylamine	µg/L	1			<1	<1
Anilines						
2-nitroaniline	µg/L	1			<1	<1
3-nitroaniline	µg/L	1			<1	<1
4-chloroaniline	µg/L	1			<1	<1
4-nitroaniline	µg/L	1			<1	<1
Explosives						
2,4-Dinitrotoluene	µg/L	1			<1	<1
2,6-dinitrotoluene	µg/L	1			<1	<1
Nitrobenzene	µg/L	1			<1	<1
Halogenated Benzenes						
1,3,5-Trichlorobenzene	µg/L	1	0.4		<1	<1
Chlorobenzene	µg/L	1			<1	<1
Bromobenzene	µg/L	1			<1	<1
2-chlorotoluene	µg/L	1			<1	<1
4-chlorotoluene	µg/L	1			<1	<1
1,3-dichlorobenzene	µg/L	1			<1	<1
1,4-dichlorobenzene	µg/L	1			<1	<1
1,2-dichlorobenzene	µg/L	1			<1	<1
1,2,4-trichlorobenzene	µg/L	1	0.1		<1	<1
1,2,3-trichlorobenzene	µg/L	1	0.1		<1	<1
Hexachlorobenzene	µg/L	1	0.05[#5]		<1	<1
Halogenated Hydrocarbons						
Dichlorodifluoromethane	µg/L	1			<1	<1
Bromomethane	µg/L	1			<1	<1
Trichlorofluoromethane	µg/L	1			<1	<1
1,2-dibromoethane	µg/L	1			<1	<1
Halogenated Phenols						
2-chlorophenol	µg/L	1	50[#3]		<1	<1
2,4-dichlorophenol	µg/L	1	0.42[#1]		<1	<1
2,4,5-trichlorophenol	µg/L	1			<1	<1
2,4,6-trichlorophenol	µg/L	1			<1	<1
Pentachlorophenol	µg/L	1	0.4[#2]		<1	<1
Phthalates						
Bis(2-ethylhexyl) phthalate	µg/L	2	1.3[#2]		<2	<2
Butyl benzyl phthalate	µg/L	1	0.75[#1]		<1	<1
Di-n-butyl phthalate	µg/L	1	8[#3]		<1	<1
Di-n-octyl phthalate	µg/L	5	20[#3]		<5	<5
Diethylphthalate	µg/L	1	200[#3]		<1	<1
Dimethyl phthalate	µg/L	1	800[#3]		<1	<1
Solvents						
Carbon disulfide	µg/L	1			<1	<1
Isophorone	µg/L	1			<1	<1
Metals						
Arsenic	µg/L	2	25[#1]		<2	<2
Arsenic (Filtered)	µg/L	0.5	25[#1]		0.642	0.796
Boron	µg/L	20	7,000[#3]		117	70.7
Boron (Filtered)	µg/L	10	7,000[#3]		105	75.2
Cadmium	µg/L	0.5	0.2[#2]		<0.5	<0.5
Cadmium (Filtered)	µg/L	0.08	0.2[#2]		<0.08	<0.08
Calcium (Filtered)	mg/L	0.2			133	148
Chromium (III+VI)	µg/L	3			<3	<3
Chromium (III+VI) (Filtered)	µg/L	1			<1	<1
Copper	µg/L	1	3.76[#1]		3.97	2.02
Copper (Filtered)	µg/L	0.3	3.76[#1]		2.58	1.32
Lead	µg/L	1	1.3[#2]		1.63	1.61
Lead (Filtered)	µg/L	0.2	1.3[#2]		<0.2	0.264
Mercury	µg/L	0.02	0.07[#5]		<0.02	<0.02
Mercury (Filtered)	µg/L	0.01	0.07[#5]		<0.01	<0.01
Nickel	µg/L	1	8.6[#2]		3.3	1.94
Nickel (Filtered)	µg/L	0.4	8.6[#2]		2.12	2.07
Phosphorus	µg/L	20	226		183	333
Selenium	µg/L	1			<1	<1
Selenium (Filtered)	µg/L	1			<1	<1
Zinc	µg/L	5	6.8[#1]		13.7	7.66
Zinc (Filtered)	µg/L	1	6.8[#1]		5.92	6.38
Organics						
Dissolved Organic Carbon (Filtered)	mg/L	3			6.51	4.81
TOC	mg/L	3			6.53	3.9
Inorganics						
BOD	mg/L	1			<1	<1
Cyanide Total (Filtered)	mg/L	0.005	0.001[#1]		<0.005	<0.005
Electrical conductivity *(lab)	µS/cm	20			896	914
Chloride (Filtered)	mg/L	2			66.2	70.8
Nitrate (as NO3-) (Filtered)	mg/L	0.07			12.1	8.55
Nitrite (as NO2-) (Filtered)	mg/L	0.05			0.111	0.15
Ortho Phosphate as P (Filtered)	mg/L	0.02			0.093	0.453
Alkalinity (total) as CaCO3	mg/L	3			223	243
Ammoniacal Nitrogen as N	mg/L	0.2	0.021		<0.2	<0.2
Sulphate (soluble) (Filtered)	mg/L	2			151	160
COD	mg/L	7			16.1	14.6
pH (Lab)	pH_Units	1			8.32	8.2
TSS	mg/L	2			28.4	9.8
PFAS						

	Units	Method Detection Limit	GAC_WTV_EN/WA_EQS-Coast	Location	IGET - SW2	IGET - SW3
				Well		
				Date	31/03/2023	31/03/2023
				Sample Type	Normal	Normal
				Lab Report Number	685972	685972
Perfluorooctanoic acid	ng/L	0.65			7.48	1.98
Perfluorooctanesulfonic acid	ng/L	0.65			56.6	1.26
Perfluorooctane sulfonic acid	ng/L	0.65			83.1	2.16
Branched Perfluorooctanesulfonic acid	ng/L	0.65			26.5	0.906

Env Stds Comments
#1:WFD England/Wales. 2015 - Saltwater Standards
#2:WFD England/Wales. 2015 - AA-EQS Trans./Coastal
#3:SEPA WAT-SG-53 Marine EQS - AA - 2015
#4:PNEC (EU REACH) - Coastal
#5:WFD England/Wales. 2015 - MAC-EQS Trans./Coastal
#6:Water Env't Regs (Scotland) 2015. AA-EQS Coast

Key
XXX Exceedance of CW/WE Water. Aquatic Toxicity - England/Wales - Transitional/Coastal

	Units	Method Detection Limit	GAC_WTV_EN/WA_EQS-Coast	Location	IGET - SW2	IGET - SW3
				Well		
				Date	31/03/2023	31/03/2023
				Sample Type	Normal	Normal
				Lab Report Number	685972	685972
Inorganic nitrogen (Filtered)	mg/L	0.2	3.78		12.2	8.62
Field						
Turbidity	NTU	0.1			25.1	8.12
TPH						
GRO >C5-C12	µg/L	50			<50	<50
EPH >C10-C40	µg/L	100			<100	<100
EPH >C10-C40 (Filtered)	µg/L	100			108	107
>C5-C6 Aliphatics	µg/L	10			<10	<10
>C6-C8 Aliphatics	µg/L	10			<10	<10
>C8-C10 Aliphatics	µg/L	10			<10	<10
>C10-C12 Aliphatics	µg/L	10			<10	<10
>C12-C16 Aliphatics	µg/L	10			<10	<10
>C16-C21 Aliphatics	µg/L	10			<10	<10
>C16-C35 Aliphatics	µg/L	10			<10	<10
>C21-C35 Aliphatics	µg/L	10			<10	<10
>C12-C35 Aliphatics	µg/L	10			<10	<10
>EC5-EC7 Aromatics	µg/L	10	8[#2]		<10	<10
>EC7-EC8 Aromatics	µg/L	10	74[#1]		<10	<10
>EC8-EC10 Aromatics	µg/L	10			<10	<10
>EC10-EC12 Aromatics	µg/L	10			<10	<10
>EC12-EC16 Aromatics	µg/L	10			<10	<10
>EC16-EC21 Aromatics	µg/L	10			<10	<10
>EC21-EC35 Aromatics	µg/L	10			<10	<10
>EC12-EC35 Aromatics	µg/L	10			<10	<10
>C5-C35 Aliphatics & Aromatics	µg/L	10			<10	<10
BTEX						
Benzene	µg/L	1	8[#2]		<1	<1
Toluene	µg/L	1	74[#1]		<1	<1
Ethylbenzene	µg/L	1	20[#3]		<1	<1
Xylene (m & p)	µg/L	1			<1	<1
Xylene Total	µg/L	2	30[#3]		<2	<2
Xylene (o)	µg/L	1			<1	<1
Total BTEX	µg/L	5			<5	<5
Oxygenates						
MTBE	µg/L	1	260[#4]		<1	<1
Tert Amyl Methyl Ether	µg/L	1	34[#4]		<1	<1
Chlorinated Hydrocarbons						
Chloromethane	µg/L	1			<1	<1
Vinyl chloride	µg/L	1	8[#4]		<1	<1
Chloroethane	µg/L	1			<1	<1
1,1-dichloroethene	µg/L	1	1[#4]		<1	<1
Dichloromethane	µg/L	3	20[#2]		<3	<3
trans-1,2-dichloroethene	µg/L	1			<1	<1
1,1-dichloroethane	µg/L	1			<1	<1
cis-1,2-dichloroethene	µg/L	1			<1	<1
Chloroform	µg/L	1	2.5[#2]		<1	<1
1,1,1-trichloroethane	µg/L	1	100[#3]		<1	<1
Carbon tetrachloride	µg/L	1	12[#2]		<1	<1
Trichloroethene	µg/L	1	10[#2]		<1	<1
1,1,2-trichloroethane	µg/L	1	300[#3]		<1	<1
Tetrachloroethene	µg/L	1	10[#2]		<1	<1
VOC						
2,2-dichloropropane	µg/L	1			<1	<1
Bromochloromethane	µg/L	1			<1	<1
1,1-dichloropropene	µg/L	1			<1	<1
1,2-dichloroethane	µg/L	1	10[#2]		<1	<1
1,2-dichloropropane	µg/L	1			<1	<1
Dibromomethane	µg/L	1			<1	<1
Bromodichloromethane	µg/L	1			<1	<1
cis-1,3-dichloropropene	µg/L	1			<1	<1
trans-1,3-dichloropropene	µg/L	1			<1	<1
1,3-dichloropropane	µg/L	1			<1	<1
Chlorodibromomethane	µg/L	1			<1	<1
1,1,1,2-tetrachloroethane	µg/L	1			<1	<1
Styrene	µg/L	1	50[#3]		<1	<1
Bromoform	µg/L	1			<1	<1
Isopropylbenzene	µg/L	1			<1	<1
1,1,2,2-tetrachloroethane	µg/L	1			<1	<1
1,2,3-trichloropropane	µg/L	1			<1	<1
n-propylbenzene	µg/L	1			<1	<1
1,3,5-trimethylbenzene	µg/L	1			<1	<1
tert-butylbenzene	µg/L	1			<1	<1
1,2,4-trimethylbenzene	µg/L	1			<1	<1
sec-butylbenzene	µg/L	1			<1	<1
p-isopropyltoluene	µg/L	1			<1	<1
n-butylbenzene	µg/L	1			<1	<1
1,2-dibromo-3-chloropropane	µg/L	1			<1	<1
Hexachlorobutadiene	µg/L	1	0.6[#5]		<1	<1
PAH						
Naphthalene	µg/L	0.01	2[#2]		<0.01	<0.01
Acenaphthylene	µg/L	0.005			<0.005	<0.005
Acenaphthene	µg/L	0.005			<0.005	<0.005
Fluorene	µg/L	0.005			<0.005	<0.005
Phenanthrene	µg/L	0.005			0.0135	0.00639
Anthracene	µg/L	0.005	0.1[#2]		<0.005	<0.005
Fluoranthene	µg/L	0.005	0.0063[#2]		0.0309	0.0244
Pyrene	µg/L	0.005			0.0484	0.0347
Benz(a)anthracene	µg/L	0.005			0.0206	0.013
Chrysene	µg/L	0.005			0.0373	0.0243
Benzo(a) pyrene	µg/L	0.002	0.00017[#2]		<0.002	0.0212
Indeno(1,2,3-c,d)pyrene	µg/L	0.005	see BaP and notes[#6]		0.0154	0.0121
Dibenz(a,h)anthracene	µg/L	0.005			<0.005	<0.005
Benzo(g,h,i)perylene	µg/L	0.005	0.00082[#5]		<0.005	0.014
Benzo(b)fluoranthene	µg/L	0.005	0.017[#5]		0.0348	0.0279
Benzo(k)fluoranthene	µg/L	0.005	0.017[#5]		0.0152	0.0143
PAH 16 Total	µg/L	0.082			0.216	0.192
SVOC						
2-methylnaphthalene	µg/L	1			<1	<1
4-bromophenyl phenyl ether	µg/L	1			<1	<1
4-chlorophenyl phenyl ether	µg/L	1			<1	<1
Azobenzene	µg/L	1			<1	<1
Bis(2-chloroethoxy) methane	µg/L	1			<1	<1
Bis(2-chloroethyl)ether	µg/L	1			<1	<1
Carbazole	µg/L	1			<1	<1
Dibenzofuran	µg/L	1			<1	<1
Hexachlorocyclopentadiene	µg/L	1			<1	<1
Hexachloroethane	µg/L	1			<1	<1

	Units	Method Detection Limit	GAC_WTV_EN/WA_EQS-Coast	Location	IGET - SW2	IGET - SW3
				Well		
				Date	31/03/2023	31/03/2023
				Sample Type	Normal	Normal
				Lab Report Number	685972	685972
Phenolics						
2-methylphenol	µg/L	1			<1	<1
2-nitrophenol	µg/L	1			<1	<1
2,4-dimethylphenol	µg/L	1			<1	<1
4-chloro-3-methylphenol	µg/L	1	40[#3]		<1	<1
4-methylphenol	µg/L	1			<1	<1
4-nitrophenol	µg/L	1			<1	<1
Phenol	µg/L	1	7.7[#1]		<1	<1
Phenol (Filtered)	µg/L	2	7.7[#1]		<2	<2
2-chloronaphthalene	µg/L	1			<1	<1
Cresol Total (Filtered)	µg/L	6			<6	<6
Total Monohydric Phenols (S) Corrected (Filtered)	µg/L	16			<16	<16
Xylenols (Filtered)	µg/L	8			<8	<8
PCBs						
PCB 118	µg/L	0.015			<0.015	<0.015
PCB 28	µg/L	0.015			<0.015	<0.015
PCB 52	µg/L	0.015			<0.015	<0.015
PCB 101	µg/L	0.015			<0.015	<0.015
PCB 138	µg/L	0.015			<0.015	<0.015
PCB 153	µg/L	0.015			<0.015	<0.015
PCB 180	µg/L	0.015			<0.015	<0.015
Total PCB 7 Congeners	µg/L	0.105			<0.105	<0.105
Amino Aliphatics						
N-nitrosodi-n-propylamine	µg/L	1			<1	<1
Anilines						
2-nitroaniline	µg/L	1			<1	<1
3-nitroaniline	µg/L	1			<1	<1
4-chloroaniline	µg/L	1			<1	<1
4-nitroaniline	µg/L	1			<1	<1
Explosives						
2,4-Dinitrotoluene	µg/L	1			<1	<1
2,6-dinitrotoluene	µg/L	1			<1	<1
Nitrobenzene	µg/L	1			<1	<1
Halogenated Benzenes						
1,3,5-Trichlorobenzene	µg/L	1	0.4		<1	<1
Chlorobenzene	µg/L	1			<1	<1
Bromobenzene	µg/L	1			<1	<1
2-chlorotoluene	µg/L	1			<1	<1
4-chlorotoluene	µg/L	1			<1	<1
1,3-dichlorobenzene	µg/L	1			<1	<1
1,4-dichlorobenzene	µg/L	1			<1	<1
1,2-dichlorobenzene	µg/L	1			<1	<1
1,2,4-trichlorobenzene	µg/L	1	0.1		<1	<1
1,2,3-trichlorobenzene	µg/L	1	0.1		<1	<1
Hexachlorobenzene	µg/L	1	0.05[#5]		<1	<1
Halogenated Hydrocarbons						
Dichlorodifluoromethane	µg/L	1			<1	<1
Bromomethane	µg/L	1			<1	<1
Trichlorofluoromethane	µg/L	1			<1	<1
1,2-dibromoethane	µg/L	1			<1	<1
Halogenated Phenols						
2-chlorophenol	µg/L	1	50[#3]		<1	<1
2,4-dichlorophenol	µg/L	1	0.42[#1]		<1	<1
2,4,5-trichlorophenol	µg/L	1			<1	<1
2,4,6-trichlorophenol	µg/L	1			<1	<1
Pentachlorophenol	µg/L	1	0.4[#2]		<1	<1
Phthalates						
Bis(2-ethylhexyl) phthalate	µg/L	2	1.3[#2]		<2	<2
Butyl benzyl phthalate	µg/L	1	0.75[#1]		<1	<1
Di-n-butyl phthalate	µg/L	1	8[#3]		<1	<1
Di-n-octyl phthalate	µg/L	5	20[#3]		<5	<5
Diethylphthalate	µg/L	1	200[#3]		<1	<1
Dimethyl phthalate	µg/L	1	800[#3]		<1	<1
Solvents						
Carbon disulfide	µg/L	1			<1	<1
Isophorone	µg/L	1			<1	<1
Metals						
Arsenic	µg/L	2	25[#1]		<2	<2
Arsenic (Filtered)	µg/L	0.5	25[#1]		0.642	0.796
Boron	µg/L	20	7,000[#3]		117	70.7
Boron (Filtered)	µg/L	10	7,000[#3]		105	75.2
Cadmium	µg/L	0.5	0.2[#2]		<0.5	<0.5
Cadmium (Filtered)	µg/L	0.08	0.2[#2]		<0.08	<0.08
Calcium (Filtered)	mg/L	0.2			133	148
Chromium (III+VI)	µg/L	3			<3	<3
Chromium (III+VI) (Filtered)	µg/L	1			<1	<1
Copper	µg/L	1	3.76[#1]		3.97	2.02
Copper (Filtered)	µg/L	0.3	3.76[#1]		2.58	1.32
Lead	µg/L	1	1.3[#2]		1.63	1.61
Lead (Filtered)	µg/L	0.2	1.3[#2]		<0.2	0.264
Mercury	µg/L	0.02	0.07[#5]		<0.02	<0.02
Mercury (Filtered)	µg/L	0.01	0.07[#5]		<0.01	<0.01
Nickel	µg/L	1	8.6[#2]		3.3	1.94
Nickel (Filtered)	µg/L	0.4	8.6[#2]		2.12	2.07
Phosphorus	µg/L	20	226		183	333
Selenium	µg/L	1			<1	<1
Selenium (Filtered)	µg/L	1			<1	<1
Zinc	µg/L	5	6.8[#1]		13.7	7.66
Zinc (Filtered)	µg/L	1	6.8[#1]		5.92	6.38
Organics						
Dissolved Organic Carbon (Filtered)	mg/L	3			6.51	4.81
TOC	mg/L	3			6.53	3.9
Inorganics						
BOD	mg/L	1			<1	<1
Cyanide Total (Filtered)	mg/L	0.005	0.001[#1]		<0.005	<0.005
Electrical conductivity *(lab)	µS/cm	20			896	914
Chloride (Filtered)	mg/L	2			66.2	70.8
Nitrate (as NO3-) (Filtered)	mg/L	0.07			12.1	8.55
Nitrite (as NO2-) (Filtered)	mg/L	0.05			0.111	0.15
Ortho Phosphate as P (Filtered)	mg/L	0.02			0.093	0.453
Alkalinity (total) as CaCO3	mg/L	3			223	243
Ammoniacal Nitrogen as N	mg/L	0.2	0.021		<0.2	<0.2
Sulphate (soluble) (Filtered)	mg/L	2			151	160
COD	mg/L	7			16.1	14.6
pH (Lab)	pH_Units	1			8.32	8.2
TSS	mg/L	2			28.4	9.8
PFAS						

	Units	Method Detection Limit	GAC_WTV_EN/WA_EQS-Coast	Location	IGET - SW2	IGET - SW3
				Well		
				Date	31/03/2023	31/03/2023
				Sample Type	Normal	Normal
				Lab Report Number	685972	685972
Perfluorooctanoic acid	ng/L	0.65			7.48	1.98
Perfluorooctanesulfonic acid	ng/L	0.65			56.6	1.26
Perfluorooctane sulfonic acid	ng/L	0.65			83.1	2.16
Branched Perfluorooctanesulfonic acid	ng/L	0.65			26.5	0.906

Env Stds Comments
#1:WFD England/Wales. 2015 - Saltwater Standards
#2:WFD England/Wales. 2015 - AA-EQS Trans./Coastal
#3:SEPA WAT-SG-53 Marine EQS - AA - 2015
#4:PNEC (EU REACH) - Coastal
#5:WFD England/Wales. 2015 - MAC-EQS Trans./Coastal
#6:Water Env't Regs (Scotland) 2015. AA-EQS Coast

Key
XXX Exceedance of CW/WE Water. Aquatic Toxicity - England/Wales - Transitional/Coastal

	Units	Method Detection Limit	GAC_WTV_EN/WA_EQS-Coast	Location	E-BH04	E-BH06A	E-BH06B	E-BH10	E-BH15		E-BH18		E-BH20		E-BH22		E-BH24	E-BH25	W-BH32
				Average Depth (m)	0.1	0	24.9	1.7	0.2	10	2.5	4.5	0.8	15.5	1.2	12.4	0.8	1.1	16.2
				Date	10/11/2022	17/11/2022	30/11/2022	11/11/2022	28/11/2022	06/12/2022	28/11/2022	29/11/2022	28/11/2022	30/11/2022	05/12/2022	06/12/2022	07/12/2022	29/11/2022	01/12/2022
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	22-97153	22-98889	22-13082	22-97123	22-13322	22-13294	22-13322	22-13359	22-13322	22-13082	22-13282	22-13294	22-13608	22-13359	22-12883
				Strata	MADE GROUND	MADE GROUND	Chalk	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	MADE GROUND	Sand - GTD	MADE GROUND	Clay - GTD	MADE GROUND	MADE GROUND	Sand - GTD
Phenolics																			
Total Monohydric Phenols (S) Corrected	µg/L	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Metals																			
Antimony	µg/L	1.7			<1.7	<1.7	13	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
Arsenic	µg/L	1	25[#1]		<1	3.1	3	3.1	3.9	2.8	2.3	1.7	4.9	2.3	7.1	3.8	4.7	19.7	1.8
Barium	µg/L	0.05			36.1	19.2	12.3	41.4	98.1	55.3	17.5	15.3	12.5	66.7	33.9	71.9	29.7	17.8	14.3
Cadmium	µg/L	0.1	0.2[#2]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium (III+VI)	µg/L	0.4			1.7	2.5	<0.4	<0.4	2.5	3.9	<0.4	0.7	2.4	<0.4	1.2	0.6	1.7	1.4	0.4
Copper	µg/L	0.7	3.76[#1]		17	8.8	4.3	4.9	9.6	16	15	9.7	11	3.6	12	10	23	32	<0.7
Lead	µg/L	1	1.3[#2]		5.8	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	4.3	<1
Mercury	µg/L	0.5	0.07[#3]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Molybdenum	µg/L	0.4			1.5	2.8	3.8	37.7	20.8	23.2	9.8	34.3	11	4	8	7.7	12.5	19.4	<0.4
Nickel	µg/L	0.3	8.6[#2]		1	1.4	3.1	1.1	<0.3	3.4	0.7	1.6	1.7	0.8	<0.3	<0.3	2.2	4.2	<0.3
Selenium	µg/L	4			<4	<4	14	<4	<4	<4	<4	<4	<4	<4	<4	<4	6.3	<4	<4
Zinc	µg/L	0.4	6.8[#1]		24	5.2	4.7	3.8	5.6	15	4.2	4.3	4	1.7	6.7	3.5	4.7	6.2	0.5
Organics																			
Dissolved Organic Carbon	mg/L	0.1			11.1	5.82	3.84	9.66	8.01	30.5	16.5	11.5	5.76	14.6	5.61	25.5	7.97	18.4	5.81
Inorganics																			
Fluoride	mg/L	0.05	5[#4]		0.16	0.28	0.2	0.45	0.25	0.4	1.1	0.45	0.36	0.43	0.4	0.58	0.68	2.1	0.12
Sulphate	mg/L	0.1			6.4	63	13	54	34	150	8	24	37	9.5	68	31	57	34	2.7
Chloride	mg/L	0.15			1	2.6	8.8	68	12	270	46	220	3.7	19	7.3	40	14	12	1.1
TDS	mg/L	4			120	140	60	330	210	750	170	490	170	96	130	180	300	110	38

Env Stds Comments
#1:WFD England/Wales. 2015 - Saltwater Standards
#2:WFD England/Wales. 2015 - AA-EQS Trans./Coastal
#3:WFD England/Wales. 2015 - MAC-EQS Trans./Coastal
#4:SEPA WAT-SG-53 Marine EQS - AA - 2015

Key
XXX Exceedance of CW/WE Water. Aquatic Toxicity - England/Wales - Transitional/Coastal

	Units	Method Detection Limit	GAC_WTV_EN/WA_EQS-Coast	Location	W-BH35	W-TP09A	W-TP11	W-TP24	W-TP29
				Average Depth (m)	0.1	2.6	0.6	0.6	0.3
				Date	22/11/2022	30/11/2022	02/12/2022	01/12/2022	06/12/2022
				Sample Type	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	22-11250	22-13082	22-12939	22-12883	22-13294
				Strata	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD
Phenolics									
Total Monohydric Phenols (S) Corrected	µg/L	10			<10	<10	<10	<10	<10
Metals									
Antimony	µg/L	1.7			<1.7	<1.7	<1.7	<1.7	<1.7
Arsenic	µg/L	1	25[#1]		1.6	2.2	2.6	<1	<1
Barium	µg/L	0.05			5.6	16.9	13.3	8.4	2.1
Cadmium	µg/L	0.1	0.2[#2]		<0.1	<0.1	<0.1	<0.1	<0.1
Chromium (III+VI)	µg/L	0.4			1	0.6	3	<0.4	0.4
Copper	µg/L	0.7	3.76[#1]		11	14	6.3	3.8	13
Lead	µg/L	1	1.3[#2]		1.4	1.3	1.2	1.2	<1
Mercury	µg/L	0.5	0.07[#3]		<0.5	<0.5	<0.5	<0.5	<0.5
Molybdenum	µg/L	0.4			2.1	44	1.3	1.8	1
Nickel	µg/L	0.3	8.6[#2]		1.5	3.2	1.5	1.2	0.7
Selenium	µg/L	4			<4	<4	<4	<4	<4
Zinc	µg/L	0.4	6.8[#1]		8.9	6.5	1.7	2.3	2.3
Organics									
Dissolved Organic Carbon	mg/L	0.1			20.9	18	8.06	12.7	34.7
Inorganics									
Fluoride	mg/L	0.05	5[#4]		<0.05	0.37	1.2	0.82	1.2
Sulphate	mg/L	0.1			3.1	58	46	5.1	4.4
Chloride	mg/L	0.15			2.2	49	6.8	1.3	1.6
TDS	mg/L	4			41	280	120	68	31

Env Stds Comments
#1:WFD England/Wales. 2015 - Saltwater Standards
#2:WFD England/Wales. 2015 - AA-EQS Trans./Coastal
#3:WFD England/Wales. 2015 - MAC-EQS Trans./Coastal
#4:SEPA WAT-SG-53 Marine EQS - AA - 2015

Key
XXX Exceedance of CW/WE Water. Aquatic Toxicity - England/Wales - Transitional/Coastal

			GAC_WTV_EN/WA_DWS	Location	E-BH04	E-BH06A	E-BH06B	E-BH10	E-BH15		E-BH18		E-BH20		E-BH22		E-BH24	E-BH25
				Average Depth (m)	0.1	0	24.9	1.7	0.2	10	2.5	4.5	0.8	15.5	1.2	12.4	0.8	1.1
				Date	10/11/2022	17/11/2022	30/11/2022	11/11/2022	28/11/2022	06/12/2022	28/11/2022	29/11/2022	28/11/2022	30/11/2022	05/12/2022	06/12/2022	07/12/2022	29/11/2022
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	22-97153	22-98889	22-13082	22-97123	22-13322	22-13294	22-13322	22-13359	22-13322	22-13082	22-13282	22-13294	22-13608	22-13359
	Units	Method Detection Limit		Strata	MADE GROUND	MADE GROUND	Chalk	Clay - TFD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	MADE GROUND	Sand - GTD	MADE GROUND	Clay - GTD	MADE GROUND	MADE GROUND
Phenolics																		
Total Monohydric Phenols (S) Corrected	µg/L	10			<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Metals																		
Antimony	µg/L	1.7	5[#1]		<1.7	<1.7	13	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
Arsenic	µg/L	1	10[#1]		<1	3.1	3	3.1	3.9	2.8	2.3	1.7	4.9	2.3	7.1	3.8	4.7	19.7
Barium	µg/L	0.05	1.300[#2]		36.1	19.2	12.3	41.4	98.1	55.3	17.5	15.3	12.5	66.7	33.9	71.9	29.7	17.8
Cadmium	µg/L	0.1	5[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium (III+VI)	µg/L	0.4	50[#1]		1.7	2.5	<0.4	<0.4	2.5	3.9	<0.4	0.7	2.4	<0.4	1.2	0.6	1.7	1.4
Copper	µg/L	0.7	2.000[#1]		17	8.8	4.3	4.9	9.6	16	15	9.7	11	3.6	12	10	23	32
Lead	µg/L	1	10[#1]		5.8	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	4.3
Mercury	µg/L	0.5	1[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Molybdenum	µg/L	0.4	70[#2]		1.5	2.8	3.8	37.7	20.8	23.2	9.8	34.3	11	4	8	7.7	12.5	19.4
Nickel	µg/L	0.3	20[#1]		1	1.4	3.1	1.1	<0.3	3.4	0.7	1.6	1.7	0.8	<0.3	<0.3	2.2	4.2
Selenium	µg/L	4	10[#1]		<4	<4	14	<4	<4	<4	<4	<4	<4	<4	<4	<4	6.3	<4
Zinc	µg/L	0.4	6.000[#3]		24	5.2	4.7	3.8	5.6	15	4.2	4.3	4	1.7	6.7	3.5	4.7	6.2
Organics																		
Dissolved Organic Carbon	mg/L	0.1			11.1	5.82	3.84	9.66	8.01	30.5	16.5	11.5	5.76	14.6	5.61	25.5	7.97	18.4
Inorganics																		
Fluoride	mg/L	0.05	1.5[#1]		0.16	0.28	0.2	0.45	0.25	0.4	1.1	0.45	0.36	0.43	0.4	0.58	0.68	2.1
Sulphate	mg/L	0.1	250[#1]		6.4	63	13	54	34	150	8	24	37	9.5	68	31	57	34
Chloride	mg/L	0.15	250[#1]		1	2.6	8.8	68	12	270	46	220	3.7	19	7.3	40	14	12
TDS	mg/L	4			120	140	60	330	210	750	170	490	170	96	130	180	300	110

Env Stds Comments
#1:WS Regs 2016 (Eng/Wal)
#2:WHO DWG 2017
#3:USEPA RSL (tapwater) [NOV 2021]

Key
XXX Exceedance of CW/WE Water. DWS - England/Wales

			GAC_WTV_EN/WA_DWS	Location	W-BH32	W-BH35	W-TP09A	W-TP11	W-TP24	W-TP29
				Average Depth (m)	16.2	0.1	2.6	0.6	0.6	0.3
				Date	01/12/2022	22/11/2022	30/11/2022	02/12/2022	01/12/2022	06/12/2022
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	22-12883	22-11250	22-13082	22-12939	22-12883	22-13294
	Units	Method Detection Limit		Strata	Sand - GTD	MADE GROUND	Clay - TFD	Clay - TFD	Clay - TFD	Clay - TFD
Phenolics										
Total Monohydric Phenols (S) Corrected	µg/L	10			<10	<10	<10	<10	<10	<10
Metals										
Antimony	µg/L	1.7	5[#1]		<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
Arsenic	µg/L	1	10[#1]		1.8	1.6	2.2	2.6	<1	<1
Barium	µg/L	0.05	1.300[#2]		14.3	5.6	16.9	13.3	8.4	2.1
Cadmium	µg/L	0.1	5[#1]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium (III+VI)	µg/L	0.4	50[#1]		0.4	1	0.6	3	<0.4	0.4
Copper	µg/L	0.7	2.000[#1]		<0.7	11	14	6.3	3.8	13
Lead	µg/L	1	10[#1]		<1	1.4	1.3	1.2	1.2	<1
Mercury	µg/L	0.5	1[#1]		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Molybdenum	µg/L	0.4	70[#2]		<0.4	2.1	44	1.3	1.8	1
Nickel	µg/L	0.3	20[#1]		<0.3	1.5	3.2	1.5	1.2	0.7
Selenium	µg/L	4	10[#1]		<4	<4	<4	<4	<4	<4
Zinc	µg/L	0.4	6.000[#3]		0.5	8.9	6.5	1.7	2.3	2.3
Organics										
Dissolved Organic Carbon	mg/L	0.1			5.81	20.9	18	8.06	12.7	34.7
Inorganics										
Fluoride	mg/L	0.05	1.5[#1]		0.12	<0.05	0.37	1.2	0.82	1.2
Sulphate	mg/L	0.1	250[#1]		2.7	3.1	58	46	5.1	4.4
Chloride	mg/L	0.15	250[#1]		1.1	2.2	49	6.8	1.3	1.6
TDS	mg/L	4			38	41	280	120	68	31

Env Stds Comments
#1:WS Regs 2016 (Eng/Wal)
#2:WHO DWG 2017
#3:USEPA RSL (tapwater) [NOV 2021]

Key
XXX Exceedance of CW/WE Water. DWS - England/Wales

	Units	Method Detection Limit	GAC_WTV_EN/WA_EQS-Coast	Location	E-BH01	E-BH02	E-BH04	E-BH07	E-BH10	E-BH11	E-BH14A	E-BH15	E-BH18	E-BH20	E-BH21	E-BH22	E-BH25	W-BH01	W-BH09	W-BH10A	W-BH14	W-BH17
				Response Zone	Chalk	Chalk	Chalk	Gravel - GTD	Chalk	Gravel - GTD	Clay - TFD	MADE GROUND	Chalk	MADE GROUND	Chalk	M/G / TFD	Clay - GTD	Chalk	Chalk	Chalk	Gravel - GTD	Chalk
				Date	27/02/2023	01/03/2023	01/03/2023	01/03/2023	27/02/2023	01/03/2023	28/02/2023	27/02/2023	01/03/2023	27/02/2023	27/02/2023	27/02/2023	01/03/2023	01/03/2023	02/03/2023	01/03/2023	28/02/2023	28/02/2023
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	23-20419	23-20842	23-20842	23-20842	23-20419	23-20842	23-20438	23-20419	23-20842	23-20419	23-20419	23-20419	23-20842	23-20842	23-20921	23-20842	23-20438	23-20438
Freon 113	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
TPH																						
>C5-C6 Aliphatics	µg/L	1			-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
>C6-C8 Aliphatics	µg/l	1			-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
>C8-C10 Aliphatics	µg/L	1			-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
>C10-C12 Aliphatics	µg/l	10			-	<10	<10	<10	-	<10	16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>C12-C16 Aliphatics	µg/L	10			-	<10	<10	<10	-	<10	85	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>C16-C21 Aliphatics	µg/l	10			-	<10	<10	<10	-	<10	60	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>C21-C35 Aliphatics	µg/L	10			-	<10	<10	<10	-	<10	27	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>C5-C35 Aliphatics	µg/L	10			-	<10	<10	<10	-	<10	190	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>EC5-EC7 Aromatics	µg/l	1	8[f1]		-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
>EC7-EC8 Aromatics	µg/L	1	74[f2]		-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
>EC8-EC10 Aromatics	µg/L	1			-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-
>EC10-EC12 Aromatics	µg/l	10			-	<10	<10	<10	-	<10	60	28	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>EC12-EC16 Aromatics	µg/L	10			-	<10	<10	<10	-	<10	100	34	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>EC16-EC21 Aromatics	µg/L	10			-	<10	<10	<10	-	<10	32	20	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>EC21-EC35 Aromatics	µg/L	10			-	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
>EC5-EC35 Aromatics	µg/L	10			-	<10	<10	<10	-	<10	190	82	<10	<10	<10	<10	<10	<10	<10	<10	<10	-
BTEX																						
Benzene	µg/L	3	8[f1]		-	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-
Toluene	µg/l	3	74[f2]		-	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-
Ethylbenzene	µg/L	3	20[f3]		-	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-
Xylene (m & p)	µg/L	3			-	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-
Xylene (o)	µg/l	3			-	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-
Oxygenates																						
MTBE	µg/l	3	260[f4]		-	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	-
Chlorinated Hydrocarbons																						
Chloromethane	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Vinyl chloride	µg/L	3	8[f4]		-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Chloroethane	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
1,1-dichloroethene	µg/L	3	1[f4]		-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
trans-1,2-dichloroethene	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
1,1-dichloroethane	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
cis-1,2-dichloroethene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Chloroform	µg/L	3	2.5[f1]		-	33.8	-	22.5	-	<3	<3	<3	<3	<3	<3	-	<3	27.3	-	<3	<3	-
1,1,1-trichloroethane	µg/L	3	100[f3]		-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Carbon tetrachloride	µg/L	3	12[f5]		-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Trichloroethene	µg/L	3	10[f5]		-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
1,1,2-trichloroethane	µg/l	3	300[f3]		-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Tetrachloroethene	µg/L	3	10[f5]		-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
VOC																						
2,2-dichloropropane	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
1,1-dichloropropene	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
1,2-dichloroethane	µg/l	3	10[f5]		-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
1,2-dichloropropane	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Dibromomethane	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Bromodichloromethane	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
cis-1,3-dichloropropene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
trans-1,3-dichloropropene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
1,3-dichloropropane	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Chlorodibromomethane	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
1,1,1,2-tetrachloroethane	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Styrene	µg/l	3	50[f6]		-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Bromoform	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Isopropylbenzene	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
1,1,2,2-tetrachloroethane	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
n-propylbenzene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
1,3,5-trimethylbenzene	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
tert-butylbenzene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
1,2,4-trimethylbenzene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
sec-butylbenzene	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
p-isopropyltoluene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
n-butylbenzene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
1,2-dibromo-3-chloropropane	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Hexachlorobutadiene	µg/l	3	0.6[f5]		-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Hexachlorobutadiene (Filtered)	µg/l	0.05	0.6[f5]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-
PAH																						
Naphthalene	µg/l	3	2[f1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-
Naphthalene (Filtered)	µg/l	0.01	2[f1]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	7.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Acenaphthylene (Filtered)	µg/L	0.01			-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Acenaphthene (Filtered)	µg/L	0.01			-	<0.01	<0.01	<0.01	-	<0.01	<0.01	1.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Fluorene (Filtered)	µg/l	0.01			-	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.61	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Phenanthrene (Filtered)	µg/L	0.01			-	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.97	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Anthracene (Filtered)	µg/l	0.01	0.1[f1]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Fluoranthene (Filtered)	µg/L	0.01	0.0063[f1]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Pyrene (Filtered)	µg/L	0.01			-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Benz(a)anthracene (Filtered)	µg/l	0.01			-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Chrysene (Filtered)	µg/l	0.01			-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Benzo(a) pyrene (Filtered)	µg/L	0.01	0.00017[f1]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Indeno(1,2,3-c,d)pyrene (Filtered)	µg/L	0.01	see BaP and notes[f8]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Dibenz(a,h)anthracene (Filtered)	µg/l	0.01			-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Benzo(g,h,i)perylene (Filtered)	µg/L	0.01	0.00082[f5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Benzo(b)fluoranthene (Filtered)	µg/L	0.01	0.017[f5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Benzo(k)fluoranthene (Filtered)	µg/l	0.01	0.017[f5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
PAH 16 Total	µg/L	0.16			-	<0.16	<0.16	<0.16	-	<0.16	<0.16	10.8	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	-
SVOC																						
Coronene	µg/L	0.01			-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	<0.01	-
2-methylnaphthalene (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	0.94	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
4-bromophenyl phenyl ether (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
4-chlorophenyl phenyl ether (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Azobenzene (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Bis(2-chloroethoxy) methane (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Bis(2-chloroethyl)ether (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Carbazole (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	1.6	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Dibenzofuran (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	0.42	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Hexachloroethane (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Bis(2-chloroisopropyl) ether (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
9,10-Anthracenedione (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Phenolics																						
2-methylphenol (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
2-nitrophenol (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
2,4-dimethylphenol (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
4-chloro-3-methylphenol (Filtered)	µg/L	0.05	40[f9]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
4-methylphenol (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	2.1	57	-	2.1	<0.05	-	<0.05	<0.05	-	-
Phenol (Filtered)	µg/L	0.05	7.7[f2]		-	<0.05	-	<0.05	-	<0.05	<0.05	2.1	<0.05	4.7	-	<0.05	<0.05	-	<0.05	<0.05	-	-
2-chloronaphthalene (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
3-&4-methylphenol (Filtered)	µg/L	0.1			-	<0.1	-	<0.1	-	<0.1	<0.1	<0.1	2.1	57	-	2.1	<0.1	-	<0.1	<0.1	-	-
Total Monohydric Phenols (S) Corrected (Filtered)	µg/l	10			-	<10	<10	<10	-	<10	<10	62	<10	15	<10	15	<10	<10	<10	<10	<10	-
PCBs																						
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	µg/l	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
PCB 118	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	µg/l	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	µg/l	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
PCB 28	µg/l	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
PCB 52	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
PCB 101	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
PCB 138	µg/l	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
PCB 153	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
PCB 180	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02	<0.02	-	-	-	-	-
PCBs (Sum of total)	µg/L	0.14			-	<0.14	-	<0.14	-	<0.14	<0.14	<0.14	-	<0.14	-	<0.14	<0.14	-	-	-	-	-
Anilines																						
Aniline (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
4-chloroaniline (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
4-nitroaniline (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Explosives																						

	Units	Method Detection Limit	GAC_WTV_EN/WA_EQS-Coast	Location	E-BH01	E-BH02	E-BH04	E-BH07	E-BH10	E-BH11	E-BH14A	E-BH15	E-BH18	E-BH20	E-BH21	E-BH22	E-BH25	W-BH01	W-BH09	W-BH10A	W-BH14	W-BH17
				Response Zone	Chalk	Chalk	Chalk	Gravel - GTD	Chalk	Gravel - GTD	Clay - TFD	MADE GROUND	Chalk	MADE GROUND	Chalk	MG / TFD	Clay - GTD	Chalk	Chalk	Chalk	Gravel - GTD	Chalk
				Date	27/02/2023	01/03/2023	01/03/2023	01/03/2023	27/02/2023	01/03/2023	28/02/2023	27/02/2023	01/03/2023	27/02/2023	27/02/2023	27/02/2023	01/03/2023	01/03/2023	02/03/2023	01/03/2023	28/02/2023	28/02/2023
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	23-20419	23-20842	23-20842	23-20842	23-20419	23-20842	23-20438	23-20419	23-20842	23-20419	23-20419	23-20419	23-20842	23-20842	23-20921	23-20842	23-20438	23-20438
2,4-Dinitrotoluene (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
2,6-dinitrotoluene (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Nitrobenzene (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Halogenated Benzenes																						
Chlorobenzene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
2-chlorotoluene	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
4-chlorotoluene	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
1,3-dichlorobenzene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
1,3-dichlorobenzene (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
1,4-dichlorobenzene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
1,4-dichlorobenzene (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
1,2-dichlorobenzene	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
1,2-dichlorobenzene (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
1,2,4-trichlorobenzene	µg/L	3	0.1		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
1,2,4-trichlorobenzene (Filtered)	µg/L	0.05	0.1		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
1,2,3-trichlorobenzene	µg/L	3	0.1		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
Hexachlorobenzene (Filtered)	µg/l	0.05	0.05[#5]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Hexabromobenzene	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
Halogenated Hydrocarbons																						
Bromomethane	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
Trichlorofluoromethane	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
1,2-dibromoethane	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3	<3	-	<3	<3	-	-
Halogenated Phenols																						
2-chlorophenol (Filtered)	µg/L	0.05	50[#3]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
2,4-dichlorophenol (Filtered)	µg/L	0.05	0.42[#2]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
2,4,5-trichlorophenol (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
2,4,6-trichlorophenol (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Phthalates																						
Butyl benzyl phthalate (Filtered)	µg/l	0.05	0.75[#2]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Di-n-butyl phthalate (Filtered)	µg/L	0.05	8[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Diethylphthalate (Filtered)	µg/L	0.05	200[#3]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Dimethyl phthalate (Filtered)	µg/L	0.05	800[#3]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Solvents																						
Isophorone (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	-	-
Metals																						
Arsenic (Filtered)	µg/L	0.15	25[#2]		-	1.26	1.93	1.91	-	0.4	2.86	21.8	1.69	17.3	0.31	2.7	2.91	<0.15	0.24	0.24	0.69	-
Barium (Filtered)	µg/L	0.06			-	45	48	88	-	92	190	65	66	200	210	290	58	74	72	76	91	-
Beryllium (Filtered)	µg/L	0.1			-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-
Boron (Filtered)	µg/L	10	7,000[#3]		-	350	1,000	720	-	330	820	170	780	680	150	3,800	83	48	33	50	23	-
Cadmium (Filtered)	µg/L	0.02	0.2[#5]		-	0.02	<0.02	<0.02	-	0.03	0.04	0.07	0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	-
Calcium (Filtered)	mg/l	0.012			130	130	130	120	140	230	400	350	160	110	180	590	200	110	130	110	96	110
Chromium (III+VI) (Filtered)	µg/L	0.2			-	0.4	<0.2	<0.2	-	<0.2	0.2	<0.2	0.4	0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	-
Copper (Filtered)	µg/L	0.5	3.76[#2]		-	2.1	1.9	1.2	-	4.8	4.4	17	3.5	1	0.8	<0.5	4.2	1.2	1.5	1	<0.5	-
Lead (Filtered)	µg/l	0.2	1.3[#1]		-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-
Magnesium (Filtered)	mg/l	0.005			10	12	99	12	9.1	24	360	0.39	23	67	19	120	9.7	6.4	6.6	6.3	7	6.5
Mercury (Filtered)	µg/l	0.05	0.07[#5]		-	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-
Nickel (Filtered)	µg/l	0.5	8.6[#1]		-	9.4	3.9	5.1	-	13	38	36	21	6.3	12	15	4.2	1.1	2.9	1.4	<0.5	-
Selenium (Filtered)	µg/L	0.6			-	<0.6	<0.6	1.2	-	<0.6	<0.6	52	<0.6	8.8	1.8	4.8	<0.6	<0.6	<0.6	<0.6	<0.6	-
Vanadium (Filtered)	µg/L	0.2	100[#3]		-	0.9	0.2	1.1	-	<0.2	2.4	20	0.6	0.5	<0.2	<0.2	19	0.4	<0.2	0.4	<0.2	-
Zinc (Filtered)	µg/l	0.5	6.8[#2]		-	16	3.7	6.4	-	13	41	1.9	21	4.1	7.9	5.4	6.2	7.9	2.2	11	2.9	-
Potassium (Filtered)	mg/L	0.025			-	7.3	56	9.6	-	7	70	190	19	39	6.3	48	9.2	1.3	1.9	1.2	1.6	-
Chromium (hexavalent) (Filtered)	µg/l	5	0.6[#2]		-	<5	<5	<5	-	-	<5	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-
Inorganics																						
Sodium (Filtered)	mg/L	0.01			-	170	400	210	-	460	16,000	570	220	960	210	640	50	14	14	13	13	-
Cyanide (Free)	mg/L	0.01	0.001[#3]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Cyanide Total	mg/l	0.01	0.001[#2]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.13	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Chloride (Filtered)	mg/L	0.15			110	230	590	250	66	850	3,700	860	390	1,500	530	790	81	36	35	33	23	35
Nitrate (as NO3-) (Filtered)	mg/L	0.05			47.4	1.98	-	0.31	50	0.78	2.19	1.660	-	1.04	-	1.2	-	-	-	31.7	0.63	35.3
Sulphide	mg/l	0.005			-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-
Nitrate (as N) (Filtered)	mg/L	0.01			10.7	0.45	0.24	0.07	11.3	0.18	0.49	374	0.09	0.24	0.07	0.27	7.39	7.9	6.77	7.16	0.14	7.96
Sulphur as S	mg/L	0.015			35	42	-	49	39	50	180	150	-	35	-	75	-	-	-	4.7	3.6	4.3
Ammoniacal Nitrogen as N	mg/l	0.015	0.021		-	<0.015	0.48	0.051	-	0.019	9.4	870	0.055	2.2	<0.015	0.8	0.17	<0.015	0.03	0.028	0.13	-
Ammonium as NH4 BRE	mg/L	0.015	0.021		0.13	0.016	-	0.066	1.2	0.025	12	1,100	-	2.8	-	1	-	-	-	0.036	0.16	0.037
pH (Lab)	pH Units	0			7.9	7.2	7.3	7.7	8	7	7.2	10.5	6.7	7.5	7.1	6.9	7	7.3	7.3	7.4	7.5	7.5

Env Stds Comments
#1:WFD England/Wales. 2015 - AA-EQS Trans./Coastal
#2:WFD England/Wales. 2015 - Saltwater Standards
#3:SEPA WAT-SG-53 Marine EQS - AA - 2015
#4:PNEC (EU REACH) - Coastal
#5:WFD England/Wales. 2015 - MAC-EQS Trans./Coastal
#6:Water Env't Regs (Scotland) 2015. AA-EQS Coast

- : Not analysed

Key
XXX Exceedance of CW/WE Water. Aquatic Toxicity - England/Wales - Transitional/Coastal

	Units	Method Detection Limit	GAC_WTV_EN/WA_EQS-Coast	Location	W-BH18	W-BH20	W-BH21	W-BH22	W-BH24	W-BH26	W-BH30	W-BH31	W-BH34	W-BH35
				Response Zone	Clay - GTD	Chalk	Chalk	Chalk	Sand - GTD	Clay	Chalk	Gravel - GTD	Silt - GTD	Chalk
				Date	28/02/2023	01/03/2023	01/03/2023	01/03/2023	28/02/2023	28/02/2023	28/02/2023	28/02/2023	28/02/2023	28/02/2023
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	23-20438	23-20842	23-20842	23-20842	23-20438	23-20438	23-20438	23-20438	23-20438	23-20438
Freon 113	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
TPH														
>C5-C6 Aliphatics	µg/L	1			<1	<1	<1	<1	<1	<1	-	<1	<1	-
>C6-C8 Aliphatics	µg/l	1			<1	<1	<1	<1	<1	<1	-	<1	<1	-
>C8-C10 Aliphatics	µg/L	1			<1	<1	<1	<1	<1	<1	-	<1	<1	-
>C10-C12 Aliphatics	µg/l	10			<10	<10	<10	<10	<10	<10	-	<10	<10	-
>C12-C16 Aliphatics	µg/L	10			<10	<10	<10	<10	<10	<10	-	<10	<10	-
>C16-C21 Aliphatics	µg/l	10			<10	<10	<10	<10	<10	<10	-	<10	<10	-
>C21-C35 Aliphatics	µg/L	10			<10	<10	<10	<10	<10	<10	-	<10	<10	-
>C5-C35 Aliphatics	µg/L	10			<10	<10	<10	<10	<10	<10	-	<10	<10	-
>EC5-EC7 Aromatics	µg/l	1	8[f1]		<1	<1	<1	<1	<1	<1	-	<1	<1	-
>EC7-EC8 Aromatics	µg/L	1	74[f2]		<1	<1	<1	<1	<1	<1	-	<1	<1	-
>EC8-EC10 Aromatics	µg/L	1			<1	<1	<1	<1	<1	<1	-	<1	<1	-
>EC10-EC12 Aromatics	µg/l	10			<10	<10	<10	<10	<10	<10	-	<10	<10	-
>EC12-EC16 Aromatics	µg/L	10			<10	<10	<10	<10	<10	<10	-	<10	<10	-
>EC16-EC21 Aromatics	µg/L	10			<10	<10	<10	<10	<10	<10	-	<10	<10	-
>EC21-EC35 Aromatics	µg/L	10			<10	<10	<10	<10	<10	<10	-	<10	<10	-
>EC5-EC35 Aromatics	µg/L	10			<10	<10	<10	<10	<10	<10	-	<10	<10	-
BTEX														
Benzene	µg/L	3	8[f1]		<3	<3	<3	<3	<3	<3	-	<3	<3	-
Toluene	µg/l	3	74[f2]		<3	<3	<3	<3	<3	<3	-	<3	<3	-
Ethylbenzene	µg/L	3	20[f3]		<3	<3	<3	<3	<3	<3	-	<3	<3	-
Xylene (m & p)	µg/L	3			<3	<3	<3	<3	<3	<3	-	<3	<3	-
Xylene (o)	µg/l	3			<3	<3	<3	<3	<3	<3	-	<3	<3	-
Oxygenates														
MTBE	µg/l	3	260[f4]		<3	<3	<3	<3	<3	<3	-	<3	<3	-
Chlorinated Hydrocarbons														
Chloromethane	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
Vinyl chloride	µg/L	3	8[f4]		-	-	-	<3	-	-	-	<3	-	-
Chloroethane	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
1,1-dichloroethene	µg/L	3	1[f4]		-	-	-	<3	-	-	-	<3	-	-
trans-1,2-dichloroethene	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
1,1-dichloroethane	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
cis-1,2-dichloroethene	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
Chloroform	µg/L	3	2.5[f1]		-	-	-	<3	-	-	-	<3	-	-
1,1,1-trichloroethane	µg/L	3	100[f3]		-	-	-	<3	-	-	-	<3	-	-
Carbon tetrachloride	µg/L	3	12[f1]		-	-	-	<3	-	-	-	<3	-	-
Trichloroethene	µg/L	3	10[f1]		-	-	-	<3	-	-	-	<3	-	-
1,1,2-trichloroethane	µg/l	3	300[f3]		-	-	-	<3	-	-	-	<3	-	-
Tetrachloroethene	µg/L	3	10[f1]		-	-	-	<3	-	-	-	<3	-	-
VOC														
2,2-dichloropropane	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
1,1-dichloropropene	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
1,2-dichloroethane	µg/l	3	10[f1]		-	-	-	<3	-	-	-	<3	-	-
1,2-dichloropropane	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
Dibromomethane	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
Bromodichloromethane	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
cis-1,3-dichloropropene	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
trans-1,3-dichloropropene	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
1,3-dichloropropane	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
Chlorodibromomethane	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
1,1,1,2-tetrachloroethane	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
Styrene	µg/l	3	50[f3]		-	-	-	<3	-	-	-	<3	-	-
Bromoform	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
Isopropylbenzene	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
1,1,2,2-tetrachloroethane	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
n-propylbenzene	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
1,3,5-trimethylbenzene	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
tert-butylbenzene	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
1,2,4-trimethylbenzene	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
sec-butylbenzene	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
p-isopropyltoluene	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
n-butylbenzene	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
1,2-dibromo-3-chloropropane	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
Hexachlorobutadiene	µg/l	3	0.6[f5]		-	-	-	<3	-	-	-	<3	-	-
Hexachlorobutadiene (Filtered)	µg/l	0.05	0.6[f5]		-	-	-	<0.05	-	-	-	<0.05	-	-
PAH														
Naphthalene	µg/l	3	2[f1]		-	-	-	<3	-	-	-	<3	-	-
Naphthalene (Filtered)	µg/l	0.01	2[f1]		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Acenaphthylene (Filtered)	µg/L	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Acenaphthene (Filtered)	µg/L	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Fluorene (Filtered)	µg/l	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Phenanthrene (Filtered)	µg/L	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Anthracene (Filtered)	µg/l	0.01	0.1[f1]		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Fluoranthene (Filtered)	µg/L	0.01	0.0063[f1]		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Pyrene (Filtered)	µg/L	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Benz(a)anthracene (Filtered)	µg/l	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Chrysene (Filtered)	µg/l	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Benzo(a) pyrene (Filtered)	µg/L	0.01	0.00017[f1]		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Indeno(1,2,3-c,d)pyrene (Filtered)	µg/L	0.01	see BaP and notes[f6]		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Dibenz(a,h)anthracene (Filtered)	µg/l	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Benzo(g,h,i)perylene (Filtered)	µg/L	0.01	0.00082[f5]		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Benzo(b)fluoranthene (Filtered)	µg/L	0.01	0.017[f5]		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Benzo(k)fluoranthene (Filtered)	µg/l	0.01	0.017[f5]		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
PAH 16 Total	µg/L	0.16			<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	-	<0.16	<0.16	-
SVOC														
Coronene	µg/L	0.01			<0.01	-	-	-	<0.01	<0.01	-	<0.01	<0.01	-
2-methylnaphthalene (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
4-bromophenyl phenyl ether (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
4-chlorophenyl phenyl ether (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Azobenzene (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Bis(2-chloroethoxy) methane (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Bis(2-chloroethyl)ether (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Carbazole (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Dibenzofuran (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Hexachloroethane (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Bis(2-chloroisopropyl) ether (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
9,10-Anthracenedione (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Phenolics														
2-methylphenol (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
2-nitrophenol (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
2,4-dimethylphenol (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
4-chloro-3-methylphenol (Filtered)	µg/L	0.05	40[f3]		-	-	-	<0.05	-	-	-	<0.05	-	-
4-methylphenol (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Phenol (Filtered)	µg/L	0.05	7.7[f2]		-	-	-	<0.05	-	-	-	<0.05	-	-
2-chloronaphthalene (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
3-&4-methylphenol (Filtered)	µg/L	0.1			-	-	-	<0.1	-	-	-	<0.1	-	-
Total Monohydric Phenols (S) Corrected (Filtered)	µg/l	10			<10	<10	<10	<10	<10	<10	-	<10	<10	-
PCBs														
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	µg/l	0.02			-	-	-	<0.02	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
PCB 118	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	µg/l	0.02			-	-	-	<0.02	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	µg/l	0.02			-	-	-	<0.02	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
PCB 28	µg/l	0.02			-	-	-	<0.02	-	-	-	-	-	-
PCB 52	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
PCB 101	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
PCB 138	µg/l	0.02			-	-	-	<0.02	-	-	-	-	-	-
PCB 153	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
PCB 180	µg/L	0.02			-	-	-	<0.02	-	-	-	-	-	-
PCBs (Sum of total)	µg/L	0.14			-	-	-	<0.14	-	-	-	-	-	-
Anilines														
Aniline (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
4-chloroaniline (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
4-nitroaniline (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Explosives														

	Units	Method Detection Limit	GAC_WTV_EN/WA_EQS-Coast	Location	W-BH18	W-BH20	W-BH21	W-BH22	W-BH24	W-BH26	W-BH30	W-BH31	W-BH34	W-BH35
				Response Zone	Clay - GTD	Chalk	Chalk	Chalk	Sand - GTD	Clay	Chalk	Gravel - GTD	Silt - GTD	Chalk
				Date	28/02/2023	01/03/2023	01/03/2023	01/03/2023	28/02/2023	28/02/2023	28/02/2023	28/02/2023	28/02/2023	28/02/2023
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	23-20438	23-20842	23-20842	23-20842	23-20438	23-20438	23-20438	23-20438	23-20438	23-20438
2,4-Dinitrotoluene (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
2,6-dinitrotoluene (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Nitrobenzene (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Halogenated Benzenes														
Chlorobenzene	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
2-chlorotoluene	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
4-chlorotoluene	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
1,3-dichlorobenzene	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
1,3-dichlorobenzene (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
1,4-dichlorobenzene	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
1,4-dichlorobenzene (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
1,2-dichlorobenzene	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
1,2-dichlorobenzene (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
1,2,4-trichlorobenzene	µg/L	3	0.1		-	-	-	<3	-	-	-	<3	-	-
1,2,4-trichlorobenzene (Filtered)	µg/L	0.05	0.1		-	-	-	<0.05	-	-	-	<0.05	-	-
1,2,3-trichlorobenzene	µg/L	3	0.1		-	-	-	<3	-	-	-	<3	-	-
Hexachlorobenzene (Filtered)	µg/l	0.05	0.05[#5]		-	-	-	<0.05	-	-	-	<0.05	-	-
Hexabromobenzene	µg/l	3			-	-	-	<3	-	-	-	<3	-	-
Halogenated Hydrocarbons														
Bromomethane	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
Trichlorofluoromethane	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
1,2-dibromoethane	µg/L	3			-	-	-	<3	-	-	-	<3	-	-
Halogenated Phenols														
2-chlorophenol (Filtered)	µg/L	0.05	50[#3]		-	-	-	<0.05	-	-	-	<0.05	-	-
2,4-dichlorophenol (Filtered)	µg/L	0.05	0.42[#2]		-	-	-	<0.05	-	-	-	<0.05	-	-
2,4,5-trichlorophenol (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
2,4,6-trichlorophenol (Filtered)	µg/L	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Phthalates														
Butyl benzyl phthalate (Filtered)	µg/l	0.05	0.75[#2]		-	-	-	<0.05	-	-	-	<0.05	-	-
Di-n-butyl phthalate (Filtered)	µg/L	0.05	8[#1]		-	-	-	<0.05	-	-	-	<0.05	-	-
Diethylphthalate (Filtered)	µg/L	0.05	200[#3]		-	-	-	<0.05	-	-	-	<0.05	-	-
Dimethyl phthalate (Filtered)	µg/L	0.05	800[#3]		-	-	-	<0.05	-	-	-	<0.05	-	-
Solvents														
Isophorone (Filtered)	µg/l	0.05			-	-	-	<0.05	-	-	-	<0.05	-	-
Metals														
Arsenic (Filtered)	µg/L	0.15	25[#2]		1.4	<0.15	0.17	<0.15	0.51	3.23	-	0.95	0.41	-
Barium (Filtered)	µg/L	0.06			170	73	70	72	120	99	-	130	78	-
Beryllium (Filtered)	µg/L	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	-
Boron (Filtered)	µg/L	10	7,000[#3]		22	21	21	19	25	350	-	26	23	-
Cadmium (Filtered)	µg/L	0.02	0.2[#5]		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	-
Calcium (Filtered)	mg/l	0.012			97	120	110	110	89	290	100	90	99	120
Chromium (III+VI) (Filtered)	µg/L	0.2			<0.2	0.3	0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	-
Copper (Filtered)	µg/L	0.5	3.76[#2]		0.8	2.1	2.7	2.6	<0.5	<0.5	-	<0.5	1.4	-
Lead (Filtered)	µg/l	0.2	1.3[#1]		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	-
Magnesium (Filtered)	mg/l	0.005			7.6	6	6	6.1	7.3	54	6.2	7.3	5.9	5.9
Mercury (Filtered)	µg/l	0.05	0.07[#5]		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-
Nickel (Filtered)	µg/l	0.5	8.6[#1]		0.7	0.9	1	1.1	<0.5	19	-	0.8	2.4	-
Selenium (Filtered)	µg/L	0.6			<0.6	<0.6	<0.6	<0.6	<0.6	1.1	-	<0.6	0.7	-
Vanadium (Filtered)	µg/L	0.2	100[#3]		<0.2	0.3	0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	-
Zinc (Filtered)	µg/l	0.5	6.8[#2]		1.9	4.8	8.8	7.6	0.7	5.6	-	1.5	4.9	-
Potassium (Filtered)	mg/L	0.025			1.7	1.3	1.4	1.4	1.7	14	-	1.6	1.6	-
Chromium (hexavalent) (Filtered)	µg/l	5	0.6[#2]		<5	<5	<5	<5	<5	<5	-	<5	<5	-
Inorganics														
Sodium (Filtered)	mg/L	0.01			13	13	13	13	14	180	-	13	12	-
Cyanide (Free)	mg/L	0.01	0.001[#3]		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Cyanide Total	mg/l	0.01	0.001[#2]		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Chloride (Filtered)	mg/L	0.15			24	34	32	30	19	72	31	19	27	24
Nitrate (as NO3-) (Filtered)	mg/L	0.05			-	-	30.2	-	-	-	31.8	0.37	-	21
Sulphide	mg/l	0.005			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-
Nitrate (as N) (Filtered)	mg/L	0.01			0.19	8.08	6.82	6.17	0.08	0.24	7.17	0.08	5.5	4.73
Sulphur as S	mg/L	0.015			-	-	4.3	-	-	-	3.7	2.4	-	4
Ammoncal Nitrogen as N	mg/l	0.015	0.021		0.07	0.028	0.052	0.08	0.72	0.12	-	0.16	0.041	-
Ammonium as NH4 BRE	mg/L	0.015	0.021		-	-	0.067	-	-	-	0.026	0.2	-	<0.015
pH (Lab)	pH Units	0			7.5	7.4	7.3	7.3	7.5	7	7.4	7.5	7.5	7.5

Env Stds Comments
#1:WFD England/Wales. 2015 - AA-EQS Trans./Coastal
#2:WFD England/Wales. 2015 - Saltwater Standards
#3:SEPA WAT-SG-53 Marine EQS - AA - 2015
#4:PNEC (EU REACH) - Coastal
#5:WFD England/Wales. 2015 - MAC-EQS Trans./Coastal
#6:Water Env't Regs (Scotland) 2015. AA-EQS Coast

- : Not analysed

Key
XXX Exceedance of CW/WE Water. Aquatic Toxicity - England/Wales - Transitional/Coastal

	Units	Method Detection Limit	GAC_WTV_EN/WA_DWS	Location	E-BH01	E-BH02	E-BH04	E-BH07	E-BH10	E-BH11	E-BH14A	E-BH15	E-BH18	E-BH20	E-BH21	E-BH22
				Response Zone	Chalk	Chalk	Chalk	Gravel - GTD	Chalk	Gravel - GTD	Clay - TFD	MADE GROUND	Chalk	MADE GROUND	Chalk	MG / TFD
				Date	27/02/2023	01/03/2023	01/03/2023	01/03/2023	27/02/2023	01/03/2023	28/02/2023	27/02/2023	01/03/2023	27/02/2023	27/02/2023	27/02/2023
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	23-20419	23-20842	23-20842	23-20842	23-20419	23-20842	23-20438	23-20419	23-20842	23-20419	23-20419	23-20419
Freon 113	µg/L	3	10,000[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
TPH																
>C5-C6 Aliphatics	µg/L	1	15,000[#2]		-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
>C6-C8 Aliphatics	µg/l	1	15,000[#2]		-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
>C8-C10 Aliphatics	µg/L	1	300[#2]		-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
>C10-C12 Aliphatics	µg/l	10	300[#2]		-	<10	<10	<10	-	<10	16	<10	<10	<10	<10	<10
>C12-C16 Aliphatics	µg/L	10	300[#2]		-	<10	<10	<10	-	<10	85	<10	<10	<10	<10	<10
>C16-C21 Aliphatics	µg/l	10	300[#2]		-	<10	<10	<10	-	<10	60	<10	<10	<10	<10	<10
>C21-C35 Aliphatics	µg/L	10	300[#2]		-	<10	<10	<10	-	<10	27	<10	<10	<10	<10	<10
>C5-C35 Aliphatics	µg/L	10			-	<10	<10	<10	-	<10	190	<10	<10	<10	<10	<10
>EC5-EC7 Aromatics	µg/l	1	1[#3]		-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
>EC7-EC8 Aromatics	µg/L	1	700[#2]		-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
>EC8-EC10 Aromatics	µg/L	1	300[#2]		-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	<1
>EC10-EC12 Aromatics	µg/l	10	90[#2]		-	<10	<10	<10	-	<10	60	28	<10	<10	<10	<10
>EC12-EC16 Aromatics	µg/L	10	90[#2]		-	<10	<10	<10	-	<10	100	34	<10	<10	<10	<10
>EC16-EC21 Aromatics	µg/L	10	90[#2]		-	<10	<10	<10	-	<10	32	20	<10	<10	<10	<10
>EC21-EC35 Aromatics	µg/L	10	90[#2]		-	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	<10
>EC5-EC35 Aromatics	µg/L	10			-	<10	<10	<10	-	<10	190	82	<10	<10	<10	<10
BTEX																
Benzene	µg/L	3	1[#3]		-	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	<3
Toluene	µg/l	3	700[#4]		-	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	<3
Ethylbenzene	µg/L	3	300[#4]		-	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	<3
Xylene (m & p)	µg/L	3			-	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	<3
Xylene (o)	µg/l	3	190[#1]		-	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	<3
Oxygenates																
MTBE	µg/l	3	1,800[#5]		-	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	<3
Chlorinated Hydrocarbons																
Chloromethane	µg/L	3	190[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Vinyl chloride	µg/L	3	0.5[#3]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Chloroethane	µg/L	3	21,000[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,1-dichloroethene	µg/L	3	140[#4]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
trans-1,2-dichloroethene	µg/l	3	50		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,1-dichloroethane	µg/l	3	2.8[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
cis-1,2-dichloroethene	µg/L	3	50		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Chloroform	µg/L	3	100		-	33.8	-	22.5	-	<3	<3	<3	<3	<3	-	<3
1,1,1-trichloroethane	µg/L	3	2,000[#4]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Carbon tetrachloride	µg/L	3	3[#3]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Trichloroethene	µg/L	3	10		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,1,2-trichloroethane	µg/l	3	0.28[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Tetrachloroethene	µg/L	3	10		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
VOC																
2,2-dichloropropane	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,1-dichloropropene	µg/l	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,2-dichloroethane	µg/l	3	3[#3]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,2-dichloropropane	µg/L	3	40[#4]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Dibromomethane	µg/L	3	8.3[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Bromodichloromethane	µg/l	3	100		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
cis-1,3-dichloropropene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
trans-1,3-dichloropropene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,3-dichloropropane	µg/l	3	370[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Chlorodibromomethane	µg/L	3	100		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,1,1,2-tetrachloroethane	µg/L	3	0.57[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Styrene	µg/l	3	20[#4]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Bromoform	µg/L	3	100		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Isopropylbenzene	µg/l	3	450[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,1,2,2-tetrachloroethane	µg/l	3	0.076[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
n-propylbenzene	µg/L	3	660[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,3,5-trimethylbenzene	µg/l	3	60[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
tert-butylbenzene	µg/L	3	690[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,2,4-trimethylbenzene	µg/L	3	56[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
sec-butylbenzene	µg/l	3	2,000[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
p-isopropyltoluene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
n-butylbenzene	µg/L	3	1,000[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,2-dibromo-3-chloropropane	µg/L	3	1[#4]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Hexachlorobutadiene	µg/l	3	0.1[#3]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Hexachlorobutadiene (Filtered)	µg/l	0.05	0.1[#3]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
PAH																
Naphthalene	µg/l	3	6[#5]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Naphthalene (Filtered)	µg/l	0.01	6[#5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	7.5	<0.01	<0.01	<0.01	<0.01
Acenaphthylene (Filtered)	µg/L	0.01	18[#5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthene (Filtered)	µg/L	0.01	18[#5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	1.5	<0.01	<0.01	<0.01	<0.01
Fluorene (Filtered)	µg/l	0.01	12[#5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.61	<0.01	<0.01	<0.01	<0.01
Phenanthrene (Filtered)	µg/L	0.01	4[#5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.97	<0.01	<0.01	<0.01	<0.01
Anthracene (Filtered)	µg/l	0.01	90[#5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.13	<0.01	<0.01	<0.01	<0.01
Fluoranthene (Filtered)	µg/L	0.01	4[#4]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pyrene (Filtered)	µg/L	0.01	9[#5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benz(a)anthracene (Filtered)	µg/l	0.01	3.5[#5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chrysene (Filtered)	µg/l	0.01	7[#5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a) pyrene (Filtered)	µg/L	0.01	0.01[#3]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-c,d)pyrene (Filtered)	µg/L	0.01	0.1		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibenz(a,h)anthracene (Filtered)	µg/l	0.01	0.07[#5]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(g,h,i)perylene (Filtered)	µg/L	0.01	0.1		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(b)fluoranthene (Filtered)	µg/L	0.01	0.1		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(k)fluoranthene (Filtered)	µg/l	0.01	0.1		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
PAH 16 Total	µg/L	0.16			-	<0.16	<0.16	<0.16	-	<0.16	<0.16	10.8	<0.16	<0.16	<0.16	<0.16
SVOC																
Coronene	µg/L	0.01			-	-	-	-	-	-	<0.01	-	-	-	-	-
2-methylnaphthalene (Filtered)	µg/l	0.05	36[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	0.94	<0.05	<0.05	-	<0.05
4-bromophenyl phenyl ether (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
4-chlorophenyl phenyl ether (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Azobenzene (Filtered)	µg/L	0.05	0.12[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Bis(2-chloroethoxy) methane (Filtered)	µg/L	0.05	59[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Bis(2-chloroethyl)ether (Filtered)	µg/L	0.05	0.014[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Carbazole (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	1.6	<0.05	<0.05	-	<0.05
Dibenzofuran (Filtered)	µg/L	0.05	7.9[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	0.42	<0.05	<0.05	-	<0.05
Hexachloroethane (Filtered)	µg/L	0.05	0.33[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Bis(2-chloroisopropyl) ether (Filtered)	µg/l	0.05	710[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
9,10-Anthracenedione (Filtered)	µg/l	0.05	1.4[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Phenolics																
2-methylphenol (Filtered)	µg/L	0.05	930[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
2-nitrophenol (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
2,4-dimethylphenol (Filtered)	µg/l	0.05	360[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
4-chloro-3-methylphenol (Filtered)	µg/L	0.05	1,400[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
4-methylphenol (Filtered)	µg/L	0.05	1,900[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	2.1	57	-	2.1
Phenol (Filtered)	µg/L	0.05	5,800[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	2.1	<0.05	4.7	-	<0.05
2-chloronaphthalene (Filtered)	µg/l	0.05	750[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
3-&4-methylphenol (Filtered)	µg/L	0.1			-	<0.1	-	<0.1	-	<0.1	<0.1	<0.1	2.1	57	-	2.1

	Units	Method Detection Limit	GAC_WTV_EN/WA_DWS	Location	E-BH01	E-BH02	E-BH04	E-BH07	E-BH10	E-BH11	E-BH14A	E-BH15	E-BH18	E-BH20	E-BH21	E-BH22
				Response Zone	Chalk	Chalk	Chalk	Gravel - GTD	Chalk	Gravel - GTD	Clay - TFD	MADE GROUND	Chalk	MADE GROUND	Chalk	MG / TFD
				Date	27/02/2023	01/03/2023	01/03/2023	01/03/2023	27/02/2023	01/03/2023	28/02/2023	27/02/2023	01/03/2023	27/02/2023	27/02/2023	27/02/2023
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	23-20419	23-20842	23-20842	23-20842	23-20419	23-20842	23-20438	23-20419	23-20842	23-20419	23-20419	23-20419
Total Monohydric Phenols (S) Corrected (Filtered)	µg/l	10			-	<10	<10	<10	-	<10	<10	62	<10	15	<10	15
PCBs																
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	µg/L	0.02	0.006[#1]		-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	µg/L	0.02	0.0004[#1]		-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	µg/l	0.02	0.004[#1]		-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	µg/L	0.02	0.004[#1]		-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
PCB 118	µg/L	0.02	0.004[#1]		-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	µg/L	0.02	0.004[#1]		-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	µg/L	0.02	0.0000012[#1]		-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	µg/L	0.02	0.004[#1]		-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	µg/L	0.02	0.004[#1]		-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	µg/L	0.02	0.004[#1]		-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	µg/L	0.02	0.000004[#1]		-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	µg/L	0.02	0.004[#1]		-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
PCB 28	µg/l	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
PCB 52	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
PCB 101	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
PCB 138	µg/l	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
PCB 153	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
PCB 180	µg/L	0.02			-	<0.02	-	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
PCBs (Sum of total)	µg/L	0.14	0.044[#1]		-	<0.14	-	<0.14	-	<0.14	<0.14	<0.14	-	<0.14	-	<0.14
Anilines																
Aniline (Filtered)	µg/l	0.05	13[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
4-chloroaniline (Filtered)	µg/L	0.05	0.37[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
4-nitroaniline (Filtered)	µg/L	0.05	3.8[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Explosives																
2,4-Dinitrotoluene (Filtered)	µg/l	0.05	0.24[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
2,6-dinitrotoluene (Filtered)	µg/L	0.05	0.049[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Nitrobenzene (Filtered)	µg/L	0.05	8 to 63[#4]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Halogenated Benzenes																
Chlorobenzene	µg/L	3	300[#4]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
2-chlorotoluene	µg/l	3	240[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
4-chlorotoluene	µg/l	3	250[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,3-dichlorobenzene	µg/L	3			-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,3-dichlorobenzene (Filtered)	µg/l	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
1,4-dichlorobenzene	µg/L	3	300[#4]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,4-dichlorobenzene (Filtered)	µg/l	0.05	300[#4]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
1,2-dichlorobenzene	µg/l	3	1,000[#4]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,2-dichlorobenzene (Filtered)	µg/L	0.05	1,000[#4]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
1,2,4-trichlorobenzene	µg/L	3	0.1[#3]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,2,4-trichlorobenzene (Filtered)	µg/L	0.05	0.1[#3]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
1,2,3-trichlorobenzene	µg/L	3	0.1[#3]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Hexachlorobenzene (Filtered)	µg/l	0.05	0.1[#3]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Hexabromobenzene	µg/l	3	40[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Halogenated Hydrocarbons																
Bromomethane	µg/L	3	7.5[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Trichlorofluoromethane	µg/L	3	5,200[#1]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
1,2-dibromoethane	µg/L	3	0.4[#4]		-	<3	-	<3	-	<3	<3	<3	<3	<3	-	<3
Halogenated Phenols																
2-chlorophenol (Filtered)	µg/L	0.05	91[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
2,4-dichlorophenol (Filtered)	µg/L	0.05	46[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
2,4,5-trichlorophenol (Filtered)	µg/l	0.05	1,200[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
2,4,6-trichlorophenol (Filtered)	µg/L	0.05	200[#4]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Phthalates																
Butyl benzyl phthalate (Filtered)	µg/l	0.05	16[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Di-n-butyl phthalate (Filtered)	µg/L	0.05	900[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Diethylphthalate (Filtered)	µg/L	0.05	15,000[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Dimethyl phthalate (Filtered)	µg/L	0.05			-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Solvents																
Isophorone (Filtered)	µg/l	0.05	78[#1]		-	<0.05	-	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05
Metals																
Arsenic (Filtered)	µg/L	0.15	10[#3]		-	1.26	1.93	1.91	-	0.4	2.86	21.8	1.69	17.3	0.31	2.7
Barium (Filtered)	µg/L	0.06	1,300[#4]		-	45	48	88	-	92	190	65	66	200	210	290
Beryllium (Filtered)	µg/L	0.1	12[#4]		-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron (Filtered)	µg/L	10	1,000[#3]		-	350	1,000	720	-	330	820	170	780	680	150	3,800
Cadmium (Filtered)	µg/L	0.02	5[#3]		-	0.02	<0.02	<0.02	-	0.03	0.04	0.07	0.02	<0.02	<0.02	<0.02
Calcium (Filtered)	mg/l	0.012			130	130	130	120	140	230	400	350	160	110	180	590
Chromium (III+VI) (Filtered)	µg/L	0.2	50[#3]		-	0.4	<0.2	<0.2	-	<0.2	0.2	<0.2	0.4	0.2	<0.2	<0.2
Copper (Filtered)	µg/L	0.5	2,000[#3]		-	2.1	1.9	1.2	-	4.8	4.4	17	3.5	1	0.8	<0.5
Lead (Filtered)	µg/l	0.2	10[#3]		-	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2
Magnesium (Filtered)	mg/l	0.005			10	12	99	12	9.1	24	360	0.39	23	67	19	120
Mercury (Filtered)	µg/l	0.05	1[#3]		-	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel (Filtered)	µg/l	0.5	20[#3]		-	9.4	3.9	5.1	-	13	38	36	21	6.3	12	15
Selenium (Filtered)	µg/L	0.6	10[#3]		-	<0.6	<0.6	1.2	-	<0.6	<4	52	<0.6	8.8	1.8	4.8
Vanadium (Filtered)	µg/L	0.2	86[#1]		-	0.9	0.2	1.1	-	<0.2	2.4	20	0.6	0.5	<0.2	<0.2
Zinc (Filtered)	µg/l	0.5	6,000[#1]		-	16	3.7	6.4	-	13	41	1.9	21	4.1	7.9	5.4
Potassium (Filtered)	mg/L	0.025			-	7.3	56	9.6	-	7	70	190	19	39	6.3	48
Chromium (hexavalent) (Filtered)	µg/l	5	50		-	<5	<5	<5	-	-	<5	-	<5	<5	<5	<5
Inorganics																
Sodium (Filtered)	mg/L	0.01	200[#3]		-	170	400	210	-	460	16,000	570	220	960	210	640
Cyanide (Free)	mg/L	0.01	0.05		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide Total	mg/l	0.01	0.05[#3]		-	<0.01	<0.01	<0.01	-	<0.01	<0.01	0.13	<0.01	<0.01	<0.01	<0.01
Chloride (Filtered)	mg/L	0.15	250[#3]		110	230	590	250	66	850	3,700	860	390	1,500	530	790
Nitrate (as NO3-) (Filtered)	mg/L	0.05	50[#3]		47.4	1.98	-	0.31	50	0.78	2.19	1,660	-	1.04	-	1.2
Sulphide	mg/l	0.005			-	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate (as N) (Filtered)	mg/L	0.01			10.7	0.45	0.24	0.07	11.3	0.18	0.49	374	0.09	0.24	0.07	0.27
Sulphur as S	mg/L	0.015			35	42	-	49	39	50	180	150	-	35	-	75
Ammoniacal Nitrogen as N	mg/l	0.015			-	<0.015	0.48	0.051	-	0.019	9.4	870	0.055	2.2	<0.015	0.8
Ammonium as NH4 BRE	mg/L	0.015	0.5[#3]		0.13	0.016	-	0.066	1.2	0.025	12	1,100	-	2.8	-	1
pH (Lab)	pH_Units	0			7.9	7.2	7.3	7.7	8	7	7.2	10.5	6.7	7.5	7.1	6.9

Env Stds Comments
#1:USEPA RSL (tapwater) [NOV 2021]
#2:WHO Petroleum DWG 2008
#3:WS Regs 2016 (Eng/Wal)
#4:WHO DWG 2017
#5:AECOM DWG (WHO method)

- : Not analysed

Key
XXX Exceedance of CW/WE Water. DWS - England/Wales

	Units	Method Detection Limit	GAC_WTV_EN/WA_DWS	Location	E-BH25	W-BH01	W-BH09	W-BH10A	W-BH14	W-BH17	W-BH18	W-BH20	W-BH21	W-BH22	W-BH24	W-BH26	W-BH30	W-BH31	W-BH34	W-BH35
				Response Zone	Clay - GTD	Chalk	Chalk	Chalk	Gravel - GTD	Chalk	Clay - GTD	Chalk	Chalk	Chalk	Sand - GTD	Clay	Chalk	Gravel - GTD	Silt - GTD	Chalk
				Date	01/03/2023	01/03/2023	02/03/2023	01/03/2023	28/02/2023	28/02/2023	28/02/2023	01/03/2023	01/03/2023	01/03/2023	28/02/2023	28/02/2023	28/02/2023	28/02/2023	28/02/2023	28/02/2023
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	23-20842	23-20842	23-20921	23-20842	23-20438	23-20438	23-20438	23-20842	23-20842	23-20842	23-20438	23-20438	23-20438	23-20438	23-20438	23-20438
Freon 113	µg/L	3	10,000[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
TPH																				
>C5-C6 Aliphatics	µg/L	1	15,000[#2]		<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	-	<1	<1	-
>C6-C8 Aliphatics	µg/l	1	15,000[#2]		<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	-	<1	<1	-
>C8-C10 Aliphatics	µg/L	1	300[#2]		<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	-	<1	<1	-
>C10-C12 Aliphatics	µg/l	10	300[#2]		<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	-	<10	<10	-
>C12-C16 Aliphatics	µg/L	10	300[#2]		<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	-	<10	<10	-
>C16-C21 Aliphatics	µg/L	10	300[#2]		<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	-	<10	<10	-
>C21-C35 Aliphatics	µg/L	10	300[#2]		<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	-	<10	<10	-
>C5-C35 Aliphatics	µg/L	10			<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	-	<10	<10	-
>EC5-EC7 Aromatics	µg/l	1	1[#3]		<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	-	<1	<1	-
>EC7-EC8 Aromatics	µg/L	1	700[#2]		<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	-	<1	<1	-
>EC8-EC10 Aromatics	µg/L	1	300[#2]		<1	<1	<1	<1	<1	-	<1	<1	<1	<1	<1	<1	-	<1	<1	-
>EC10-EC12 Aromatics	µg/l	10	90[#2]		<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	-	<10	<10	-
>EC12-EC16 Aromatics	µg/L	10	90[#2]		<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	-	<10	<10	-
>EC16-EC21 Aromatics	µg/L	10	90[#2]		<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	-	<10	<10	-
>EC21-EC35 Aromatics	µg/L	10	90[#2]		<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	-	<10	<10	-
>EC5-EC35 Aromatics	µg/L	10			<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	-	<10	<10	-
BTEX																				
Benzene	µg/L	3	1[#3]		<3	<3	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-
Toluene	µg/l	3	700[#4]		<3	<3	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-
Ethylbenzene	µg/L	3	300[#4]		<3	<3	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-
Xylene (m & p)	µg/L	3			<3	<3	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-
Xylene (o)	µg/l	3	190[#1]		<3	<3	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-
Oxygenates																				
MTBE	µg/l	3	1,800[#5]		<3	<3	<3	<3	<3	-	<3	<3	<3	<3	<3	<3	-	<3	<3	-
Chlorinated Hydrocarbons																				
Chloromethane	µg/L	3	190[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Vinyl chloride	µg/L	3	0.5[#3]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Chloroethane	µg/L	3	21,000[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,1-dichloroethene	µg/L	3	140[#4]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
trans-1,2-dichloroethene	µg/l	3	50		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,1-dichloroethane	µg/l	3	2.8[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
cis-1,2-dichloroethene	µg/L	3	50		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Chloroform	µg/L	3	100		27.3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,1,1-trichloroethane	µg/L	3	2,000[#4]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Carbon tetrachloride	µg/L	3	3[#3]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Trichloroethene	µg/L	3	10		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,1,2-trichloroethane	µg/l	3	0.28[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Tetrachloroethene	µg/L	3	10		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
VOC																				
2,2-dichloropropane	µg/l	3			<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,1-dichloropropene	µg/l	3			<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,2-dichloroethane	µg/l	3	3[#3]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,2-dichloropropane	µg/L	3	40[#4]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Dibromomethane	µg/L	3	8.3[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Bromodichloromethane	µg/l	3	100		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
cis-1,3-dichloropropene	µg/L	3			<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
trans-1,3-dichloropropene	µg/L	3			<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,3-dichloropropane	µg/l	3	370[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Chlorodibromomethane	µg/L	3	100		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,1,1,2-tetrachloroethane	µg/L	3	0.57[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Styrene	µg/l	3	20[#4]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Bromoform	µg/L	3	100		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Isopropylbenzene	µg/l	3	450[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,1,2,2-tetrachloroethane	µg/l	3	0.076[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
n-propylbenzene	µg/L	3	660[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,3,5-trimethylbenzene	µg/l	3	60[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
tert-butylbenzene	µg/L	3	690[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,2,4-trimethylbenzene	µg/L	3	56[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
sec-butylbenzene	µg/l	3	2,000[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
p-isopropyltoluene	µg/L	3			<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
n-butylbenzene	µg/L	3	1,000[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,2-dibromo-3-chloropropane	µg/L	3	1[#4]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Hexachlorobutadiene	µg/l	3	0.1[#3]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Hexachlorobutadiene (Filtered)	µg/l	0.05	0.1[#3]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
PAH																				
Naphthalene	µg/l	3	6[#5]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Naphthalene (Filtered)	µg/l	0.01	6[#5]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Acenaphthylene (Filtered)	µg/L	0.01	18[#5]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Acenaphthene (Filtered)	µg/L	0.01	18[#5]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Fluorene (Filtered)	µg/l	0.01	12[#5]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Phenanthrene (Filtered)	µg/L	0.01	4[#5]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Anthracene (Filtered)	µg/l	0.01	90[#5]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Fluoranthene (Filtered)	µg/L	0.01	4[#4]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Pyrene (Filtered)	µg/L	0.01	9[#5]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Benz(a)anthracene (Filtered)	µg/l	0.01	3.5[#5]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Chrysene (Filtered)	µg/l	0.01	7[#5]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Benzo(a) pyrene (Filtered)	µg/L	0.01	0.01[#3]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Indeno(1,2,3-c,d)pyrene (Filtered)	µg/L	0.01	0.1		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Dibenz(a,h)anthracene (Filtered)	µg/l	0.01	0.07[#5]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Benzo(g,h,i)perylene (Filtered)	µg/L	0.01	0.1		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Benzo(b)fluoranthene (Filtered)	µg/L	0.01	0.1		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Benzo(k)fluoranthene (Filtered)	µg/l	0.01	0.1		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
PAH 16 Total	µg/L	0.16			<0.16	<0.16	<0.16	<0.16	<0.16	-	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	-	<0.16	<0.16	-
SVOC																				
Coronene	µg/L	0.01			-	-	-	-	<0.01	-	<0.01	-	-	-	<0.01	<0.01	-	<0.01	<0.01	-
2-methylnaphthalene (Filtered)	µg/l	0.05	36[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
4-bromophenyl phenyl ether (Filtered)	µg/l	0.05			<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
4-chlorophenyl phenyl ether (Filtered)	µg/l	0.05			<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Azobenzene (Filtered)	µg/L	0.05	0.12[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Bis(2-chloroethoxy) methane (Filtered)	µg/L	0.05	59[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Bis(2-chloroethyl)ether (Filtered)	µg/L	0.05	0.014[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Carbazole (Filtered)	µg/L	0.05			<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Dibenzofuran (Filtered)	µg/L	0.05	7.9[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Hexachloroethane (Filtered)	µg/L	0.05	0.33[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Bis(2-chloroisopropyl) ether (Filtered)	µg/l	0.05	710[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
9,10-Anthracenedione (Filtered)	µg/l	0.05	1.4[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Phenolics																				
2-methylphenol (Filtered)	µg/L	0.05	930[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
2-nitrophenol (Filtered)	µg/L	0.05			<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
2,4-dimethylphenol (Filtered)	µg/l	0.05	360[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
4-chloro-3-methylphenol (Filtered)	µg/L	0.05	1,400[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
4-methylphenol (Filtered)	µg/L	0.05	1,900[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Phenol (Filtered)	µg/L	0.05	5,800[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
2-chloronaphthalene (Filtered)	µg/l	0.05	750[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
3-&4-methylphenol (Filtered)	µg/L	0.1			<0.1	-	<0.1	<0.1	-	-	-	-	-	<0.1	-	-	-	<0.1	-	-

	Units	Method Detection Limit	GAC_WTV_EN/WA_DWS	Location	E-BH25	W-BH01	W-BH09	W-BH10A	W-BH14	W-BH17	W-BH18	W-BH20	W-BH21	W-BH22	W-BH24	W-BH26	W-BH30	W-BH31	W-BH34	W-BH35
				Response Zone	Clay - GTD	Chalk	Chalk	Chalk	Gravel - GTD	Chalk	Clay - GTD	Chalk	Chalk	Chalk	Sand - GTD	Clay	Chalk	Gravel - GTD	Silt - GTD	Chalk
				Date	01/03/2023	01/03/2023	02/03/2023	01/03/2023	28/02/2023	28/02/2023	28/02/2023	01/03/2023	01/03/2023	01/03/2023	28/02/2023	28/02/2023	28/02/2023	28/02/2023	28/02/2023	28/02/2023
				Sample Type	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
				Lab Report Number	23-20842	23-20842	23-20921	23-20842	23-20438	23-20438	23-20438	23-20842	23-20842	23-20842	23-20438	23-20438	23-20438	23-20438	23-20438	23-20438
Total Monohydric Phenols (S) Corrected (Filtered)	µg/l	10			<10	<10	<10	<10	<10	-	<10	<10	<10	<10	<10	<10	-	<10	<10	-
PCBs																				
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	µg/L	0.02	0.006[#1]		<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	µg/L	0.02	0.0004[#1]		<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	µg/l	0.02	0.004[#1]		<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	µg/L	0.02	0.004[#1]		<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
PCB 118	µg/L	0.02	0.004[#1]		<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	µg/L	0.02	0.004[#1]		<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	µg/L	0.02	0.0000012[#1]		<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	µg/L	0.02	0.004[#1]		<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	µg/L	0.02	0.004[#1]		<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	µg/L	0.02	0.004[#1]		<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	µg/L	0.02	0.000004[#1]		<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	µg/L	0.02	0.004[#1]		<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
PCB 28	µg/l	0.02			<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
PCB 52	µg/L	0.02			<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
PCB 101	µg/L	0.02			<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
PCB 138	µg/l	0.02			<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
PCB 153	µg/L	0.02			<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
PCB 180	µg/L	0.02			<0.02	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-
PCBs (Sum of total)	µg/L	0.14	0.004[#1]		<0.14	-	-	-	-	-	-	-	-	<0.14	-	-	-	-	-	-
Anilines																				
Aniline (Filtered)	µg/l	0.05	13[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
4-chloroaniline (Filtered)	µg/L	0.05	0.37[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
4-nitroaniline (Filtered)	µg/L	0.05	3.8[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Explosives																				
2,4-Dinitrotoluene (Filtered)	µg/l	0.05	0.24[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
2,6-dinitrotoluene (Filtered)	µg/L	0.05	0.049[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Nitrobenzene (Filtered)	µg/L	0.05	8 to 63[#4]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Halogenated Benzenes																				
Chlorobenzene	µg/L	3	300[#4]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
2-chlorotoluene	µg/l	3	240[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
4-chlorotoluene	µg/l	3	250[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,3-dichlorobenzene	µg/L	3			<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,3-dichlorobenzene (Filtered)	µg/l	0.05			<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
1,4-dichlorobenzene	µg/L	3	300[#4]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,4-dichlorobenzene (Filtered)	µg/l	0.05	300[#4]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
1,2-dichlorobenzene	µg/l	3	1,000[#4]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,2-dichlorobenzene (Filtered)	µg/L	0.05	1,000[#4]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
1,2,4-trichlorobenzene	µg/L	3	0.1[#3]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,2,4-trichlorobenzene (Filtered)	µg/L	0.05	0.1[#3]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
1,2,3-trichlorobenzene	µg/L	3	0.1[#3]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Hexachlorobenzene (Filtered)	µg/l	0.05	0.1[#3]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Hexabromobenzene	µg/l	3	40[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Halogenated Hydrocarbons																				
Bromomethane	µg/L	3	7.5[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Trichlorofluoromethane	µg/L	3	5,200[#1]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
1,2-dibromoethane	µg/L	3	0.4[#4]		<3	-	<3	<3	-	-	-	-	-	<3	-	-	-	<3	-	-
Halogenated Phenols																				
2-chlorophenol (Filtered)	µg/L	0.05	91[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
2,4-dichlorophenol (Filtered)	µg/L	0.05	46[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
2,4,5-trichlorophenol (Filtered)	µg/l	0.05	1,200[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
2,4,6-trichlorophenol (Filtered)	µg/L	0.05	200[#4]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Phthalates																				
Butyl benzyl phthalate (Filtered)	µg/l	0.05	16[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Di-n-butyl phthalate (Filtered)	µg/L	0.05	900[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Diethylphthalate (Filtered)	µg/L	0.05	15,000[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Dimethyl phthalate (Filtered)	µg/L	0.05			<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Solvents																				
Isophorone (Filtered)	µg/l	0.05	78[#1]		<0.05	-	<0.05	<0.05	-	-	-	-	-	<0.05	-	-	-	<0.05	-	-
Metals																				
Arsenic (Filtered)	µg/L	0.15	10[#3]		2.91	<0.15	0.24	0.24	0.69	-	1.4	<0.15	0.17	<0.15	0.51	3.23	-	0.95	0.41	-
Barium (Filtered)	µg/L	0.06	1,300[#4]		58	74	72	76	91	-	170	73	70	72	120	99	-	130	78	-
Beryllium (Filtered)	µg/L	0.1	12[#4]		<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	-
Boron (Filtered)	µg/L	10	1,000[#3]		83	48	33	50	23	-	22	21	21	19	25	350	-	26	23	-
Cadmium (Filtered)	µg/L	0.02	5[#3]		0.03	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	-
Calcium (Filtered)	mg/l	0.012			200	110	130	110	96	110	97	120	110	110	89	290	100	90	99	120
Chromium (III+VI) (Filtered)	µg/L	0.2	50[#3]		0.3	<0.2	<0.2	<0.2	<0.2	-	<0.2	0.3	0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	-
Copper (Filtered)	µg/L	0.5	2,000[#3]		4.2	1.2	1.5	1	<0.5	-	0.8	2.1	2.7	2.6	<0.5	<0.5	-	<0.5	1.4	-
Lead (Filtered)	µg/l	0.2	10[#3]		<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	-
Magnesium (Filtered)	mg/l	0.005			9.7	6.4	6.6	6.3	7	6.5	7.6	6	6	6.1	7.3	54	6.2	7.3	5.9	5.9
Mercury (Filtered)	µg/l	0.05	1[#3]		<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	-
Nickel (Filtered)	µg/l	0.5	20[#3]		4.2	1.1	2.9	1.4	<0.5	-	0.7	0.9	1	1.1	<0.5	19	-	0.8	2.4	-
Selenium (Filtered)	µg/L	0.6	10[#3]		<0.6	<0.6	<0.6	<0.6	<0.6	-	<0.6	<0.6	<0.6	<0.6	<0.6	1.1	-	<0.6	0.7	-
Vanadium (Filtered)	µg/L	0.2	86[#1]		19	0.4	<0.2	0.4	<0.2	-	<0.2	0.3	0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	-
Zinc (Filtered)	µg/l	0.5	6,000[#1]		6.2	7.9	2.2	11	2.9	-	1.9	4.8	8.8	7.6	0.7	5.6	-	1.5	4.9	-
Potassium (Filtered)	mg/L	0.025			9.2	1.3	1.9	1.2	1.6	-	1.7	1.3	1.4	1.4	1.7	14	-	1.6	1.6	-
Chromium (hexavalent) (Filtered)	µg/l	5	50		<5	<5	<5	<5	<5	-	<5	<5	<5	<5	<5	<5	-	<5	<5	-
Inorganics																				
Sodium (Filtered)	mg/L	0.01	200[#3]		50	14	14	13	13	-	13	13	13	13	14	180	-	13	12	-
Cyanide (Free)	mg/L	0.01	0.05		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Cyanide Total	mg/l	0.01	0.05[#3]		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-
Chloride (Filtered)	mg/L	0.15	250[#3]		81	36	35	33	23	35	24	34	32	30	19	72	31	19	27	24
Nitrate (as NO3-) (Filtered)	mg/L	0.05	50[#3]		-	-	-	31.7	0.63	35.3	-	-	30.2	-	-	-	31.8	0.37	-	21
Sulphide	mg/l	0.005			<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	-
Nitrate (as N) (Filtered)	mg/L	0.01			7.39	7.9	6.77	7.16	0.14	7.96	0.19	8.08	6.82	6.17	0.08	0.24	7.17	0.08	5.5	4.73
Sulphur as S	mg/L	0.015			-	-	-	4.7	3.6	4.3	-	-	4.3	-	-	-	3.7	2.4	-	4
Ammoniacal Nitrogen as N	mg/l	0.015			0.17	<0.015	0.03	0.028	0.13	-	0.07	0.028	0.052	0.08	0.72	0.12	-	0.16	0.041	-
Ammonium as NH4 BRE	mg/L	0.015	0.5[#3]		-	-	-	0.036	0.16	0.037	-	-	0.067	-	-	-	0.026	0.2	-	<0.015
pH (Lab)	pH_Units	0			7	7.3	7.3	7.4	7.5	7.5	7.5	7.4	7.3	7.3	7.5	7	7.4	7.5	7.5	7.5

Env Stds Comments
#1:USEPA RSL (tapwater) [NOV 2021]
#2:WHO Petroleum DWG 2008
#3:WS Regs 2016 (Eng/Wal)
#4:WHO DWG 2017
#5:AECOM DWG (WHO method)

- : Not analysed

Key
XXX Exceedance of CW/WE Water. DWS - England/Wales

Appendix J Foundation Capacity Calculations

To be prepared